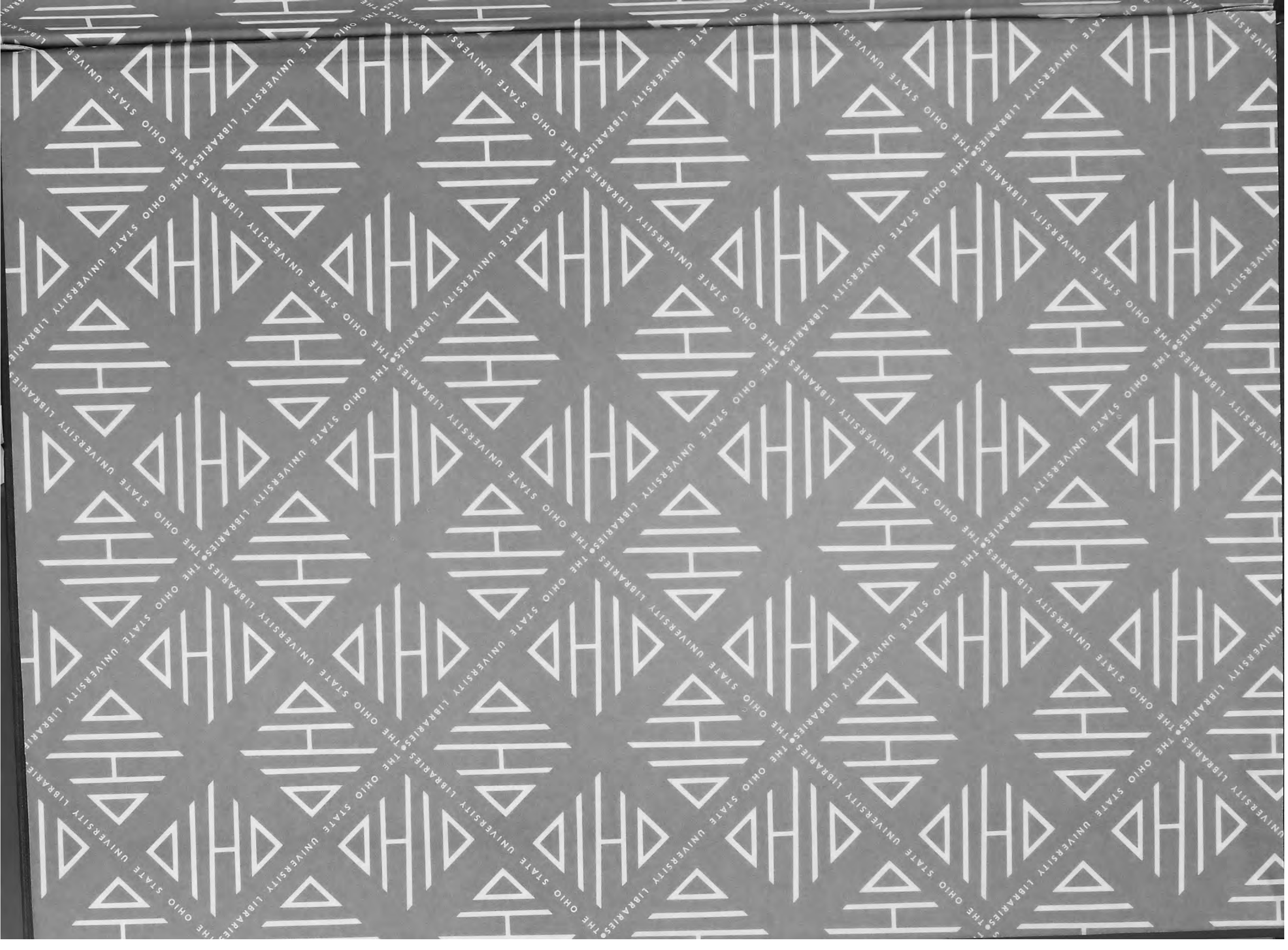
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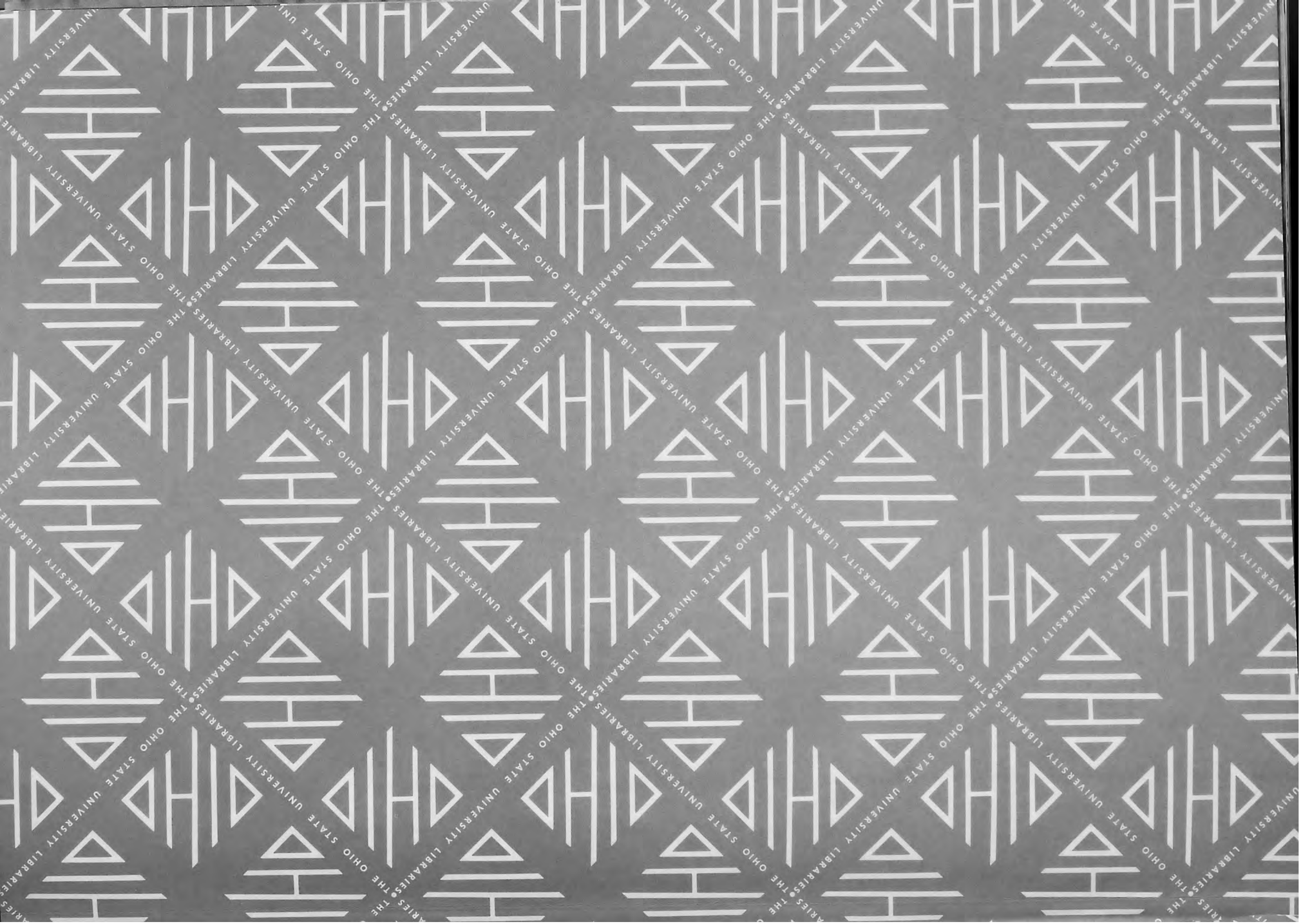
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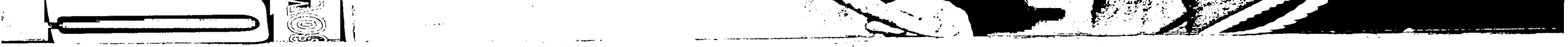

USSR

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Is Man Free in Everything? page 16
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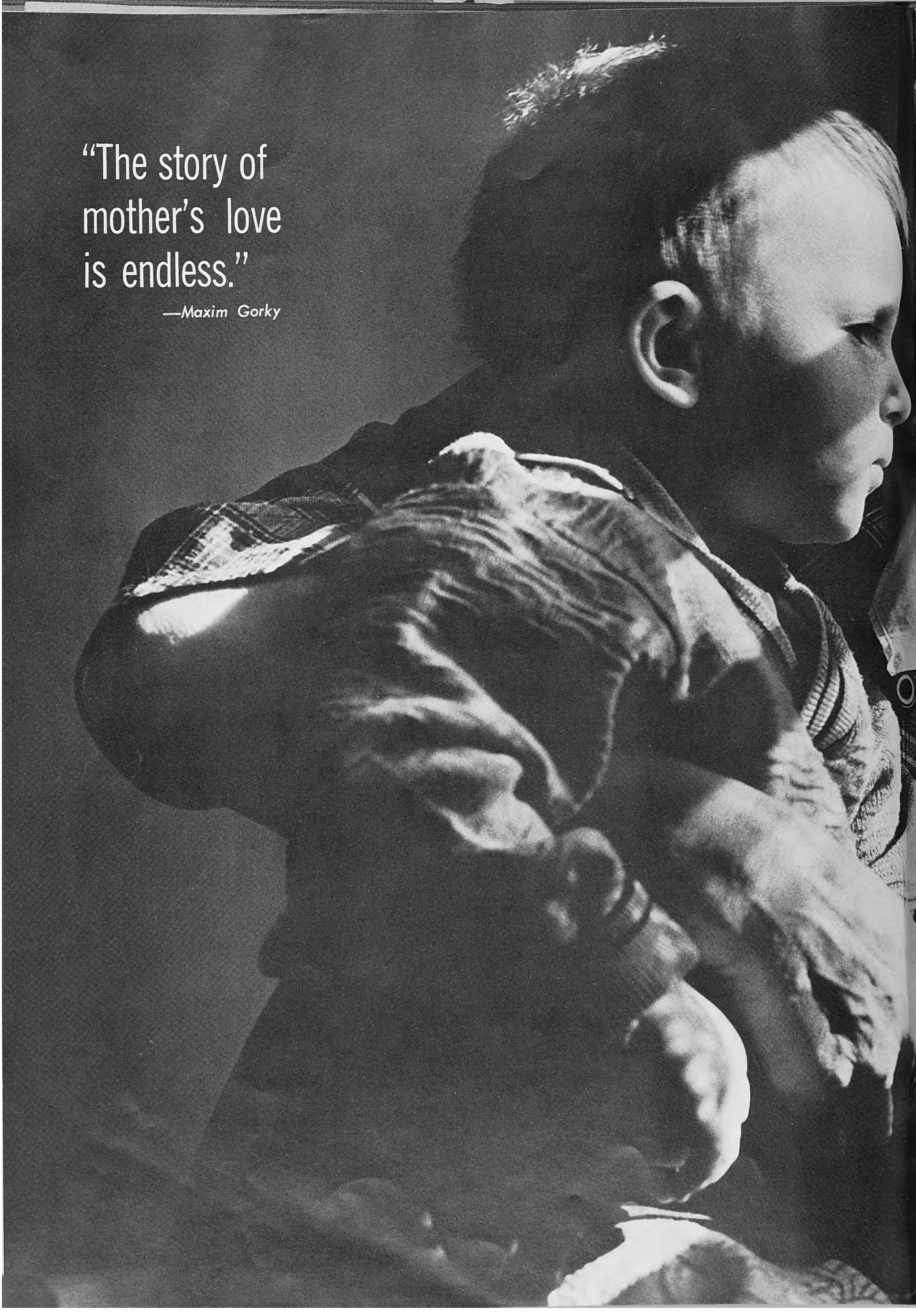
"The story of
mother's love
is endless."
—Maxim Gorky

"A War Widow" is a story about the difficult destiny of an ordinary Ukrainian woman who lost her brother, husband and son in the war.

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Front Cover: A favorite sport in Estonia.

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OUR TRENDS

The Future Works Today

A hundred years ago, Nikolai Chernyshevsky, the noted Russian man of letters, wrote: "The future is bright and beautiful. . . . Love it, strive for it, work to bring it closer, carry as much of it over into the present as you can. Your life will be bright and good, rich in joy and pleasure to the degree that you bring the future into it."

These prophetic words of the great nineteenth century humanist might have been written especially for the people active in the communist work movement that is so widespread in the Soviet Union today. Because what they are working toward and what they have already accomplished is precisely that—to carry into the present the principles of the future.

The communist work movement originated about five years ago when the country was discussing the draft of the seven-year plan. Moscow railwaymen took the initiative with their proposal that the decades-old socialist emulation movement be given a larger content to meet the needs of the time, and themselves set the example. The socialist emulation movement had centered mostly on production, with its slogan, "Work in a socialist way." The pioneers of the new movement adopted the slogan, "Learn to work and to live in a communist way."

That the movement had a viable base is seen from the fact that more than 23 million people are now active in it, among them industrial workers, farmers, engineers, scientists and workers in public service establishments. Six million of them have already fulfilled the conditions of the competitive movement, and millions of others are approaching that goal. It has become a great material and spiritual force for progress of Soviet society.

The principal element in the emulation movement is still work, the effort to do more and to do it better. For this reason the movement is one of the basic factors guaranteeing the successful fulfillment of the seven-year plan. The shock workers of the communist work teams emerge as the innovators; they achieve the greatest labor productivity, the highest output in the least time. And all this is done not by tightening the pressure on workers but by comprehensive rationalization.

However, this feeling for work, significant as it may be, is only one of the manifestations of the new movement. A no less significant aspect is what we might call its humanism.

One of the sponsors of the movement was Valentina Gaganova, a textile worker. Wanting to use her skills for the greater benefit of industry and society, she asked to be transferred from her leading team to one which was less productive. Gaganova's earnings, at least in the initial period, went down, while her responsibilities grew. But she placed the common interest above her own. She made this same transfer three times. Her lead was followed by 50,000 other people.

This is only one of many similar facts. This unselfish quality of the new man is fostered by the movement in many ways. Participants in the movement work hard to increase their technical and general knowledge, to make the artistic and cultural heritage of the country their own. It is no accident that the number of workers and farmers in correspondence and evening courses at institutes and specialized secondary schools has doubled since the movement originated and now exceeds seven million people.

The climate that it has generated confirms the truth that far from curbing individuality, the new society, on the contrary, gives the individual the widest opportunities to use his abilities. In this short time many thousands of uncommon individuals have come out of the movement—innovators in technology, in organizational work, in civic activity.

The communist work movement is perhaps the most important and most pervasive social phenomenon of our time. Only a sampling of the good things tomorrow has in store for Soviet society, its prospects are unlimited.

Sunny Season

July is the height of the Russian summer and, statistics indicate, the month is likely once again to set a record for the number of vacationing Soviet town dwellers at the country's 500 resort areas with their 3,000 sanatoriums and 1,000 rest homes.

Most of the accommodations are provided by the trade unions of the

factories and offices either free of charge or at a 70 per cent discount. Five million people a year spend their vacations in these very well-run and very popular resorts. Given the same type of resort nearby or far away, in another republic, the Soviet vacationer will almost certainly prefer the latter. He wants to see other places and meet other people. So you find a Ukrainian spending his vacation in Haapsalu, Estonia; an Estonian in Arkadia, the Ukraine; a Kazakh in Sergeyevka, Moldavia; and a Moldavian in Muldy, Kazakhstan.

Many people like touring. The country is big and has any number of beautiful spots like the Caucasus, the Urals, the Altai taiga and the Pacific coast. And we have people of all ages traveling to these scenic spots with knapsack and tent, compass and movie camera, individually or in groups, by air, train, and on foot. Figures show that in 1955, eight million Soviet people spent their vacations hiking; in 1962, 12 million; and in 1963, there will probably be 30 million.

Some people prefer to take one of the 370 tours sponsored by the trade unions. They are routed through the most interesting and picturesque regions and provide a choice of more than 300 well-equipped tourist and alpine centers with hotels, restaurants and all the necessary camping equipment. These tours provide complete service at a price the average person can afford, and in many cases there is no charge at all.

Those who want to avoid the trodden paths work out their own tours—it might be remote wooded country or a big town like Moscow, Kiev, Riga or Novgorod.

There are those who are fond of village life—milk fresh from the cow, the crowing of a cock in the morning, the smell of freshly cut hay. For these people a vacation isn't a vacation unless it's off to the country visiting relatives or friends. This category of traditional Russian vacationer is quite numerous.

Finally, there are the hunters, anglers and other nature lovers. Facilities for them are practically unlimited—hunting and fishing lodges by the thousands that supply them on arrival with everything from a room to a shotgun, and from a fishing rod to a fried sterlet.

For Young Pioneers there are the many camps situated near all the cities. For the littlest ones there are the nurseries and kindergartens, which move to the country for the summer season. And . . . but it is impossible to describe all the multitudinous ways in which Soviet people spend their summer vacations.

Concern No. 1

It is a year since the World Congress for General Disarmament and Peace was held in Moscow. It was a momentous event. People of all the nations of our globe, of different races and nationalities, classes and social groups, parties and political convictions, men and women of various religions and atheists, put aside all the things that divide them and came together to discuss the most urgent issue of our day—how to block the road to war. Various American groupings and opinions were also represented in Moscow by the biggest delegation in the history of the peace movement.

Addressing the congress, Nikita S. Khrushchev said: "We have always advocated disarmament and used every effort to strengthen world peace."

And again: "Our government has instructed me to declare from this rostrum that the Soviet people want to live in peace and friendship with the industrious and gifted people of America. The Soviet and American peoples have no grounds for hostility. Peace and friendship are their common interest. The Soviet people call on the American people and on all other peoples to work together for these lofty aims."

The year that has passed since the congress has measurably strengthened the peace forces all over the world and the popular sentiment for general and complete disarmament. It was evident this year, as in years previous, that the Soviet Union continues, consistently and energetically, to pursue a peaceful policy, a policy of constructive action looking toward generally acceptable decisions on international problems. It is sufficient to recall the position taken by the Soviet Union in the Caribbean crisis and the new proposals it submitted at the 18-nation meeting in Geneva.

Notable also is the fact that Moscow was once again the scene of an assembly for peace, the World Congress of Women, the largest after last year's congress. The cordiality of the Soviet people toward such gatherings speaks for itself; they are not only for peace but do everything in their power to give practical assistance to all movements and people of good will pledged to peace.

Youth Day was recently observed all over the country. Strictly speaking, it was a holiday for the young people, but—and this is typical of the new society—its joyousness gave color to everything and drew in everybody, young and old. It was a day for Soviet young people to sum up what they had acomplished and to explore the future. Demonstrations, sports events, balls and concerts were held everywhere. The older generation looked with loving pride at these young people newly embarked on their productive lives—at these young metalworkers, bricklayers, students, scientists, cultivators of virgin lands and builders of huge hydroelectric power stations on the Siberian rivers. "They will not go through a war, these children of ours who are building the beautiful edifice of a new society," the elders vowed on that day.

Gaily dressed, carrying flowers and singing songs, the young men and women made merry in the parks till the early morning hours. They each had their own thoughts and feelings on that beautiful day, but they were unanimous on this one thing: "We, like all the people of the world, need a stable and enduring peace no less than we do the sun."

And indeed, peace is concern No. 1 for all the Soviet people. It is mankind's most vital concern.

Life and Science

Fifteen academies of sciences, 4,172 research institutions and 524,000 scientists—this is the physical structure of Soviet science today. Its creative work is generally acknowledged. Soviet scientists hold a leading place in the world in a number of critical fields of knowledge.

Science will have an even larger place in the new society, the reason the organization of research was recently overhauled.

The general background and the principal reason for this reorganization are the new and very complex tasks facing Soviet science and the greater possibilities it looks forward to. At the same time the shortcomings were removed that had to a certain extent accumulated in the last stage, in the course of the rapid development of the country's scientific institutions.

The changes are many. These are the major ones:

Science will play a larger part in solving vital problems of production. In particular, scientists will concentrate maximum attention on the search for new technological answers in all areas of production.

There will be a new approach in the coordination of research and guidance of all scientific institutions. The USSR Academy of Sciences is to be the focus. It will be responsible for drawing up research plans for the whole country, for channeling appropriations for scientific work and for expanding facilities. The 162 academicians and 350 corresponding members will concentrate their attention on the most important theoretical and applied problems, working closely with state industrial committees. The academy's branches will function along different lines. Previously a branch did research in a whole group of different areas; now it will specialize in a specific field of study.

The academies of sciences of the union republics, whose structure was frequently similar to that of the USSR Academy of Sciences, are to be scientific centers, each of which will engage in specific areas of study, eliminating the duplication of research and the scattering of personnel. The research activities of higher educational institutions, formerly independent and uncoordinated, will now be included in the over-all national research plan. Student research is to become a more integral part of the educational process, and the training of scientists it to be improved.

The reorganization is working toward the closest ties between science and production, the participation of science in solving the concrete tasks of industry and agriculture.

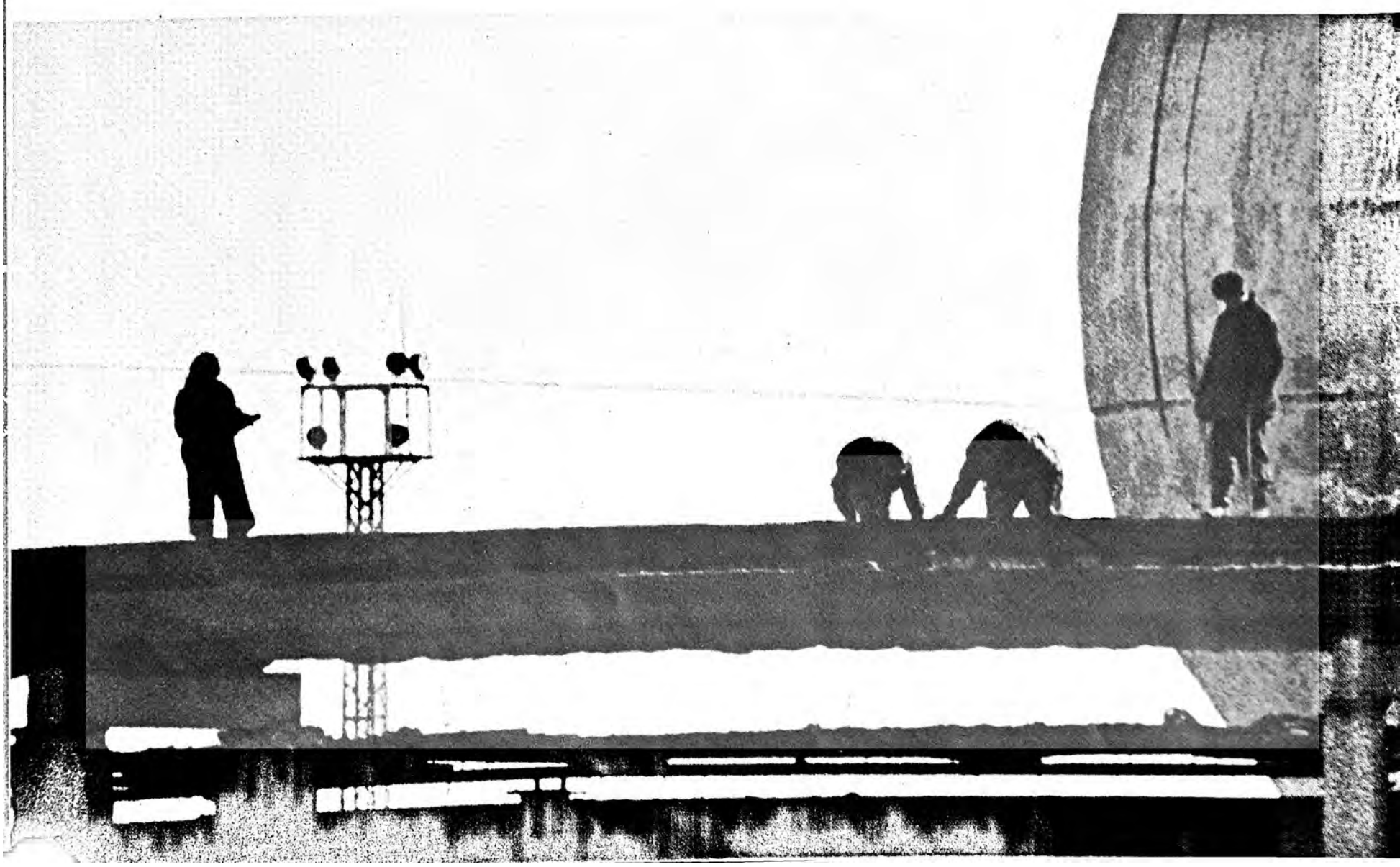
The reorganization will create a more productive framework for Soviet science, which has always been a creative force in the peaceful service of mankind. ★

THANK YOU, PEOPLE

BY OLEG KUPRIN

PHOTO BY DMITRI UKHTOMSKY

This photo of a group of oil refinery construction men in Ferghana, Uzbekistan, was the cover picture of Ogonyok, *a popular Soviet magazine, two years ago. The same issue carried a story on the project by the author of this article. Here is the project, Ferghana, and friends made then and since revisited.*



WE ARE FLYING across almost the whole country, Moscow to Ferghana. The white clouds under the plane make dull viewing, but when they scatter we see factory chimneys smoking, long, speeding trains, tiny villages dotting river shores, and sprawling cities.

What we cannot see from the plane are the people. It was they who created all this. Thinking about them and what they had accomplished, we wanted to yell down—

"Thank you, people."

Not far from the beautiful city of Ferghana, in the heart of Central Asia, they are building a large oil refinery. We were there two years ago. Now the refinery is in operation, but new installations are still being mounted.

Central Asian petroleum is very rich in oils. Hence, the refinery is mainly taken up with processing lubricants. It turns out enough of it for Uzbekistan, the other Central Asian Republics and the rest of the country as well.

On Sunday we visited the Oil Workers' House of Culture, a busy place. A company of amateur actors was rehearsing in the auditorium; athletes were training in the gym; the ballet, choral and vocal groups were practicing. The House of Culture is right in the center of this new village which has doubled in size in the two years since we were last here.

We met an old acquaintance, Khatam Usmanov. Two years ago this Uzbek lad was a fitter. He took a training course, and now he's a team leader. They used to call him Khatam, now it's comrade Usmanov—respect for a foreman, and a good one.

Usmanov's team is assembling tanks for storing oil or oil products. Ten years ago Usmanov hoped to become a teacher, but he did not pass the entrance examination for the pedagogy institute. He isn't too sorry about it now; he has come to like construction work and is preparing to take examinations that will enable him to enroll in the correspondence department of the Polytechnic Institute.

Anna Snetkova

Two years ago we made the acquaintance of Anna Snetkova on the construction site. At the time she was a foreman and headed several teams. Now she is a work superintendent in charge of a whole unit and directs several foremen. Anna has been on the project for six years now. Her debut was somewhat unusual.

A young woman on crutches walked into the manager's office one day.

"What can I do for you?" he asked.

"I'm reporting for the job. Here are my papers," she said in the most matter-of-fact way.

"What happened to your leg?"

On the way to Ferghana she had met with an accident and broke her leg. When it healed, she went to the steppes to help build the oil pipeline.

Anna Snetkova grew up in Riga, capital of Latvia. She studied construction engineering there and after graduation chose the Ferghana oil pipeline project from the several jobs she was offered.

At the time work was going on in the steppes and not in the green Ferghana valley. The sun was scorching; it was enough to touch the pipe with a bare hand to get a nasty burn. No flowers, no trees, but plenty of snakes. "I had had a vision of a beautiful region and what I came to was a regular hell." This is what Anna was saying six years ago. Now she told us this:

"A funny thing happened the other day. Glancing through a magazine, I saw a photo of a primary refining unit. The picture was taken from above and it looked beautiful—not a bit like our place. And then I looked at the caption and couldn't believe my eyes. It was our unit, the one I built. I walk past these things every day and never realized how beautiful they are."

Gazi Sabirov

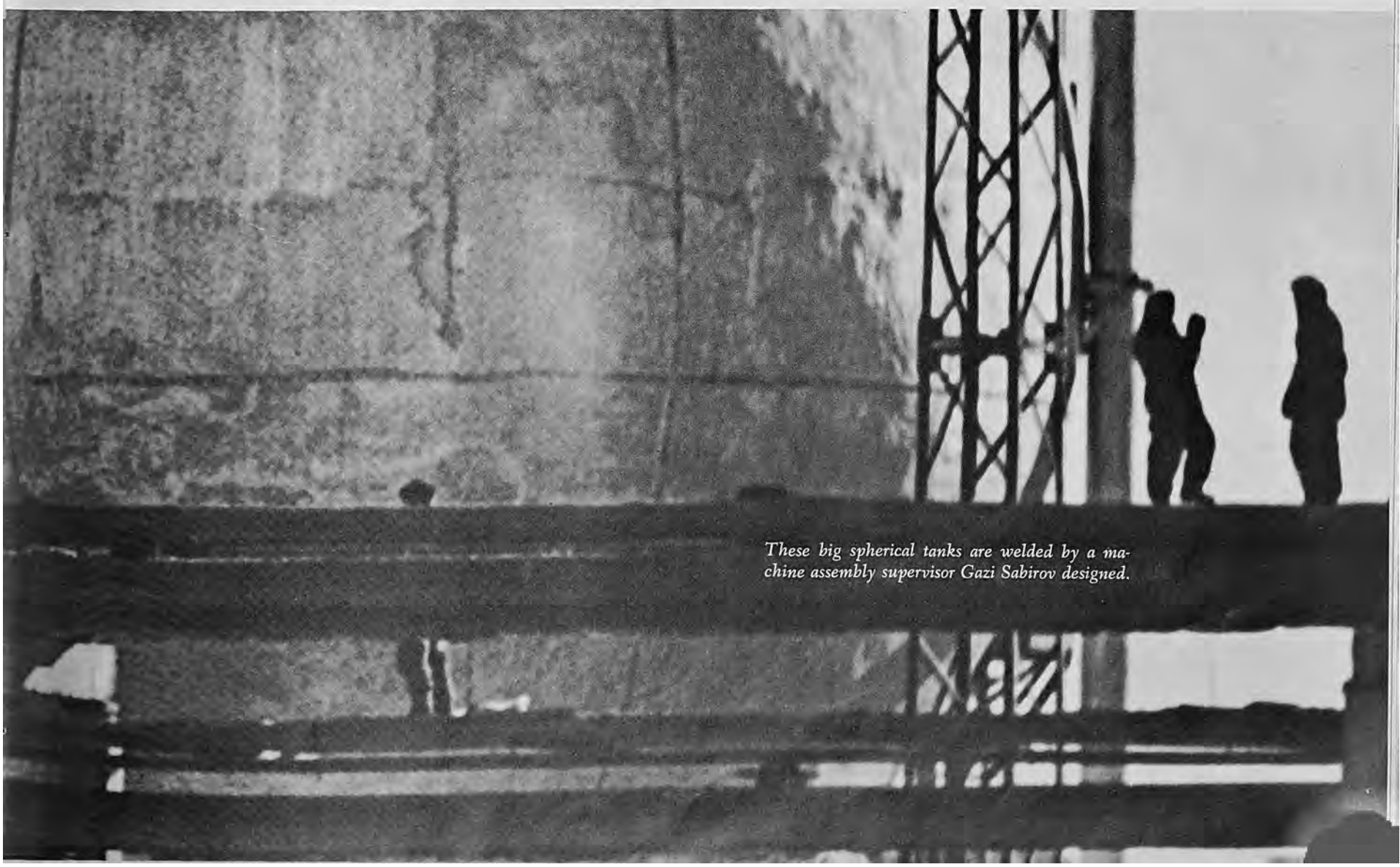
Gazi Sabirov, is another old acquaintance. He was born in Tataria, but his trade—construction—brought him to Central Asia long ago. Now he heads the construction organization which is building the Ferghana oil refinery. But his interests range wider than the construction site and the refinery.

One day Sabirov drove to the neighboring city. The weather was awful, pelting rain for days in succession. Off the road he saw huge piles of cotton. He stopped the car to talk to the collective farmers. They were very worried. The rain would stop eventually, but how were they going to dry the mountains of cotton?

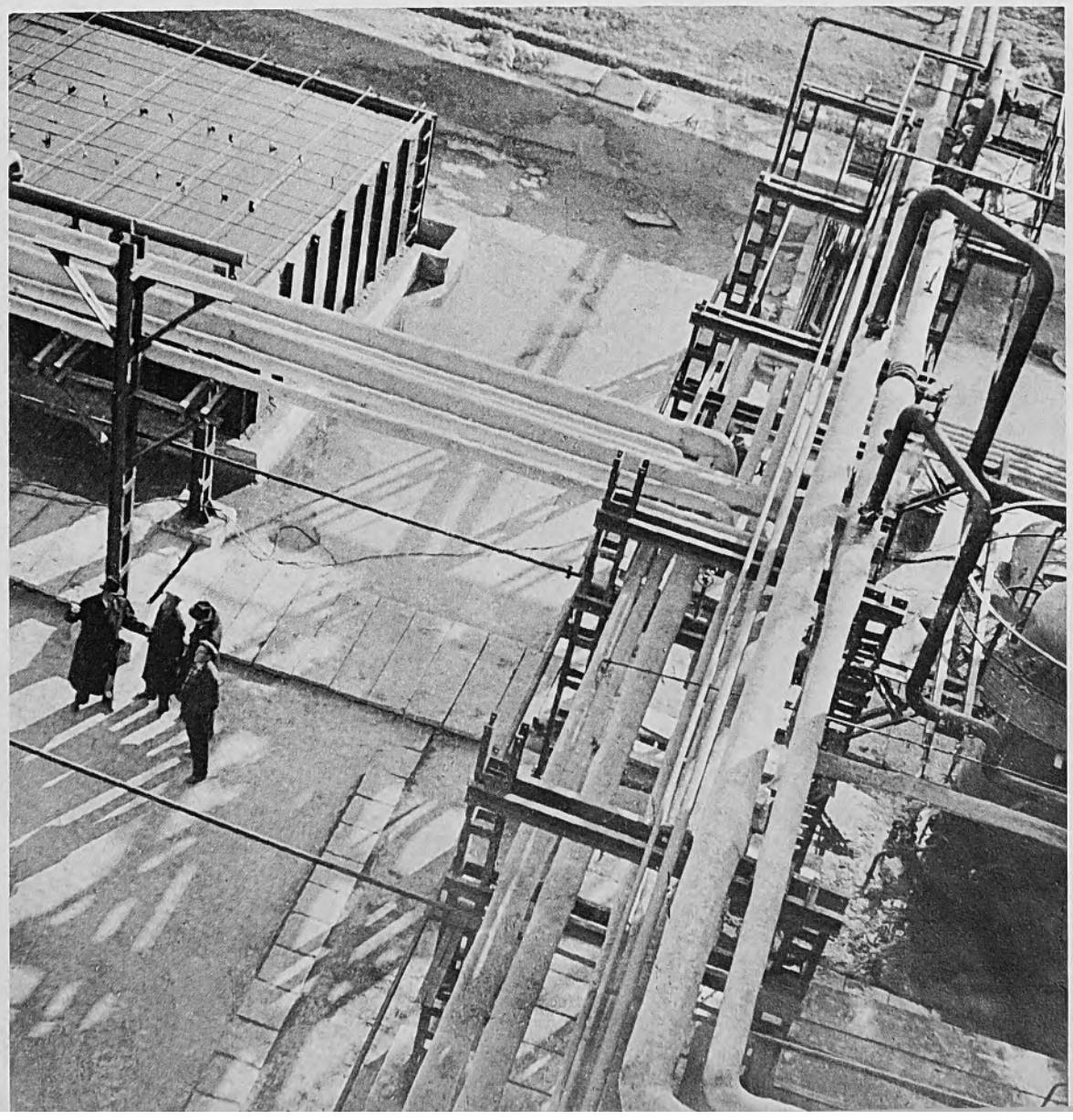
When Sabirov got back home he was more absorbed than usual, kept drawing on odd bits of paper and fussing about with a slide rule. But a few days later he had an air and gas dryer worked out for the cotton growers. The very first year 430 such dryers saved the collective farms more than 1,500,000 rubles.

The head of a construction organization often has to deal with unforeseen worries, especially when he's a person who can't remain indifferent to other people's problems.

A well was being drilled not far from Ferghana. Instead of oil, a fountain of very warm water spurted out. Medical men found that the water had medicinal qualities. Sabirov suggested that a water-cure facility be set up and designed it himself. The construction men worked on a



These big spherical tanks are welded by a machine assembly supervisor Gazi Sabirov designed.



Checking over the units of a new installation of the oil refinery before it goes into operation.

Engineer Anna Snetkova is 26, six years out of college. She supervises several dozen people.

A house-building plant near the refinery makes these panels. They are assembled on the site.

volunteer basis, in their free time. So did their helpers—students and collective farmers. And now there is a resort in the steppes with a fine building shaded by trees and shrubs where hundreds of people have already spent their vacations.

The Brothers Alexander and Ilya

One day we were watching the assembly of a new oil refining installation on which Alexander Sazonov's team was working. We had met his brother Ilya two years before. We asked what Ilya was doing and where we could see him. He was working in India, helping to build an oil refinery and was head of one of the construction units. His children were living with Alexander's family.

While we were talking, the assemblers had prepared a huge column for hoisting. They asked us to get out of the way. Alexander Sazonov took up his position at the concrete foundation where the 19-ton, 65-foot-long column had to be placed. He walked onto the platform, yelled something to the crane operator, made sure everything was set, and raised his hands. The motors started droning, and the column broke away from the ground slowly, as though unwilling. The team leader waved first one, then the other hand.

The higher the column rose, the more forceful Sazonov's movements became. There was something very familiar about his gestures. What did they remind me of? Finally it dawned on me; they were like the movements of a conductor leading an orchestra. That was it! He didn't even look like the man we had chatted with a few minutes before.

The column landed obediently where it was supposed to. The whole team fussed around it. The job was done. And now Alexander was changed back, nothing like a conductor in his clumsy and dirty jackboots and just as dirty jacket.

We took leave of our old and new acquaintances. We walked out of the factory grounds and looked back. The working day was at its peak. The people were not visible from here, but we saw the tall installations they had assembled. And once again we had the impulse to call out to them, "For what you have built for all of us—thank you, people." ★

CHEMICALS—INDUSTRY

BY EDGAR KUDRYAVTSEV

OURS IS AN AGE of cosmic speeds. By comparison, our rates of terrestrial progress are slow and unimpressive.

Builders advance by slow, imperceptible, unspectacular degrees. So it appears, until you add up totals, and then you begin to see how they have speeded up time. Say there is a time schedule you can meet easily if you stick to the set norms. This is, so to speak, a time barrier; it sets the presently accepted limits of what is possible.

But what if you try to break through the barrier, to build faster, to get a shop or a factory finished two, three or five months ahead of schedule? Worth a try? It may not be quite as dramatic as breaking through the sound barrier at hypersonic speeds, but expanded to national proportions, it could save years of time.

At present the Soviet Union is simultaneously building 374 chemical projects; 103 with top priority will soon be finished. If each of the 374 enterprises is completed, say, a week before schedule, it will save the country more than seven years of time!

After doing a similar piece of arithmetic, Ukrainian builders in the town of Severodonetsk set themselves the job of getting several new projects operating ahead of schedule and completing, also ahead of schedule, five factory buildings that were not due to be finished till 1964. Other parts of the country followed suit. Construction workers building plants for the production of synthetic rubber in Voronezh and Omsk, and new factories in Voskresensk, Sumgait, Salavat and other towns also pledged that they would get top priority projects done ahead of schedule. Industrial designers and suppliers of equipment went right along with them and are now revising their schedules for the preparation of blueprints and the delivery of machinery to the construction sites.

Yesterday and Today

Why so much concentration on developing the chemical industry? Why must chemicals become one of the leading Soviet industries? To understand today's problems we must go back a little.

After World War II chemistry became the basis of technological progress. Our planning agencies, however, were not nearly so conscious of this development as they should have been. They did not realize how much the future efficiency of the national economy generally would depend upon the chemical industry. This was reflected in budgeting funds for capital investments. The concentration remained on metals to the neglect of newer materials and chemical compounds. The compelling facts of science and technology forced a re-evaluation. The result is that today we do have technological processes worked out by our scientists, but they have not yet been put to sufficient use. While new chemical products have been developed, they are not being produced on a large enough scale. Hence the emphasis.

The year 1958 was the turning point for the Soviet chemical industry. At the May Plenary Meeting of the Central Committee of the CPSU, the decision was made to accelerate the development of this critical industry. The results were quick to tell. In the four years since, output of chemical products has grown by 60 per cent, with as many as 150 new plants and large chemical projects placed in service. A bumper chemical crop that augurs well for the industry's future.

Chemical products have literally invaded every branch of the country's economy. Their advantages are great and self-evident. In mechanical engineering, for instance, a ton of plastics not only does the job of three to four tons of steel but cuts the labor needed for the manufacture of goods to a fifth! The use of 3.1 million tons of plastics in machine building frees 10 to 12 million tons of steel and 700,000 tons of nonferrous metals, and with large savings in production costs of the articles manufactured.

The rate of growth of labor productivity is higher in the chemical industry than in any other, except machine building. It follows that as the proportion of chemicals in the national economy increases, the general level of labor productivity in the country increases. Besides, the return per production ruble is higher in the chemical industry than in any other, which means higher rates of growth in the national income.

What the accelerated development of the industry will give the country can be seen from these figures. Within two decades chemistry will be providing every third kilogram of bread, every second or third kilogram of potatoes and vegetables, every third cubic meter of construction materials (this is with ferrous metals as a base), every second hour in a shorter workday.

The May 1958 Plenary Meeting pointed the way, but the practical difficulties remained, and they were many. Some progress was made, but there was more than enough room for improvement, and there still is. That is the reason the November 1962 Plenary Meeting of the Central Committee of the CPSU once again gave top priority to chemical industry development. But whatever lag there is presently in the rate of growth can and will be met in the two remaining years of the seven-year plan period.

No 1

In the figurative language of Nobel Prize winner Academician Nikolai Semenov, twentieth century science is "no longer the servant of industry, it has become industry's mother." With science a productive force in society, as the Soviet Union develops chemical production, it also strengthens and enlarges the scientific and research facilities of this branch of industry. In the past four years 12 new research and design institutes with 32 branches have been set up. The volume of design and prospecting work has grown by 3.2 times, and of research by more than six times. Science is now dictating rates of development for the industry, a guarantee of development on a grand scale.

Panorama of Great Construction

In December 1962 the USSR Supreme Soviet adopted the national plan for economic development and the budget for 1963. Both the plan and the budget took into account the priority development of a number of important industries, with chemistry in the first place. Hence, great sums are being invested for its development—1.7 billion rubles, 36 per cent more than in 1962. Its over-all output is expected to grow by 17 per cent compared with last year's. This is projected against an 8 per cent increase in total industrial output.

We have already mentioned the 103 top priority chemical projects for this year. What will they be giving the country?

New plants to begin operating in various parts of the Soviet Union this year will be producing more than seven million additional tons of mineral fertilizer. A number of new agricultural items are going to be produced—defoliants, for example, which are special toxic chemicals that destroy cotton plant leaves before the combine picks the cotton. New artificial and synthetic fiber and rayon plants will make a larger choice of goods available to the consumer. The tire industry will be getting superstrong cord. The 34 synthetic rubber plants now under construction will be using new procedures and equipment that will turn out synthetic rubber superior to the natural product.

The projected growth for plastics and synthetic resins is higher than for other chemical products—25 per cent. Plants are rising in the oil processing regions around Sterlitamak, Salavat, Kuibyshev, Sumgait, Grozny.

And all this hinges on construction workers, on how much before schedule they can finish these new projects in Barnaul and Balakovo, in Cherkassy, in Kursk and Saratov regions and a hundred other places, on how much they can speed up time. ★

OUR VOCABULARY

Central Committee plenum or plenary meeting. A meeting of the Central Committee of the Communist Party of the Soviet Union. The Party Rules require that it be held at least once every six months. Between plenums the work of the Central Committee is directed by an elected Presidium.

The plenums consider diverse questions of great importance to the life of the Party and the Soviet state. For example, recent plenums outlined steps to speed up the agricultural development program, with a resulting rise in farm output. Other meetings considered the country's general economic development and particularly the progress in specific branches of the economy, inner Party matters, and the state of affairs in science, literature and the arts.

A characteristic feature of these meetings is that not only members and alternate members of the Central Committee participate but also invited specialists from various fields of endeavor—scientists and plain factory workers and collective farmers. Not infrequently, in preparation for a plenum, the Party organizes preliminary zonal conferences of those directly concerned with the problem—specialists, workers, farmers—to get as broad a survey of opinion as possible on the question at hand.

These democratic procedures allow for larger public participation in Party affairs, a better understanding of its decisions and a greater interest in seeing that they are carried out. It must be noted that the function of the Party plenum is not to supplant the country's economic bodies but to assist them by indicating general trends and directions.

Productive forces. The term denotes means of production—forests; coal, iron ore and other minerals; machine tools and industrial equipment; factory buildings; warehouses; railroads; electric transmission lines; and other such resources—as well as manpower, the workers who produce the material values with the means of production. The level of development attained by these productive forces reflects man's progress in harnessing nature.

The degree of development reached by the productive forces of different societies depends on the tools its workers use (the stone axe of primitive man or the modern automatic line); the power potential the worker has at his command (the muscle power of a human being or draft animal, or a huge hydroelectric power station); and finally, on the knowledge and skill that the workers have acquired in production.

The prime productive force is, of course, manpower, since without human intervention there can be no production and no material values produced. It is man who sets in motion the machines he himself has made, who produces for himself his necessities—food, clothing, housing. Work is more than the foundation of social living; it is also a natural necessity without which there can be no human life. Hence, the production of material values is the determining factor in social progress.

Production relations. Karl Marx said: "To produce things, people enter into definite contacts and relationships, and it is only through the medium of these social contacts and relations that their attitude to nature is displayed and production takes place."

Labor relations between people first began to take shape in primitive societies. In hunting tribes this was expressed in communal hunting. When division of labor first appeared, relations began to be established between the tillers of the soil and the breeders of cattle, between the farmers and artisans, the artisans and merchants. The rise of the factory system made these relations more complex and differentiated.

It is the form of ownership that essentially determines the production relations. Without appropriating the material values they have produced, people cannot live. Once they do appropriate them, they willy-nilly enter into property relations or relations of ownership. The form of ownership becomes the defining factor in production relations. The distribution of material values and the position of the different social groups involved depends on who owns the means of production. If they are owned by society in common, the relations that develop between people in the process of production are based on comradeship. But if they are owned by a particular group of people, the relations become those of master and servant. Ownership of the means of production permits a small group to appropriate most of the product, in whose production they had no direct part, and compels an army of direct producers, who do not own the means of production, to sell their labor.

In the process of creating material values people accumulate experience and knowledge, improve the machines (the implements of labor) and invent new ones. What we have is a never-ending renewal of the productive forces, which prove to be more flexible than the production relations. As the production relations lag, they begin to conflict with the productive forces. This is resolved by introducing new production relations. ★

Lenin speaking at the Second Party Congress, from a painting by Y. Vinogradov. Delegates recall the force, eloquence and simplicity of his delivery.

THE WORLD'S FIRST

THE SECOND CONGRESS of the Communist Party of the Soviet Union, whose sixtieth anniversary is now being celebrated, met from July 30 to August 23, 1903. During those epochal four weeks, the longest of the Party's 22 congresses, the foundation of the world's first Communist Party was laid. What Vladimir Ilyich Lenin, the Party's founder, described as a compact group of men marching along a precipitous and difficult road surrounded by enemies on all sides and advancing under almost continual fire, has now grown to a membership of 10 million.

At the Turn of the Century

In 1903 representatives of Russia's working class, at the risk of being jailed, crossed the country's frontiers and traveled a long distance to take part in the work of the congress.

Why did these 43 delegates of the Russian workers' movement have to gather for their congress in foreign countries, first in a flour warehouse in Brussels and then in various places in London?

They were forced to do so because in the early twentieth century reaction was rampant in czarist Russia. The prisons were crammed with political prisoners, and thousands of people were being driven in chains along the roads to Siberia.

Russia was then the focus of imperialist contradictions. Oppression by the native landlords and capitalists was augmented by the merciless exploitation by foreign capitalist monopolies. The load of the national minorities of Great Russia was even heavier because they also suffered at the hand of the feudal nobility in the provinces.

The working class was unbelievably oppressed. The workday was 14 to 15 hours long, the wages barely enough to keep alive on, the living conditions unspeakable. All this created extremely fertile soil for Marxist ideas, and Marxist circles and other political organizations soon began to mushroom throughout the country.

Influenced by revolutionary ideas, the five-million-strong working class of Russia began to grow in political consciousness and intensify its activities. The struggles for economic rights began to take on a political character, and was directed against the arbitrariness of the czarist authorities and the bourgeoisie. Besides demanding better working and living conditions, higher wages and shorter hours, the workers fought for freedom of speech, freedom of assembly, and other political rights.

In time the movement grew to large proportions and assumed a definite Marxist character.

The workers believed in their eventual victory. One of the many testimonies to this faith is a speech made by revolutionary worker Pyotr Alexeyev before a czarist court in 1877. "The workingmen can count only on themselves," he said; "the muscular arm of millions of workingmen will be lifted, and the yoke of despotism, maintained by soldiers' bayonets, will be smashed to bits!"

Nor was it the working class alone that wanted to rid the country of the yoke of the feudal nobility and the capitalists; Russia's ruined and impoverished peasantry and its artisans wanted the same thing.

But how was that to be achieved? Lenin gave the answer in his two books *Where To Begin?* (1901) and *What Is To Be Done?* (1902).

A Lever of Revolution

"Give me a lever and I shall move the world!" said the ancient Greek mathematician and physicist Archimedes.

And Lenin, the leader of the Russian Marxists, paraphrased those famous words at the dawn of the twentieth century: "Give us an organization of revolutionaries, and we shall overturn Russia!"

Such an organization could only be a Marxist party of the working class.

The embryo of this party was the League of Struggle for the Emancipation of the Working Class, set up in 1895 by Lenin in St. Petersburg (now Leningrad), the capital of Russia at the time. Similar Leagues of Struggle soon sprang up in Moscow and other cities.

The first attempt to unite the Marxist organizations and groups in Russia into a single party was made in 1898. That year nine Marxist revolutionaries gathered secretly in Minsk at the first congress of their party. But shortly after the congress, they were arrested. Although the formal founding of the party had been announced, it did not exist in fact. No common program or rules had been adopted, and the several Leagues of Struggle and other Marxist organizations still acted individually.

To organize the party all the Marxist circles and organizations had to jointly draw up a draft party program and rules, have them discussed by the workers and then convene the Second Party Congress. This very difficult preparatory work was done by *Iskra* (Spark), the illegal newspaper founded by Lenin in 1900. It was the first all-Russian political newspaper of the revolutionary Marxists. The paper was published abroad in Leipzig, Munich, London and Geneva, and circulated underground throughout Russia. The masthead carried the slogan, "The spark will kindle a flame!"—prophetic words, the future was to show.

The preparatory work for the Second Party Congress was done in the face of a sharp struggle the Marxist revolutionaries were carrying on against all kinds of opportunists within the country and abroad, opportunists who wrapped themselves in the banner of Marxism but actually supported the ruling classes. At the Party Congress it became evident at once that the views of the participants differed greatly. The disagreements were serious

and the debate heated. From the outset two political groupings took shape, groupings whose positions in ideological, organizational and tactical questions were absolutely different.

The first grouping was composed of consistent revolutionaries who took the theory of Marxism seriously and were determined to put it into practice. Lenin, who was 33 at that time, headed this grouping, and it was supported by the workers of Russia's big industrial centers and the impoverished peasants. This was the revolutionary wing of the congress.

The other, a heterogeneous grouping, opposed Lenin and his supporters. It held the most philistine views and was supported mainly by wavering intellectuals and highly paid workers. The group was headed by Martov, Lieber and Akimov.

The Leninists believed that the principal task of the congress, one which the times dictated, was to organize a militant revolutionary party of the working class that had strong bonds with the people, and that this party had to have a program, rules and leading bodies of its own.

Eyewitnesses report that Lenin was the heart and soul of the Second Party Congress, that his speeches were distinguished for their impregnable logic and decisiveness, their depth of revolutionary conviction and passion, their tenacious adherence to principle and the speaker's great personal magnetism.

"The force, eloquence, extraordinary naturalness and simplicity of Lenin's way of speaking," recalls S. Gusev, one of the congress participants, "his remarkable calmness, unfading smile, his unaffected friendliness toward his comrades and the great pleasure and satisfaction with which he dedicated himself to his work—these were Lenin's distinguishing characteristics . . ."

The delegates elected him a member of the congress executive and of its credentials, program and rules committees. He spoke on almost all the 20 items on the agenda. The congress minutes record about 130 of his speeches and comments.

Lenin spoke often and with particular force in the debates on the program, rules and the election to the central party organs.

Party Program, a Source of Inspiration

The Party Program turned out to be the major issue on the agenda. Of the 37 meetings held during the congress, 25 were devoted to discussion of the Party Program. The disagreement was on basic principle, with the opportunist delegates standing opposed to the main planks in the program.

Lenin's opponents demanded that the clause calling for the establishment of the dictatorship of the proletariat in Russia be struck out. They were subsequently persuaded by the consistent Marxists, who argued that in any bourgeois state the factory workers and peasants are the majority of the population, the capitalists and landlords make up the minority, and that the dictatorship of the proletariat means the democracy of the majority, while the democracy of the bourgeoisie is actually the dictatorship of the minority.

Another of their objections to the draft program was the Marxist answer to the national question. The opportunists fought against the complete equality of all citizens, regardless of nationality, race or religion. They refused to accept the principle of self-determination for all the nations in the Russian Empire, and were opposed to the concept of a party that encompassed workers of all nationalities.

But the logic of the Leninists battered down all the arguments of the opportunists, and the Party Program was approved almost unanimously, with only one man opposed, Akimov, the leader of the opportunists.

This was the first Communist Party Program in our country and in the history of the international workers' movement. It consisted of two parts—a minimum and maximum program of action.

The maximum program declared that the main task of the Party of the working class was to end the exploitation of man by man and the division of society into classes. For this purpose it was necessary to abolish private ownership of the means of production. In other words it was necessary to replace the capitalist system with socialism by means of a revolution and the establishment of the dictatorship of the proletariat.

However, under the conditions that prevailed, the maximum program could not be effected without first solving more immediate and urgent problems. The congress therefore worked out a minimum program, to be carried through first. This minimum program had such immediate aims as the overthrow of the czarist regime, the establishment of a democratic republic, an eight-hour workday and the elimination of the remnants of the feudal system in the countryside.

Thus, the Party Program called on the working people of Russia to free themselves first of the leftovers of feudalism, and then of capitalism.

Calling these two systems two piles of rubbish that could not be carted away simultaneously, Lenin wrote, "The people of Russia will first have to cart away all the rubbish that we know as feudal and landowners' property; then they will have to come back with an empty cart to their somewhat cleaner courtyard and begin to load the cart with tbe second pile of rubbish of capitalist exploitation."

Communist Party, Party of Action

The program adopted, the congress began to discuss the draft rules of the Party. A dispute flared up around the first paragraph, dealing with membership in the Party.

Lenin and his supporters maintained that the Party should be a fortress with its doors open only to staunch and tested fighters for the workers' cause. It was not sufficient for a member of such a party to accept its program and pay dues; he should also be required to work actively in one of its organizations.

Lenin argued for an organized, militant and well-disciplined Party, made up of professional revolutionaries. "In its struggle for power the proletariat has no other weapon but organization. . . . The proletariat can and inevitably will become an invincible force only when its ideological unification around Marxist principles is consolidated by the material unity of an organization welding millions of toilers into an army of the working class."

Martov and other opponents of Lenin held that party members did not necessarily have to belong to an organization, carry out party orders and observe its discipline. It was quite sufficient, they said, for a member to be on the party rolls and pay dues.

Lenin's supporters knew that with such a motley and undefined party lacking organization and discipline, it would be impossible to realize the minimum, let alone the maximum program. And though Martov and other opportunists at the Second Party Congress, beginning with Akimov and winding up with Trotsky, managed to railroad through their version of the first article of the Party Rules, the next (Third) Party Congress, held in London in 1905, restored the Leninist wording.

In electing the Party's central organs, the congress again split. The majority voted with Lenin's supporters. Since then, Communists loyal to the working class have been known as Bolsheviks (from the word *bolshinstvo*, meaning majority). The opponents of Lenin and their followers were dubbed Mensheviks (from the word *menshinstvo*, minority).

The struggle at the congress was very stubborn but was brought to its logical conclusion.

Describing it, Lenin said: "What a wonderful thing our congress was. It was a free and open struggle. All opinions were expressed, all shades of ideas delineated. Hands were raised in voting. A decision was taken. A stage has been covered. Now we march on! That is what I like. This is real life. It has nothing to do with the endless, boring verbiage of the intelligentsia, verbiage which ends not because people come to the solution of a problem, but because they simply get tired of talking. . . ."

The Second Party Congress took place on foreign soil, but the workers' movement in Russia followed the proceedings carefully, and the Bolsheviks won the support of the majority of Russia's workers' organizations.

Thus the main achievement of the Second Party Congress of 60 years ago was the founding of the world's first Communist Party, a Marxist party of the working class that applied in practice the theory of scientific communism worked out by Marx and Lenin.

The minimum program was carried out when Russia's working people overthrew the czarist regime in February 1917. Eight months later, in October 1917, came the socialist revolution. The new socialist system replaced the old capitalist system. This was the maximum program realized.

A new program was needed then. It was adopted by the Eighth Party Congress in 1919. Its goal—to build socialism in the country. It took several decades of hard work, but the Soviet people built their socialist society and fulfilled the Second Party Program.

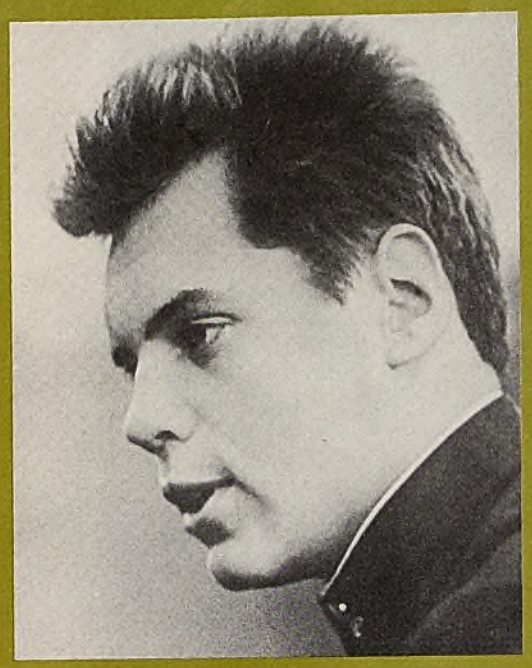
In 1961 the Twenty-second Congress of the CPSU adopted the third program. Its target is to build a communist society in the Soviet Union. This grand program is now being translated into life. "The present generation of Soviet people," the program declares, "shall live under communism!"

These three programs are a three-stage rocket. The first stage rid the country of capitalism, the second stage raised it to the heights of socialism, and the third stage will orbit it into communism, a forecast that is confirmed by the Soviet Union's ever growing economic, scientific and engineering achievements.

The history of the Communist Party is Marxism in operation, a history of a party of action, a party of creative effort, a party of socialist and communist construction.

The heroic story of the Communist Party of the Soviet Union is told in a recently issued instructive and interesting six-volume work on the history of the Party from its founding to the present time. No other political party anywhere in the world is responsible for such profound social changes. No other party has traveled such a long and difficult road. For 60 years the Communist Party of the Soviet Union has been fighting for freedom, justice and peace, for 60 years it has been leading an irresistible movement of millions of working people toward socialism and communism. ★

AROUND *the* COUNTRY



FIFTEEN-YEAR-OLD SCIENTIST

Volodya Mazepus was at home with integral and differential calculus when his classmates were still laboring over fractions and the decimal system. He was 11 then. A little later the seventh-grader was poring over the works of the world's leading physicists: Landau, Ivanenko, Heisenberg, De Broyle. In the all-Siberia physics and mathematics contest for secondary school students, held last year, Volodya won prizes for solving problems in both physics and mathematics.

The 15-year-old tenth-grader from Sverdlovsk was given a research fellowship at the new laboratory of the Nuclear Physics Institute of the Siberian Branch of the USSR Academy of Sciences. He is taking a correspondence course at Novosibirsk University.

Volodya is 6 feet 1¼ inches tall, strong and well built. He enjoys skiing and swimming. A good musician, he is studying composition and has already composed two sonatas and several preludes and mazurkas.

A TALKING PIPE

Young radio amateurs Alexander Salosin and Victor Prokhorov of Donetsk have designed and built an electronic device for sound reproduction that fits into an ordinary tobacco pipe. A man with paralysis of the vocal cords can talk with his pipe; it gives him artificial vocal cords. He puts the mouthpiece between his lips and presses a barely noticeable button. Thereupon a generator begins to send out sound oscillations of 80-90 cycles per second.

NEW DELHI-MOSCOW-WASHINGTON

These two young men from India, Prabkhakar Menon (left) and Satish Kumar, are marching for peace. They left New Delhi in mid-1962, walked across Pakistan, Afghanistan, Iran and four Soviet republics—Azerbaijan, Armenia, Georgia and the Russian Federation. They say: "We are trying to talk to public figures in the different countries and to get people to work for disarmament. From Moscow we will be going to Warsaw, Berlin, Paris and London. We will finish our 'peace march' in Washington."

HEART SURGERY

Years of theoretical research and experimentation on anmials led Professor Alexander Vishnevsky (surgeon), Professor Tigran Darbinyan (anesthesiologist) and Dr. Vladimir Portnoi to the conclusion that an operation on the heart is best performed with the brain disconnected from the general blood circulatory system. The disconnected brain is supplied with blood artificially while the body is in a state of clinical death. The operation over, the arteries leading to the brain resume their function, and the body is once again alive.

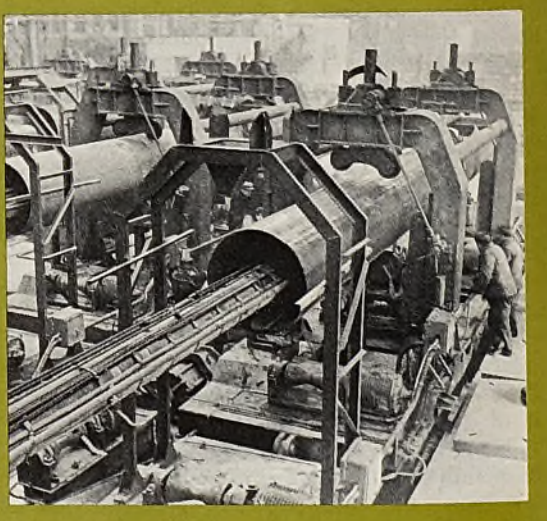
Scores of experiments, complicated calculations, theoretical investigations and all sorts of modifications in the apparatus that carries the blood to the brain during the operation have made the new technique a successful reality.

On the operating table is 22-year-old Galina Blinova suffering from contraction of the pulmonary artery. Surgeon Vishnevsky cuts open the pectoral cavity, connects a miniature artificial blood circulatory system (of 0.5-liter capacity) to the brain. The silence of the operating room is broken only by the even pulsation of the "minor artificial heart" feeding blood to the brain. Nine minutes pass. Professor Vishnevsky has corrected the cardiac defect and motions to his assistants to take over. The assistants put the heart back in place and suture the blood vessels.

TARAS SHEVCHENKO PRIZE

On the decision of the World Peace Council the 150th birth anniversary of Taras Shevchenko, Ukrainian poet, thinker and revolutionary democrat, will be observed in 1964. To immortalize the memory of the great poet the Government of the Ukrainian Republic last year established the annual Taras Shevchenko Prize.

The republic's Committee on Prizes decided to award the Taras Shevchenko Prize for 1963 to the prominent Soviet Ukrainian poet Vladimir Sosyura (left) for the books of poems *The Swallows on the Sun* and *Happiness of the Working Family*, to writer Grigori Tyutyunnik (posthumously) for the novel *The Whirlpool*, and to composer Georgi Maiboroda (right) for the opera *The Arsenal*.



TUBE MILL "1020" COMMISSIONED

The first section of the giant "1020" tube mill has been commissioned at the Chelyabinsk Tube-rolling Plant. The plant's 80,000-square-meter electric welding shop, where the mill is installed, turns out metal tubes 529-1,020 millimeters in diameter for the Bukhara-Urals gas main and the Druzhba oil pipeline. All the processes in the new shop are automated. The builders and assemblers did the two-year construction job in 10 months.

SCIENCE DISSECTS ART

An unusual symposium—the arts investigated with the instruments and techniques of the scientist—was held recently in Leningrad. Cybernetics experts delved into the laws of versification. Physiologists tried to ferret out the secrets of the nerve cells responsible for emotions. Psychologists staged experiments demonstrating the role of intuition. Artists compared their understanding of inspiration.

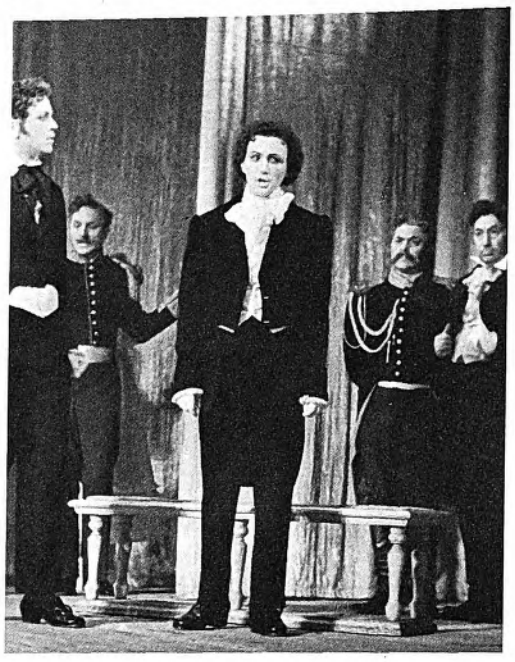
Pyotr Anokhin of the USSR Academy of Medical Sciences reported on the physiology of higher nervous activity as related to the origin of an art project and on the role of emotion in the creative process. Writer Gennadi Gor spoke on self-observation as a technique for studying the psychology of creative work. Academician Andrei Kolomogorov's paper used statistics and the theory of relativity in a study of the Russian iambic foot. The symposium participants had the unique experience of listening to music composed by an electronic machine.

WORKERS PUT ON OPERA

The photo is a scene from *Eugene Onegin* as staged by the amateur opera company of the Central Railwaymen's House of Culture in Moscow. On opening night technician-designer Galina Sinitsina sang Tatyana; engineer Valentin Muslayev, Onegin; and fitter Vasili Bakhirev, Gremin.

This opera company was organized by its young director Anna Sokolova, who graduated from the Conservatory and the State Institute of Theatrical Art only three years ago. The original company of 15 has grown to 50.

They began with scenes from *Mazepa, The Mermaid, Aida* and *La Traviata;* did all of Leoncavallo's *Pagliacci;* and now *Eugene Onegin,* complete with chorus and orchestra. It should be noted that this House of Culture's ballet and fine arts group collaborated in the production. The company plans to do Verdi's *Otello* and *October* by Vano Muradeli.



NEW MINISTER OF AGRICULTURE

Ivan Volovchenko is the new USSR Minister of Agriculture, recently appointed to the post by the Presidium of the USSR Supreme Soviet. He was born in 1917 in the village of Karyzh, Kursk Region. After graduating from the Voronezh Agricultural Institute in 1942, he worked as an agronomist at a machine and tractor station. He saw active service in the war and after demobilization went back to farm work.

The new minister served as director of the Petrovsky State Farm, Lipetsk Region, for nearly 12 years, where he proved to be a very fine organizer and innovator. The Petrovsky farm, under his management, showed a steady rise in crop yields and decline in production costs.

150-MILLION-YEAR-OLD FOSSILS

A paleontological expedition of the USSR Academy of Sciences, working in Kazakhstan north of the town of Chimkent on the site of what was a lake in the Jurassic period, found several thousand fossil plants, insects and fishes in the lime-mud shale. The two most exciting finds were unique specimens of fish and an excellently preserved flying pangolin, one of the earliest of the flying vertebrates.

Scientists believe these plants and animals lived some 150 million years ago.

HOT SUBTERRANEAN SEAS

A team of hydrogeologists were exploring Daghestan's Black Lands several years ago. The hot sky pushing down on the steppe was gray with dust; the sand, covered with patches of incinerated grass, looked like the skin of a mammoth lizard. A large hole showed pitch-black on the slope of a limestone ridge in the foothills of the Caucasus Mountains.

The hydrogeologists decided to have a look inside the cave. A low gallery led them to a vaulted grotto. Farther on were several chambers, each with a small pool of warm water in the center. As the hydrogeologists went deeper into the cave, the pools grew larger and the water warmer, as high as 158 degrees Fahrenheit. The pools, they found, were the outlets of a hot, invisible sea, a freshwater sea.

That discovery changed the Black Lands region so that it is hardly recognizable now. In summer the water, extracted from deep inside the earth and cooled, is channeled to melon fields and vegetable beds. Corn, beans and other vegetables are grown on what was once semidesert land. In the wintertime green houses like this one in the North Caucasus are warmed by the inexhaustible natural central heating plant.

The subterranean waters are also used for other than irrigation and heating purposes. Some of the mineralized "seas" of the Caucasus supply raw materials for the production of iodine and bromine.

AROUND the COUNTRY

ENGINEERS TURN TO SCIENCE

BY NINA VITKOVA AND MIKHAIL VASILYEV

PHOTOS BY ALEXANDER MOKLETSOV

THE 40,000-volume technical library of the Electrosila Plant in Leningrad has a section, crowded now, containing books written by past and present staff members. The section is of more than professional interest; it is evidence of the plant's tradition of independent research and writing.

Some of the books now have historical rather than current significance. One such dog-eared volume is *Hydraulic Generator Engineering* by Vladimir Titov and Mikhail Gruzov, two young engineers at the plant at the time of its writing.

Titov, now assistant chief designer, came to Electrosila 35 years ago straight from college, when the plant was getting down to work on a complete set of generators for the Dnieper Hydroelectric Power Station, Europe's largest at the time. He took an active part in designing them, and then, with Gruzov, made a comparative study of these singularly new generators and those of other countries.

The study left the two engineers with bulging folders of notes and observations, and they conceived the idea of doing a book on the valuable experience that had accrued in designing the high-powered hydraulic generators.

This was the first book in the field written by Soviet engineers, the precursor of many to follow by Electrosila staff members, which generalized the experience of a large body of hydraulic generator builders.

Another Electrosila engineer, Alexander Berger, wrote a three-volume work *Alternating-Current Turbogenerators*. It has played an enormous part in the development of Soviet hydraulic engineering, having been a textbook for generations of students in the USSR and elsewhere. The author has worked at Electrosila for two decades during which time he has also taught at a technical college.

Engineer Robert Lyuter holds a doctor's degree in the technical sciences and has written several major works. He is the generally acknowledged leader in Soviet generator design theory and development. Another Electrosila engineer, Georgi Zherve, has also made an important research contribution.

Nikolai Ivanov, the plant's chief designer, recently defended a thesis he wrote for his Master of Science degree at the All-Union Electrotechnical Engineering Research Institute in Moscow. It was the fruit of almost 30 years' experience, paralleling the development of Soviet generating-machinery engineering. He had a hand in designing a series of turbogenerators early in the thirties. Then, under his guidance and with his direct participation, the plant designed 100,000-kilowatt air-cooled generators. After World War II Electrosila built turbogenerators having a 200,000-kilowatt, and then 300,000-kilowatt, capacity. In process several important technical problems were solved in connection with the gas-cooling of the rotor winding and water-cooling of the stator winding. Ivanov directed all this work, and the results are reflected in his thesis.

The work that engineer Edward Gurevich has been doing at Electrosila during the past 15 years—testing and designing insulation for high-voltage machines—suggested the research subject for his master's degree. The recommendations Gurevich made in his thesis will help increase the reliability of insulation.

Other Electrosila people will shortly be getting their graduate degrees. Vladimir Lyulko, chief of the high-voltage insulation laboratory, has been doing research on the wave parameters of electric machines. Leonid Yablonik, who works in the Department of Metals and Strength, has been investigating the use of ultrasonics in generator-building. He has arrived at some very interesting conclusions that are summed up in his thesis "The Sensitivity and Singularity of Ultrasonic Control by the Shadow Method."

The list of all the people at Electrosila doing research on their own is a long one. They have, of course, the encouragement and complete cooperation of the plant management—the use of the laboratories, library and other facilities, the advice of the academicians and other eminent scientists who have been research consultants to Electrosila for many years, including such authorities as Academician Mikhail Kostenko, director of the Institute of Electromechanics and Corresponding Member of the USSR Academy of Sciences Professor Alexeyev and Yevgeni Komar, Doctor of Technical Sciences. The plant's own leading consultants, among them Robert Lyuter, Georgi Zherve, Alexander Berger and Oscar Bron, are always at the service of the younger engineers, sharing their experience and methods, giving advice and checking results.

Electrosila's Science and Engineering Society (SES) has a membership of 500, people from the plant and its branch research institute, junior investigators and leading lights in Soviet hydraulic engineering. Membership in the society is voluntary, and it has an elected council of 15. Membership dues, one ruble twenty kopecks a year, are used to finance interplant research contests and travel grants to the society's members at work on research problems. The expenses incurred by the frequent conferences and meetings with researchers in other establishments are covered by Electrosila's management.

Typical of these conferences was one initiated by engineer Ivan Filippov on cooling electrical machines. He found the existing literature on the subject inadequate and suggested a conference. The SES council sent invitations to related plants and research institutes throughout the country. Some 300 Soviet and foreign specialists attended, and the conference was a huge success. The published reports constitute an indispensable handbook for designers. The new cooling systems recommended by the conference are now in use at Electrosila and other plants.

Another recent and very informative conference was held on problems in commutation of direct-current machines. Representatives from 18 plants and 40 research institutes discussed 25 papers on commutation theory and practice. The recommendations of the conference are already being applied in industry.

The Electrosila management has been turning to the Science and Engineering Society more and more frequently for help in appraising new projects, technical processes and research results. Previously this was the function of the plant's Scientific and Technical Council, chaired by the chief engineer. Now the council's functions are gradually being taken over by the SES in line with the general Soviet trend of having public organizations take increasing responsibility for managing the country's economic and political affairs.

Last year, for instance, at the more than 60 meetings of SES sections some 100 major problems of electrical engineering were discussed. Thus are industry and science cooperating in research and development, their common contribution to technical progress in our country.

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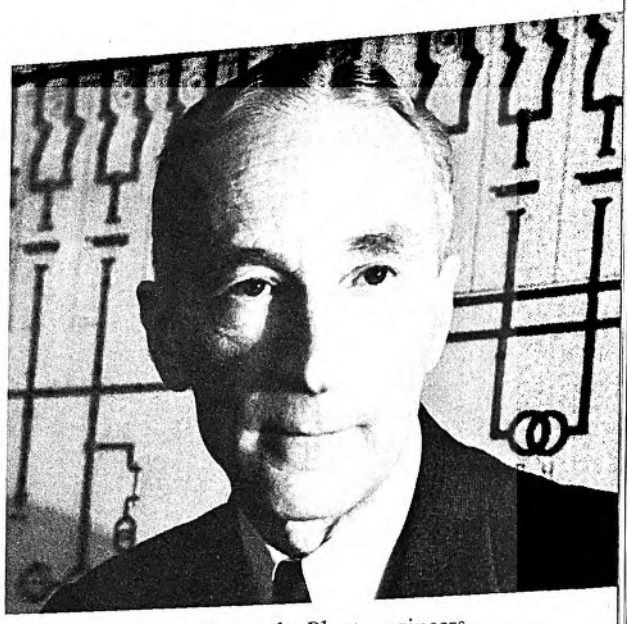
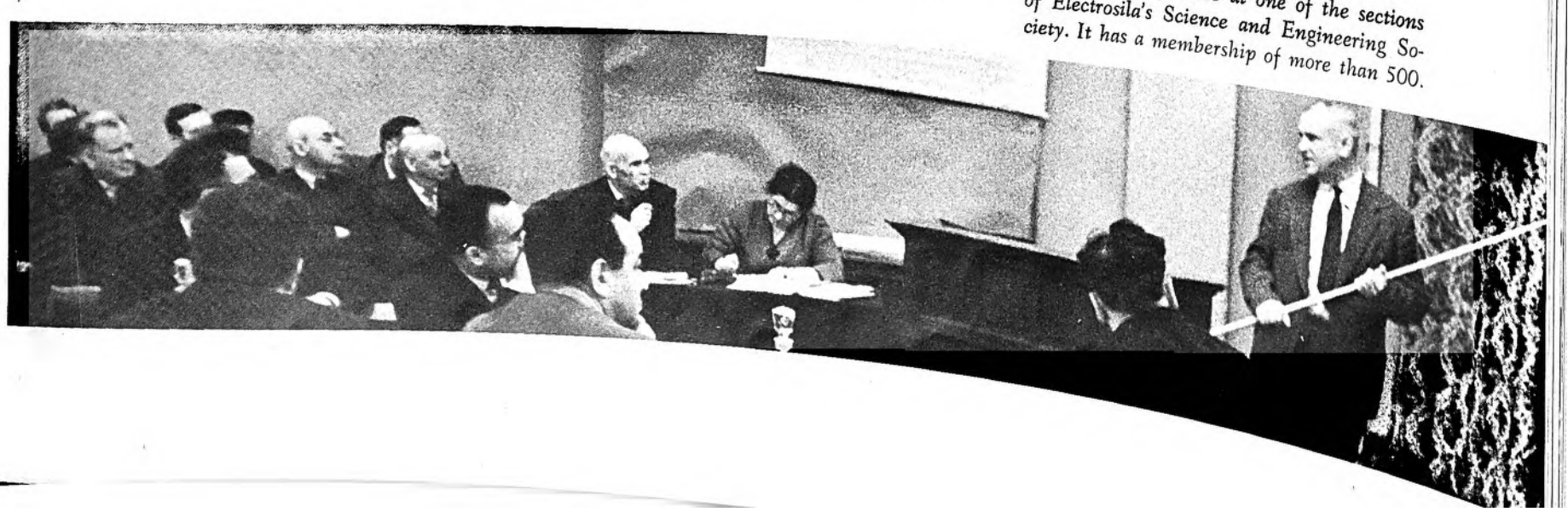


Like many other Electrosila Plant engineers, laboratory chief Georgi Zherve has a number of important research studies to his credit.

Engineer Oscar Bron in the plant's 40,000-book library. A sizable shelf is filled with books written by Electrosila staff members.

A research conference at one of the sections of Electrosila's Science and Engineering Society. It has a membership of more than 500.



IS MAN FREE IN EVERYTHING?

EVERY HUMAN BEING sets himself a definite aim in life and tries to achieve it. But what are the motives that guide man in his choice of aim and the means he uses to achieve it? Are just his personal wishes sufficient, or are there external circumstances over which he has no control and which command him to act this way and no other? Do we freely choose all the aims we set ourselves? Are they all possible of achievement? In short, is man free to do as he wills?

These questions bring to mind the early aeronautic efforts. The idea of flying in a heavier-than-air machine was advanced and substantiated a long time ago by Leonardo da Vinci. His was a scientific theory of aeronautics, but flight in those remote days was bound to remain a dream. There are also external circumstances that refuse to be ignored. These circumstances derive from the laws governing reality, from the laws of nature, from what philosophers like to call *natural necessity*.

Centuries later man succeeded in conquering the air. Having created powerful airships, today he flies much faster, farther and higher than birds.

What happened in between? How is it that the same dream, the selfsame aim man cannot achieve under one set of conditions he does in another? Is he able to alter the law-governed process of things, natural necessity?

No, man does not have the power to create and alter the laws of nature. The laws of nature are just as inexorable today as they were in antiquity. It is man himself who has changed beyond recognition. His struggle with nature has enriched his intellect. He has learned and even applied many of its laws. He has created a powerful technology. With his knowledge of the laws of nature, he has controlled the destructive power of water, wind and the other elements. What is more, he has forced them to work for him, to irrigate fields and turn the rotors of power station turbines. Man had to learn and make use of many of nature's laws to rise and stay in the air despite the earth's power of attraction.

Although these actions of his have not altered the laws of nature, they have definitely shown that man can achieve freedom to the degree that he comes to know these laws.

The rapid development of the natural sciences is expanding this freedom more and more. There are no limits to the triumph of man's intellect over the forces of nature, no limits to what he can learn about the ever moving, ever changing matter that forms our universe.

But let us ask another question: Is man free from historical necessity—the objective laws of social development?

To answer this question we must first establish whether there is such a thing as historical necessity. If there is, how and to what extent does it determine man's behavior, his actions. It may seem difficult to answer this question. Since it is not blind, elemental forces of nature that act in society but conscious beings—men—the impression one gets is that there are no laws, that objective necessity does not operate here, that social development is guided not by historical necessity but by man's ideas and views, aims and aspirations. That is exactly what many sociologists thought and still think.

But if we admit that society is guided by ideas, then another question arises: Why is the given society dominated by these particular ideas and not others, and how do the ideas originate?

As you see, there are many questions, and the answers are quite numerous. As a Marxist philosopher, I shall be giving you the views of our sociologists on the science of society. We believe that Marx and Engels were able to reveal the significant characteristics inherent in man in all periods of history, from the ancient to our day, the characteristics that bridge different social eras and make a single, integral whole of our complex human history. This ever present and decisive characteristic is the material, productive activity of people, the relations that develop in the process of creative labor.

In making this assertion, Marx and Engels proceeded from the obvious fact that before people can interest themselves in science, the arts, philosophy and other types of intellectual activity, they must eat, drink, clothe and house themselves. These necessities are not supplied by nature ready-made. To get them, man has to work, to produce. "You won't catch even a little fish in a pond if you don't work for it," says a Russian proverb.

Material production, labor, is what basically determines all other aspects of human activity.

"In the social production of their life," Marx wrote, "men enter into definite relations that are indispensable and independent of their will, relations of production which correspond to a definite stage of development of their material productive forces. The sum total of these relations of production constitutes the economic structure of society, the real foundation, on which rises a legal and political superstructure and to which correspond definite forms of social consciousness. The mode of production of material life conditions the social, political and intellectual life process in general. It is not the consciousness of men that determines their being, but, on the contrary, their social being that determines their consciousness."

However, the development of production is by no means fortuitous and, consequently, the history of society is not a chaotic heaping-up of events, but a law-governed replacement of some types and forms of production activity by others that are newer, more perfected and more progressive.

Having elucidated the material basis of social development, Marx and Engels showed that the production activity of people determines their intellectual activity as well as all other spheres of social life—their forms of government, art, literature, ethical principles, etc. This materialist theory of social development is known as historical materialism.

The Marxist science of society helps us solve such universal and important questions of historical development as the relation between the material (working) activity of people and their ideal (intellectual) activity, the origin and role of social ideas and social institutions. It enables us to understand the role played in history by the masses and by great men. It shows us how different classes and social groups evolve and why they clash, how the state arose, why revolutions break out and how they influence the historical process.

In other words, the Marxist theory proves that social laws determine the development of human society just as the laws of natural development determine natural processes. The laws of social development cannot be dismissed or abolished any more than the laws of nature can. Attempts to counter these laws are doomed to failure. Recall how bitterly the feudal lords resisted the advance of capitalism in France, England, Germany and other countries in the seventeenth to nineteenth centuries. Nevertheless, capitalism won; the replacement of economically and politically weak and disunited feudalism by the more progressive capitalism was a historical necessity, a law of social development. Socialism, which has established itself in a number of European and Asian countries, has become the same necessity.

And so, according to historical materialism, there are objective laws in society just as in nature. Some have been operative through all of human history, for instance, the law that people's social being determines their social consciousness, the law of the progressive development of society, etc. Others are operative only at some definite phase of social development. For example, the law of balanced and proportionate development of the national economy, the law of social and ideological unity of society, etc., are peculiar to socialism. In their sum total, the laws of social development constitute man's inescapable *historical necessity*.

Does recognition of this historical necessity mean renouncing human freedom? Does it make a man a blind toy, a helpless victim of the inevitable trend of social processes?

Not at all. Our world outlook does not preclude man's conscious, free activity, but on the contrary, predicates it. Men, wrote Marx, are not only the actors but also the authors of their play.

No, we cannot abolish the laws of social development and create new ones. But we can learn to know these laws and, proceeding from their historical necessity, actively intervene in the sociohistorical process. We can influence the movement of

social events—speed historical development or retard historical progress. It is in the cognition of objective necessity and in using it in man's interests that human freedom lies. More, human activity can be free only when it is in accord with the objective necessity of the laws of society, when this activity can make these laws serve human needs.

We believe, for instance, that socialism provides unequaled opportunities for mastering historical necessity and achieving genuine human freedom. Why? Because socialism forever liberates people from the social and national yoke and ensures an equitable distribution of material wealth, thus relieving mankind of hunger, unemployment, crises of overproduction, fear for the morrow and the other social evils that infringe on man's freedom. Public ownership under socialism permits planning and rational organization of society's economic, political and cultural life. The principles of planning under socialism do not restrict man's free choice of his place and activity in society. On the contrary, they permit him to make the best decision possible, one which takes into account his personal interests and those of society. It is precisely this unhampered opportunity to

BY VICTOR AFANASYEV

MASTER OF SCIENCE (PHILOSOPHY)

combine the personal and public interests that is the essence of human freedom.

A characteristic of a socialist society is that in his choice of aims and means of achieving them, man is not left alone; he has the understanding and support of the collective, of society. Together, collectively, it is easier to master necessity, to gain greater control over natural and social forces and thus further expand the area of personal freedom.

Under socialism, man's personal freedom is inseparable from social freedom. What is more, a socialist society guarantees that personal freedom not only by law but by its very way of life.

The Constitution of the USSR ensures every able-bodied citizen the right to work, that is, the right to guaranteed employment and to payment for his work in accordance with its quantity and quality. It gives every citizen the right to rest and leisure, to maintenance in old age and in sickness and disability. This right is given practical effect by the system of vacations with full pay; the existence of a large network of sanatoriums, vacation resorts and medical and cultural institutions; free medical service; an extensive system of state social security, etc.

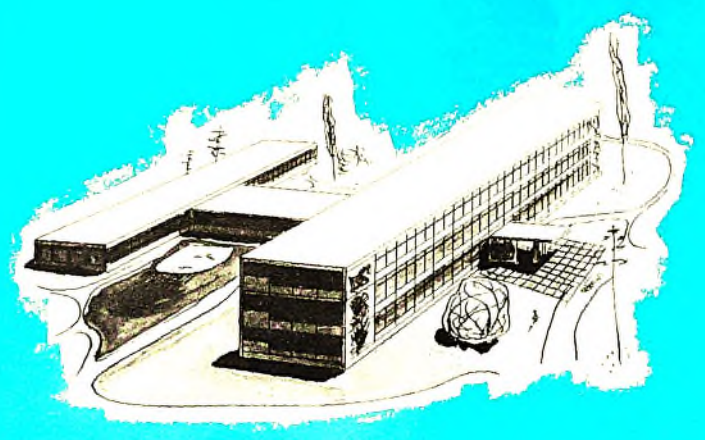
Socialism gives people unrestricted access to knowledge, to the sciences and the humanities. This is ensured by universal, compulsory eight-year schooling and a variety of educational facilities to serve different needs—general and specialized secondary schools, institutes and universities, evening and correspondence schools, vocational training at places of employment.

The equality of all citizens in every sphere of economic, political and cultural life, irrespective of social status, sex, nationality, race and religion, is inviolable law in a socialist society. Although the church in the USSR is separated from the state, and the school from the church, freedom of religious worship and freedom of antireligious propaganda are both guaranteed by the Constitution.

With the printing presses, stocks of paper, public buildings and communications facilities in the hands of the working people and their organizations, they are guaranteed freedom of speech, freedom of the press, freedom of assembly, street processions and demonstrations. Soviet citizens have the freedom to join trade unions and cooperative, youth, sports and other public organizations. The law guarantees inviolability of person and home, and privacy of correspondence.

By the same token socialist society imposes certain obligations on its members. It requires them to obey its laws, to observe labor discipline, to safeguard socialist property, to respect the rules of social intercourse, etc. These obligations benefit not only society but every one of its members, since they help to protect and foster individual freedom.

Socialism operates on the premise that historical necessity influences freedom of choice. But in a socialist society the laws of social development are applied consciously, purposefully. Guided by these laws, the Soviet people are now building a Communist society, which will mean a step to a still higher level of human freedom. ★



GLASS-WALLED SCHOOL

SIDEWALK superintendents in Moscow have been going out of their way to watch a three-story school for 960 children going up. It is being assembled from large panel sections trucked to the site.

The two buildings shown in the picture are connected by a passageway. The three-story classroom building is almost all glass wall for maximum light. The classrooms for the ninth through eleventh grades are designed and equipped for special uses. There are drawing boards in one of them for mechanical drawing, and tape recorders in another for foreign-language study. There will be specially equipped rooms for domestic science and industrial arts.

The outside play area is situated and equipped for most effective use even during short recesses. An originally designed cloakroom near the entrance will provide children with easy and quick access to their wraps. The recreation and extracurricular activity areas for each of three age-groups will be separate and isolated from the study areas.

The second building will house a gymnasium large enough for volleyball, basketball and light athletics; an auditorium for assemblies, concerts and film showings; and a lunchroom.

The passage between the two buildings will have the various shops for woodwork and metalwork and a fully equipped kitchen.

This will be the first panel-type school built to a standard model. It was worked out by Architect's Shop No. 4 of the Moscow Institute of Standard and Experimental Design. ★

THE KURILS

TEXT AND PHOTOS BY VADIM GIPPENREITER

THE KURIL ISLANDS, the easternmost territory of the Soviet Union, are a chain of volcanoes that form a gentle arc separating the Sea of Okhotsk from the Pacific Ocean. If we could look at the Kuril chain from the ocean floor, we would see a great mountain system of two arc-shaped ranges with peaks six to seven miles high. The present islands are the highest peaks of this underwater mountain system rising from the ocean.

More than 600 miles lie between the northern and southern islands. In the north grow scrubby tundra plants that have adapted themselves to the low mean annual temperature, the strong winds and heavy snowfalls; in the south grow subtropical plants.

The creeping cedars and alders, dwarf willows, birches and undersized rowans give way to forests of tall, coniferous and broad-leaved trees, magnolias and bamboos as we move south. But the change is not gradual from island to island. At one time or another volcanic eruptions and earthquakes killed every living thing—the reason some of the islands are so bleak, have no life at all. But on other islands there are millions of nesting and migratory birds, and the coastal waters swarm with an extraordinary abundance and variety of fish and aquatic plants and animals.

The climate is typically marine, with strong winds, fog and comparatively warm and humid winters. The forbidding shores resound with raucous bird cries, the roar of marine animals and the thunder of the breakers.

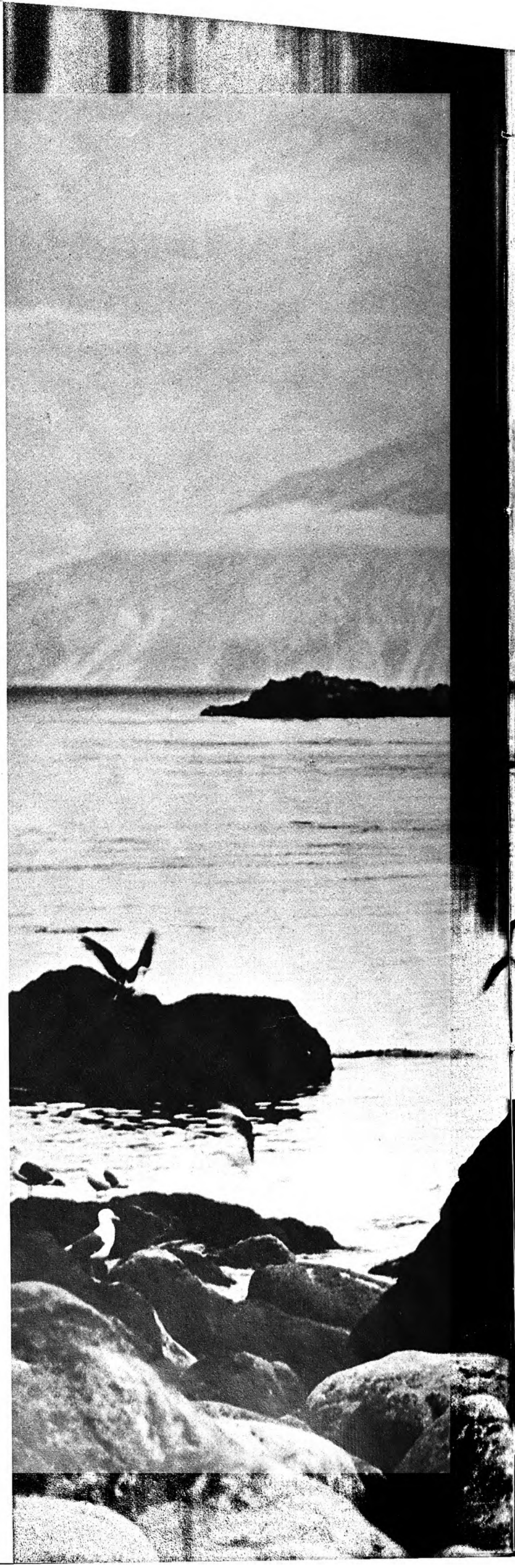
Our *Geolog*, a small expedition ship of the Institute of Volcanology, visited all the islands of the Northern and Central Kurils. We made our way from island to island, through storm and fog, finding our bearings by compass, radar and sonic depthfinder.

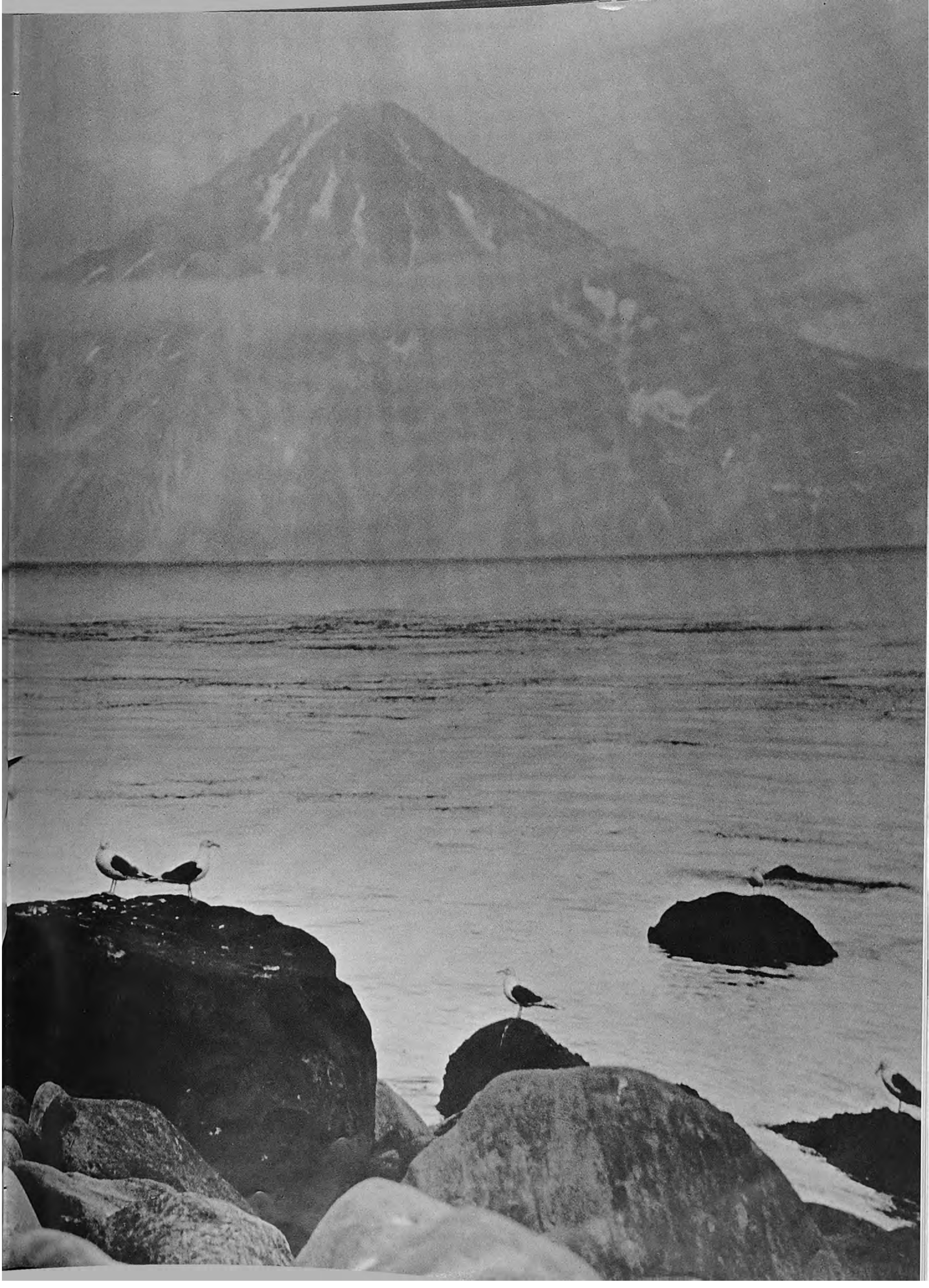
The first sign of a new island in the offing is always the birds, first singly, then in whole flocks. Nearer the shore growths of sea kale appear. Over the engines we can hear the pounding of the surf and the roaring of sea lions in their rookeries. Cormorants, ducks and other birds flush from the surface; every now and then the head of a seal appears; dolphins cut through the water with a swish. Then the shore gradually comes into view through the mist, its outline curiously distorted.

The sea otter, the most valuable fur-bearing animal in the world, is found in these coastal zones. This creature had been almost completely wiped out like the local Steller's sea cow, which has only recently become extinct. Now sea otters are protected by international law, and the species is gradually increasing. The fur seals that migrate along the Kurils to rookeries in the Commander Islands are also protected. A small seal herd makes its home in the Kurils, and occasionally whales stray into their coastal waters.

In clear weather, when the horizon is visible, the Kuril ridge is an unforgettable sight, with its smoking cones, colossal heaps of rocks, and lava streams dropping straight down into the ocean.

The dangerous currents in the straits, the lack of bays or anchorages sheltered from the wind in many of the islands, the frequent fogs and storms make navigation in the Kuril waters hazardous. Nevertheless they are connected by regular lines of communication with Vladivostok and Petropavlovsk. Geologists and volcanologists visit the area for study, as do ichthyologists. The many unsolved problems of the island's colonization by animals and plants attract botanists and zoologists. Whalers and crabbers have their bases on the islands. The small native population lives by fishing and by hunting marine animals.





The coastal waters are a teeming and diversified world of marine plant and animal life.

The Kuril Islands are a chain of volcanoes. Kuntominta on Shiashkoton Island is active.

A big rookery of sea lions, protected by the game laws, makes its home on Raikoke Island.

Mikhail Molodensky

Bruno Pontecorvo

Kuzma Andrianov

Yevgeni Varga

LENIN

FOR NEW SUCCESSES SCORED IN SCIENCE AND TECHNOLOGY

BY ACADEMICIAN MSTISLAV KELDYSH

CHAIRMAN, LENIN PRIZE COMMITTEE
FOR SCIENCE AND TECHNOLOGY
USSR COUNCIL OF MINISTERS

THE LENIN PRIZE for science was awarded this year for outstanding contributions in earth study, physics, mathematics, chemistry, plant selection, medicine and psychology.

Mikhail Molodensky, Corresponding Member of the USSR Academy of Sciences, won the prize for research on the external gravitational field and the shape of the earth. Molodensky's theory of the earth's shape, essentially a development of the one proposed almost a century ago by Stokes, has been extensively applied in compiling highly accurate geographic maps for entire continents. It is also used in calculating the exact movements of sputniks.

The prize was awarded to Bruno Pontecorvo, Corresponding Member of the USSR Academy of Sciences, for his fundamental contributions to the problem of weak interactions of elementary particles and the physics of the neutrino. Characteristic of Pontecorvo's work is the experimental skill with which he validates his theoretical analyses. His concept of the close analogy between the electron and the mu-meson, which is 207 times heavier but has the same charge, served as the basis for the theory of universal weak interactions. He predicted and subsequently validated by experiment the law of the pair production of what was known as strange particles. His astrophysical works demonstrating the important role of the neutrino in the evolution of stellar systems have stimulated research in that field both in the Soviet Union and abroad.

Academician Ilya Vekua, leading Soviet mathematician, received the prize for his work on the theory of generalized analytical functions. In his monograph "Generalized Analytical Functions" he develops a new method for studying a wide range of important problems in physico-mathematics and explains its application to the theory of surfaces and the mechanics of solid media.

Three major contributions in chemistry were awarded the Lenin Prize this year. Corresponding Member of the USSR Academy of Sciences Kuzma Andrianov's "Investigation in the Field of Polymers with Inorganic Main Chains of Molecules" has great theoretical importance and introduces a new class of substances with properties extremely valuable for engineering. He was the first to synthesize new classes of polymers of multiform structures with inorganic main chains of molecules, using silicon in combination with titanium, aluminum, boron, tin, and other elements. Many of these polymers have a complex of valuable properties which cannot be found in any natural material. Andrianov's findings are being widely used in industry. Polymers derived by his methods serve as the basis for the manufacture of heat-resistant enamels, plastics, glues, lacquers, and electric insulation materials.

The work of Dmitri Kursanov, Corresponding Member of the USSR Academy of Sciences, and Mark Volpin, Doctor of Science, on new non-benzenoid aromatic systems earned them the award. Aromatic compounds have extremely valuable properties for the manufacture of dyes, medicines and a number of important synthetic materials. The two chemists studied these fundamentally new types of aromatic systems. They predicted and produced many new and previously unknown compounds which do not exist in nature. They elaborated the theoretical principles for compounds of these classes.

A group composed of Victor Zuyev, Varvara Saulina, Pavel Tesner and others worked out industrial methods for manufacturing active highly dispersed carbon black from liquid hydrocarbons. The process, which won them the Lenin Prize, makes it possible for the country to discontinue importing that product and to effect large economies by increasing the service life of tires.

Plant breeders Boris Sokolov, Mikhail Khadzhinov, Gaifutdin Galeyev, Alexander Musiyko and Vasili Kozubenko were awarded the prize for creating high-yield hybrids and varieties of corn and for putting their seed production on a sterile basis. By using new genetic and special hybridization methods, the group raised corn hybrids which yield 20 to 30 per cent more than varieties previously grown. The new hybrids and varieties are already being raised on an area of 50 million acres.

The Lenin Prize was awarded to selectionists Prokofi Garkavyi, Valentina Mamontova and Vasili Remeslo for producing new and very valuable varieties of cereals by using new genetic methods.

The very valuable work on the treatment and prevention of cancer done under Professor Nikolai Petrov was awarded the prize. The results of this experimental and clinical research on the etiology and pathogenesis of malignant growths are summed up in a comprehensive three-volume work entitled *Malignant Tumors* and in other studies. They are internationally recognized as an indispensable source of information for oncologists in their daily work.

The successful research on live polio vaccine done by a group of scientists headed by Anatoli Smorodintsev and Mikhail Chumakov won the Lenin Prize. The study led to the large-scale production and extensive medical use throughout the country of a new, highly efficient and harmless preparation. Soviet-made live vaccine has won general world acceptance and is now being exported.

Alexei Leontyev's book *Problems of Psychic Development*, a theoretical and experimental research study of the genesis and nature of perception as an elementary psychic form, its biologic psychic evolution and its sociohistoric development, won a Lenin Prize. Aside from its general value as a contribution to the study of human psychology and to the further development of theoretical studies in the field, the work is important for its consideration of the psychological problems that arise with the use of cybernetic-type machines.

Two men were cited for their outstanding contributions to the social sciences. Academician Yevgeni Varga won the Lenin Prize for his work in Marxist-Leninist economics. His *Main Problems of Economics and Politics of Imperialism (after World War II)*, *Capitalism of the Twentieth Century*, and *Modern Capitalism and Economic Crises* have enriched Marxist political economy with their analyses of the new phenomena that make their appearance in the period of the general crisis of capitalism.

Yevgeni Krupnov's *The Ancient History of the North Caucasus* is an important contribution to the study of the history of the peoples of the Soviet Union. The volume, based on many years of research, is the first attempt to trace the least known period in the complex and very distinctive history of the peoples of the North Caucasus and Daghestan.

A number of technological achievements were awarded prizes. A group headed by Nikolai Baibakov, in collaboration with a number of research establishments in Krasnodar Territory, developed and introduced a series of measures to facilitate the drilling and exploitation of

gas condensate deposits. Their new method of gas extraction requires less metal and makes it possible to reduce very sharply the over-all costs of gas field construction. The new type of casing tube they propose in combination with certain other engineering devices and processes precludes gas blowouts.

A team of specialists headed by Boris Medovar worked out a simple, cheap and highly efficient method to improve the quality of special steels and alloys that is now being introduced generally in the metallurgy industry.

Konstantin Lyubavsky, Nikolai Novozhilov, Daniil Dudko and others at the Central Research Institute of Technology and Machine-building, the Research Institute of Aviation Technology and the Paton Electric Welding Institute developed a new method for automatic arc welding of steel by melting electrodes in a protective atmosphere of carbon dioxide. The new method is being used extensively for welding alloyed sheet steel, stainless and refractory steel, and especially for welding gas pipe.

A group of researchers—Tsolak Bakhshiyan, Vasili Baklashov and others—proposed a furnace of original design with small tunnels in the ceramic panel walls that act as burners. In this furnace the transmission of heat by emission is done not through a burning flame, but through heated ceramic panels. This helps to distribute the heat evenly in the pipes. With the new design it was possible to substantially reduce the size of furnaces, the cost of construction and fuel consumption.

A group of inventors at the Chelyabinsk Tube-rolling Plant—Alexei Burov, Asryel Gurevich and others—developed and installed a new, highly efficient unit for the continuous furnace welding of water and gas pipes.

Alexander Butyrin, Oleg Grodsky and others at the Leningrad Metal Plant designed and built a new 200,000-kilowatt steam turbine which marked a large step forward in that field of engineering.

These are obviously only a chosen few of the very large number of contributions Soviet scholars, scientists and engineers have made in the recent past. But these few are sufficient evidence that Soviet science and technology are making great strides along the road to a communist society charted by Lenin.

Abridged from Pravda

PRIZES

Chingiz Aitmatov

Rasul Gamzatov

Samuil Marshak

Gediminas Iokubonis

FOR OUTSTANDING ACHIEVEMENTS IN THE ARTS

BY NIKOLAI TIKHONOV

CHAIRMAN, LENIN PRIZE COMMITTEE
FOR LITERATURE AND THE ARTS
USSR COUNCIL OF MINISTERS

THE LENIN PRIZE Committee for Literature and the Arts felt charged with an especially serious responsibility this year after the very wide and general discussion at public forums and in the press of the works nominated for awards.

After a close study and evaluation of all the works nominated, after listening to musical compositions and concert performers, after trips to see monumental sculpture on the spot, after a great amount of debate, the committee voted by secret ballot for these 1963 prize winners.

The Kirghiz writer Chingiz Aitmatov was honored with the Lenin Prize for his *Stories of the Mountains and Steppes* ("Jamila," "My Little Poplar in a Red Scarf," "Camel's Eye," "The First Teacher").

The young author of these books, who has already learned a great deal from life, takes his characters directly from the people. The honesty, simplicity and clarity with which he describes his characters, their inner lives, their struggles to mold themselves into new people, have brought him a host of readers at home and abroad.

Aitmatov's superb stories not only show a notable talent but also hold out great promise for the further growth of this commanding Soviet man of letters.

The Lenin Prize was conferred on Rasul Gamzatov for his book of verse *The Stars High Above.*

Rasul Gamzatov is a folk poet of mountainous Daghestan, but his inspiration embraces the whole wide world. His settings are his native gorges, his characters the hill folk and their time-honored wisdom that so amazingly dovetails with our contemporary thought. His theme is international friendship, a theme of many lands and people who live together in peace, of the brotherhood of all working people.

Samuil Marshak was honored with the Lenin Prize for his volume of verse *Selected Lyrics* and his children's books.

This eminent writer for children, translator and critic is known far and wide. His books are enjoyed by readers of all ages.

The variety of Marshak's children's books illustrates the endless possibilities of the medium. Take his *Merry Trip from A to Z,* for example, in which every letter of the alphabet serves as a point of departure for a story in verse. This very fresh and original treatment does more than teach the child the alphabet. It gives him a sense of the richness of the language, satisfies his intellectual curiosity, trains his character and develops his esthetic tastes.

The lyrical and always understandable whimsy of his children's books, the fruit of many years of labor, wisdom and talent, have won Marshak the affection of millions of youngsters in the Soviet Union and foreign lands.

The Lenin Prize for sculpture was awarded to Gediminas Iokubonis, a young Lithuanian, for his monument to the victims of fascism in Pirciupis, a village in his native republic.

A monument at the scene of a mass tragedy, a place where innocent people were murdered, is a formidable task and imposes demanding responsibility on the sculptor. Iokubonis solved his problem with superb artistry.

The monument is austere in its understatement. The crowning statue personifying the motherland is infinitely expressive. The sculptor borrowed from the ancient Lithuanian folk traditions of wood sculpture to carve a strong and true image. An old, simply clad Lithuanian peasant woman stands rooted to the spot, grieving silently. No one who sees it can help feeling the hatred of fascism and the sorrow for the Pirciupis victims that invests the monument.

The Lenin Prize was conferred on the eminent artist Pavel Korin for his gallery of contemporary portraits—of Martiros Saryan, Ruben Simonov, the Kukryniksy (Mikhail Kuprianov, Porfiri Krylov and Nikolai Sokolov), and Renato Guttuzo.

These are works of great realistic art, probing psychological portraits of people imbued with a high sense of purpose and responsibility, who see their work, their contribution to the social community, as the essential content of their lives.

Korin's work has contributed greatly to Russian and Soviet art. (For a more detailed analysis of his paintings, see page 30 of this issue.)

The committee held over until next year final consideration of three nominees—the noted actors Shukur Burkhanov of the Uzbek Khamza Drama Theater and B. V. Platonov of the Byelorussian Yanka Kupala Drama Theater, and the writer Y. Isayev, who was nominated for his poem "Memory Is the Judge."

Abridged from Pravda

LENIN PEACE PRIZE WINNERS

Modibo Keita

Manolis Glezos

Georgi Traikov

Oscar Niemeyer

BY ACADEMICIAN DMITRI V. SKOBELTSYN

CHAIRMAN, COMMITTEE ON INTERNATIONAL LENIN PRIZES FOR THE PROMOTION OF PEACE AMONG NATIONS

FOUR courageous and devoted soldiers in the great army of fighters for world peace and a bright and happy future for all men were honored with this year's International Lenin Prize for the Promotion of Peace among Nations.

The new laureates include the head of an African state, a well-known journalist who is also a national hero of Greece, a Bulgarian statesman and a noted Brazilian architect.

All progressive mankind joins the freedom-loving people of Africa in congratulating Lenin Prize winner Modibo Keita, Head of State and Chairman of the Government of the Republic of Mali.

As the head of the state and government of Mali, Modibo Keita actively pursues a peaceloving foreign policy based on the principle of coexistence of countries with different social systems. He made an invaluable contribution to the maintenance of peace by effecting the removal of all French armed forces and military bases from his country. The Republic of Mali is the sponsor of the UN resolution declaring Africa an atom-free zone.

The International Lenin Prize was awarded to Manolis Glezos, the world-famous hero of the Acropolis.

In May 1941, when Greece was under the iron heel of the fascist occupation forces, a 19-year-old youth made his way into the heavily guarded Acropolis and tore down the fascist flag. This touched off a more violent struggle against the fascists.

A talented journalist, Manolis Glezos has time and again suffered persecution for his courageous articles exposing reaction. In 1948 he was sentenced to death, in 1958 he was thrown into prison on a trumped-up charge. On both occasions the people of his own country as well as public opinion all over the world came to the defense of this national hero, and their pressure forced the Greek Government to set him free. His name became a symbol of the unity of all people of good will in the struggle against obscurantism, tyranny and reaction.

Freed from prison on December 15, 1962, Glezos once again took his place with the front-rank fighters for peace and progress.

The peace prize award to Georgi Traikov, First Deputy Chairman of the Council of Ministers of the Bulgarian People's Republic and secretary of the Agrarian National Union since its founding, met with general gratification.

An irreconcilable fighter against fascism and reaction, Georgi Traikov led his country's peasants in the struggle for freedom and national independence. When the people won power, he was appointed Minister of Agriculture and subsequently became First Deputy Chairman of the Council of Ministers. Traikov has devoted much of his effort to the development of the young republic's agriculture.

Traikov has done yeoman service to unite the peasant movements and organizations of different countries on behalf of peace and international cooperation.

The peoples of Latin America and all men of good will welcome the award of the International Lenin Prize to Oscar Niemeyer, the eminent Brazilian architect and fighter for peace.

Oscar Niemeyer Soares Filho won world fame in postwar years. He designed several of the principal public buildings in Brasilia, the new capital of Brazil, and worked with others in designing the United Nations in New York as well as many other such trend-setting buildings in European countries.

Niemeyer is a consistent proponent of peaceful coexistence of peoples and states with different social systems. Active in the public life of Latin America, he battles the enemies of peace and works for the friendship of peoples.★

COLLEGE-EDUCATED WIFE OR COLLEGE-EDUCATED SPECIALIST?

BY IRANA KAZAKOVA

RUSSIAN wedding parties are famous for their merrymaking. I am sure the wedding party I went to would have spread to the whole neighborhood if the reinforced concrete walls of the new house hadn't confined it to reasonable limits.

When everything on earth had been toasted in all possible beverages, the guests clamored to see the bride's dowry. An ironclad coffer, exactly like the one in Russian fairy tales, was duly brought in. The coffer was made of papier-mâché, if you want to be pedantic; nobody there did. The lid was lifted on a thin blue booklet—a college diploma. The guests were delighted and one of the men raised his glass to college-educated wives.

"You'd better say college-educated specialists," a pretty woman sitting next to him rejoined.

"What's the difference?" the man asked.

The conversation fluttered about the emancipation and education of women and took on a facetious turn, as you might expect it would.

I don't remember the jokes. But that little thing stuck in my memory: A college-educated wife or a college-educated specialist. Is there any difference? There is.

We have many wives with a college degree. Their diplomas are kept in a drawer which is pulled out less frequently than any other. There it rests, a silent rebuke to herself, her husband and that humdrum housewife's life she has been sucked into.

Such women usually talk a great deal about how they hope to work some day, but something always gets in the way. They always seem to be apologizing for themselves.

In our country a college-educated woman who has traded her diploma for domestic chores loses something of her appeal. Being just a housewife somehow detracts from her glamor, and what worse fate could befall one of our sex?

Anyway, for many more of our women college degrees are rockets that carry them into exciting orbits of activity.

The magnetic field of higher schooling has grown stronger in recent years. It attracts increasing numbers of young people, young women in particular. As a matter of fact, women account for 43 per cent of the enrollment.

I'm willing to concede that some go to college only to improve their chances of marriage. But if this were the main reason, how account for the current feminine infatuation with engineering colleges? How explain the number of our undaunted young women in math and science research societies? Their long evenings in libraries? That is a hard and circuitous path to marriage. In the Soviet Union there are plenty of colleges that teach the humanities; they are not nearly so hard on a girl's complexion as physics, math or engineering.

It is true that many a tale of love and marriage can be tracked down to a student party, to a joint leafing through of a thick textbook, to common agitation at the door of an exam room and fraternal jubilation when the exam is over. There's no question that for many the road to a science degree turns out to be the road to marriage. But even when they cross, these roads do not cross each other out. The commissions in charge of assigning jobs to graduates are very much aware of newlyweds and always take their interests into consideration. A man and wife often begin their working careers on the same day and in the same school, hospital or industrial plant.

There are cases, of course, when once through college a young wife turns into a mother and forgets about everything except her family. This is not the usual thing, however.

Three reasons, I think, explain the Soviet woman's push for higher education.

First, upbringing and emphasis in the family and in school. The Soviet woman much prefers the formula of Mayakovsky, "Ah, how this dress would be improved with brains," to Oscar Wilde's maxim, "Beauty ends where intellect begins."

Our little girls are fond of dolls. But they also read books and play thinking games.

Our schools teach housekeeping, but they also teach physics, chemistry and astronomy—required courses for both boys and girls.

Our women college students get no special dispensations. As a matter of fact, they would consider that an encroachment on their equality, a slight on their capability as future specialists.

This brings us to the second point. In our country women specialists are taken seriously. When they graduate, they are offered highly skilled jobs at the same salaries as men and with the same prospects. That is the reason most of our women think of their degrees as storage batteries that have to be recharged if they are going to be generating energy, vigor, interest in life and the personal dignity that comes with being useful.

In short, our young women believe that higher education is altogether compatible with femininity. Sparkling conversation can do more for the eyes than mascara.

Our concept of the modern woman is the educated woman in the main stream of life. That is why I think 95 per cent of the young women entering Soviet colleges have independent careers after graduation.

If all the women in our country suddenly decided to stay home, the disaster would be of national proportions. Suppose they all threw their diplomas into the dustbins and quit their jobs!

The plight of the Minister of Health! He resigns because he has lost three doctors out of every four!

Distracted, the Minister of Education of the Russian Federation sits in his office, paying no attention to the frantic ring of his telephones. His ministry might just as well shut up shop. All schools have had to close, 90 per cent of the teachers have not shown up.

Both ministers would envy their counterparts at the building ministries. They have lost only a fifth of their workers, about as many as usually go on summer vacations. They have nothing to complain about.

Urgent sessions of the legislature are convened in Uzbekistan and Daghestan. Both republics are left without presidents. The elections of the new presidents have been invalidated because there were too few votes cast.

The State Planning Committee and the Supreme Economic Council are in session day and night. Two problems are under discussion: 1) the breakdown of industry and 2) where to find new heads for half of the country's factories, farms, hospitals, etc., etc.

Radio Moscow announces that fabrics, cakes and sweets have disappeared from store counters because the country's largest confectionery and textile factories have no managers, engineers or foremen.

But the picture is too gloomy, and very unlikely, besides. Women and society are too sensible to rob themselves of the values contributed by their women specialists. ★

THE CRUCIBLE

PHOTOS BY MIROSLAV MURAZOV

PLAYGOERS in the Soviet Union are familiar with Arthur Miller's work. His Death of a Salesman *and* A View from the Bridge *have been staged by many of our theaters. Most recently the Stanislavsky Drama Theater in the capital produced another Miller play—*The Crucible. *The production is uneven, the actors are prone to a pathos which is hardly characteristic of the playwright, and the director does not always demonstrate a feeling for seventeenth century American life. Nevertheless, the tragic spirit of the time comes through—its bigotry and social conflicts. What makes the play so gripping to contemporary audiences is that the events of Salem are a grim and pointed warning to our own century. In its eighth month of production,* The Crucible *is still playing to full houses.*

The Salem maids above are (left to right) Lionella Skirda, Tatyana Ukharova and Olga Yaroshenko. To the left is Nikolai Salant as Danforth, and to the right Dina Ritenbergs as Elizabeth Proctor. ★

A DATE WITH VENUS

BY VLADIMIR SHAKHOVSKOI

FROM the window of the trolleybus I watched the lights of Chelyabinsk, the big South Urals city, blinking past. It was the time of evening when people set off for the theater or the stadium, for a café or a party. Two young men were sitting opposite me. They were both spruced up, newly shaven and very much engrossed in conversation.

The trolleybus stopped and I couldn't help overhearing their conversation.

"Meeting her again tonight?"

"That's right."

"Another date with Venus?"

"Sure! We're going steady."

I was too intrigued not to intrude. "Excuse me, but who did you say you had a date with?"

"With Venus of Medici. I'm going to finish a picture of her tonight at the factory art studio."

That was how I got to know factory worker Cherny, who later showed me around the art studio at the Chelyabinsk Tractor Factory's Palace of Culture. There I met the studio's director, Honored Art Worker Sergei Blazhevich. He knows every studio student not only as a creative artist but as a skilled worker and a human being. They tell him about their achievements at work and their problems at home; they are all his friends.

"We have an enrollment of more than 200," he told me. "Our students' tastes in art vary as much as their abilities. Many of them have real ability and, I think, are going to develop into fine artists and sculptors. These young people find that their work at the studio fills an emotional need, something they can't do without. The studio has been functioning since 1934. Besides learning composition, drawing and painting techniques, these amateur artists attend lectures on Russian and foreign art, and literature.

"I make a point of following the work of other such studios," Blazhevich told me. "It's hard to get excited about statistics, but these give me as much pleasure as a good picture painted by one of my students. In the past 18 months nearly 6,000 exhibitions of works by 130,000 amateur artists have been held at factories, collective farms and offices in Chelyabinsk Region. There were nearly half a million exhibits at the show—each a product of a man's heart and hands, hands that are more accustomed to a lathe or a combine than a brush or a chisel."

Courtesy of the magazine Soviet Union

The Chelyabinsk tractor plant studio with some of its 200 amateur artists at work.

ART STEMS FROM LIFE

BY YURI PIMENOV

Yuri Pimenov is a leading Soviet artist who works in a variety of fields: painting, murals, illustration, and decorative art. His work shows a penetrating insight into the new and characteristic features of Soviet life today.

A People's Artist of the Russian Federation, Professor of Painting and State Prize winner, Pimenov was elected a member of the USSR Academy of Arts last year.

THE world around us provides the artist with extraordinarily subtle and unfathomed material. There is endless variety in the way reality can be perceived, and the artist, unless he is a potboiler, can always find in this great variety the particular harmonies he is in tune with and try to express them.

The world's reality, however, makes its own strict demands on the artist; it requires that he be frank, honest, impassioned. It forgives an artist failure but never indifference.

Indifference cannot keep art company, for it always forces the artist into the dull and rigid pattern of tasteless hack work. It negates his individuality.

People talk and argue art a great deal. This proves how deeply it touches them. And it is not only artists who are involved in these discussions but those to whom their work is addressed, men and women in all walks of life.

But only the honest and deeply felt works of art can evoke real emotion, for these are the only ones that leave their trace on men's minds. The superficial works, motivated by lucrative fads, attract attention for the moment, only to end up in the dust bin.

Trace the development of art, and what becomes apparent is that real art has its own recognizable character and enough diversity to have lasted for many centuries, with sufficient left over, very likely, to last till the end of time. Dead art, which gives only the appearance of creative effort, has no real inner vitality; it is static, it cannot progress.

The emasculated art of naturalism has not progressed or developed; all its characteristic features are stereotyped, unchanging. That is also the fate of abstractionism; it has no soul, character, or social significance. It can only squirm about in its own emptiness, with no possibility of viable development.

I simply cannot understand how anyone can get up in the morning, look out of the window and see the sun shining on city roof tops, smell the fresh, moist air after a rain, see a child playing in the sun, a woman asleep in a half-dark room, observe the delicate beauty of an orange cut in two, a slice of bread on the shiny surface of a plate—and then start punching holes in an old piece of cardboard.

I really cannot comprehend how one can go through a whole day, from morning to night, enjoy life, eat and drink, think about things, ponder on life—and then offer intelligent human beings a piece of useless iron as a work of art.

New thoughts, feelings and conceptions of life have always been and will always remain the goal of great art. These thoughts and feelings will always call for a new form contemporary with them. But for this form to emerge and express contemporary thoughts, it must have a solid foundation of tradition, social awareness and skill.

A new way of expressing life cannot emerge and grow in a vacuum of inadequacy and negation.

Nor can art built only on the foundations of the past be a true art.

The artist who tries to give his pictures reality by making them look like old museum pieces, who does not understand and feel that the hot breath of life must inevitably produce some new alloy, is like a man riding down a modern street in a horse-drawn buggy. This kind of art may be skillfully executed, but it has no feeling or thought to give people.

Neither the formalists nor the naturalists have it in their power to destroy real art. Life itself stops them and so does the vast treasury of great world art.

We all cherish the precious feeling of life great art gives us, we marvel at the ingenious craft with which it portrays ordinary phenomena, are stirred by its passion and its beauty. It is real life we see, gone and yet present, people dead and yet alive, in the wonderful paintings of the infantas by Velazquez, in the feline artifice of Renoir's Parisian women, in the beauty of rural landscapes by Venetsianov, in Raphael's remarkable simplicity and in Vrubel's intensity.

I remember a boat trip I once made along the estuary of the Neva from Leningrad to Petrodvorets. We sailed past high stacks of logs and low islands overgrown with trees and bushes. Then came the sea and the sky and, on the horizon, the big city with the smoke of its factories. The slow swell of the sea, distant sailboats—it was all suffused in silver and mother-of-pearl; there was the play of sunlight, and the magnificent pattern of clouds.

We had been talking, and my companion was saying, looking at the sea: "How beautiful! And how ridiculous to insist that landscape is outdated, that representational art in general is outdated. How else are we to remember this radiant scene and the sensations it evokes?"

And why should we not portray the fascinating little girl with the gossamer pink skin we saw later on in the train—her two baby teeth missing in front, her soft fair hair, her curiosity? Why should one not portray the old man sitting opposite us in the compartment, with his deep wrinkles, his strong, worker's hands that spoke of the long path he had walked, of his youth and love, of the hard work he had done, of his wife, children, grandchildren, his golden wedding?

Real art will never discard the great theme of human biography; people will never turn away from the portrayal of real life, reject the bright, keen memory of the artist and his precious ability to picture life as it is.

The Soviet artist is fortunate, for he is in tune with the great exploits of his time and his people. He has no lack of ideas and subjects. Life enlists him for large subjects. An artist of that kind can never fail in his choice of theme, but he will have his failures in execution, for life, marching ahead, will demand of him new expressions of reality and new plasticity. This new life is not to be satisfied with mindless inventions or imitations; it demands sincerity of the artist.

However, even the failures will be for a cause which is alive, and if the artist manages to discover and portray at least some small value, he will not have worked in vain.

Not so long ago our half-baked abstractionists were told some harsh, blunt truths at a serious and productive discussion of Soviet art. The criticism leveled at those so-called abstractionists was absolutely correct. The thing to be added is that all their "works" are stagnant and talentless. These are obsolete and moth-eaten relics, peculiar and decadent drawings salvaged from old garrets, productions without taste and abounding in crudities.

One other good thing about this discussion is that it brings art into the spotlight of life, pulls it out of its frequently circumscribed professional confines. The discussion was continued at the Second USSR Congress of Artists with a consideration of the lines of development of Soviet fine arts, the artist's ideological position and responsibility to his country and his art, which must stem from life and contribute to the life of the people.

All the elements of real art derive from life, and when the artist feels them profoundly and translates them successfully into line and color, they become artistic monuments to his time.

It was from the Russian countryside that Arkhipov's peasant women and Plastov's warm and milk-scented cow came into art. Manet's tired salesgirl walked onto his canvas straight from the streets of Paris. It was from life, too, that Nesterov did his marvelous portrait gallery of Soviet intellectuals. Sergei Gerasimov brought his beautiful landscapes back from the Moscow countryside. Georgi Nissky gave us fine paintings of boats and automobile roads, and Alexander Deineka glowing pictures of today's slim-legged sprinters.

Our young artists are enormously interested in Soviet life and want to depict it in all its many-sided complexity. Some of the oldest Soviet master artists remarked on this at the congress. They were pleased to note, they said, that artists of the younger generation—they mentioned some by name —who were developing under the aegis of socialist realism showed a discerning feeling for the new and contemporary in their work.

Young artists want to do new things. This is the compelling right of all artists, young and old. But this is not easy. It is much more difficult to produce a work new in essence and feeling than to duplicate something already created. The road to the new is never smooth; it is strewn with failures, mistakes and disillusionment.

A very interesting and varied display of Soviet art could now be made. It would include, in addition to works by the artists already mentioned, the severely simple productions of Korin and the gentle pictures of Chernyshov, the strong and mature works of Bubnov and the agitating works of Prorokov, the typically Russian paintings of Stozharov, the poignant modern drawings of Soifertis, Goryaev, Orest Vereisky and Laptev, the illustrations of Favorsky, Shmarinov, Kibrik, Goncharov and Dubinsky. About the last-named, I think that it would be hard to find illustrators as good anywhere else in the world.

I have been watching Gelii Korzhev develop into a serious artist. He has varying success with his canvases, but he is a real artist, and without being obvious he conveys very clearly and sensitively the trend and feeling of the times. Salakhov, the Tkachyovs, Gribov, Khanjian, Abdullayev, Golitsyn, Yepishin, Zakharov and many others, though young, are mature artists. From one work to another they mark progress, each in his own individual way, but with deep-rooted interconnections.

A good artist is always in contact with reality. His emotions are genuine, he does not descend to exhibitionism. The life of our country is his life. His most powerful artistic language is the language of the people—warm, intelligent, living. The people's concerns and emotions will always form the content of his art. ★

ART

PAVEL KORIN:

innovation is ruled out without traditions

See page 34

IN the canvases of Pavel Korin we find two of the major earmarks of the Russian school of painting—strong social consciousness and passionate concern for people.

The artist was born in the very heart of Russia, in the village of Palekh. It is famous the world over for its exquisite lacquer ware—boxes of many shapes and sizes for a variety of uses realistically decorated with vivid colors and charming figures. The Palekh artists were icon painters for many generations, following in the tradition of Theofanes the Greek, Andrei Rublyov and Dionysius. Korin's father and grandfather were both icon painters, and he followed in their footsteps.

His competence did not come easily. He acquired the necessary skill only by dint of perseverance. But he acquired, in the process, a respect for craftsmanship that is characteristic of all his work. By the age of 18, he was already a recognized artist. Nevertheless he felt the need for further training, and at the age of 20 went to study at the Moscow School of Art and Sculpture. Here he continued to work diligently.

Pavel Korin had two close friends, both great men: his teacher, the artist Mikhail Nesterov, and the writer Maxim Gorky. It was with his painting of Gorky that Korin began his series of famous portraits, which includes artist Martiros Saryan, actor Vasili Kachalov, sculptor Sergei Konenkov, writer Alexei Tolstoy and many others. His portraits are both physically and psychologically true, revealing the inner life of his subjects.

Pavel Korin has shown much creative versatility in his 71 years: in his famous series of mosaic panels in the Moscow subway, his murals and landscapes. A fine restorer, he has worked on many of the old masters' paintings in the Dresden Gallery collection.

His yet unfinished series of portraits *Vanishing Russia* represents people of the past—monks, anchorites and priests—and is striking in the philosophical undertones. These figures from prerevolutionary times have a tragic kinship in their fallacious conception of the truth, their moral anxiety, their premonition of impending doom.

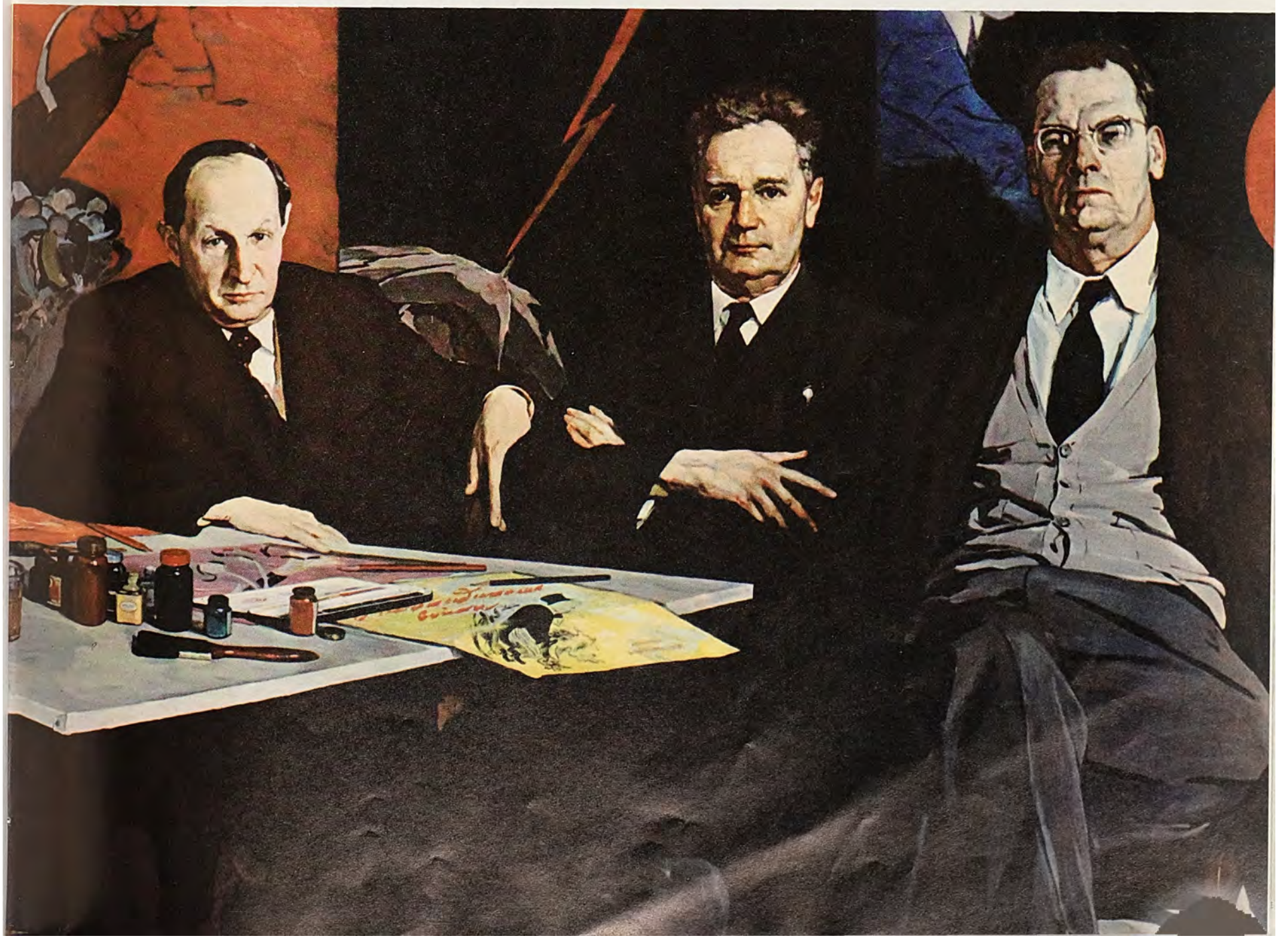
The canvases of the artist unfold a whole world of ideas, images and emotions. The triptych *Alexander Nevsky*, painted during the Second World War, is an expression of the artist's love for his country and faith in its victory.

His country in the present, in the past, and its achievements in the future—this subject has constantly engaged Korin's attention. It is only the strong and daring of spirit who can build the new society, say the pictures.

In April 1963 Pavel Korin received the Lenin Prize, the highest award annually conferred for achievements in literature, the arts and science, for portraits of his contemporaries Martiros Saryan, Ruben Simonov, the Kukryniksy artists and Renato Guttuzo.

Portrait of Renato Guttuzo. *1961.*

The Kukryniksy Artists. *1958.*

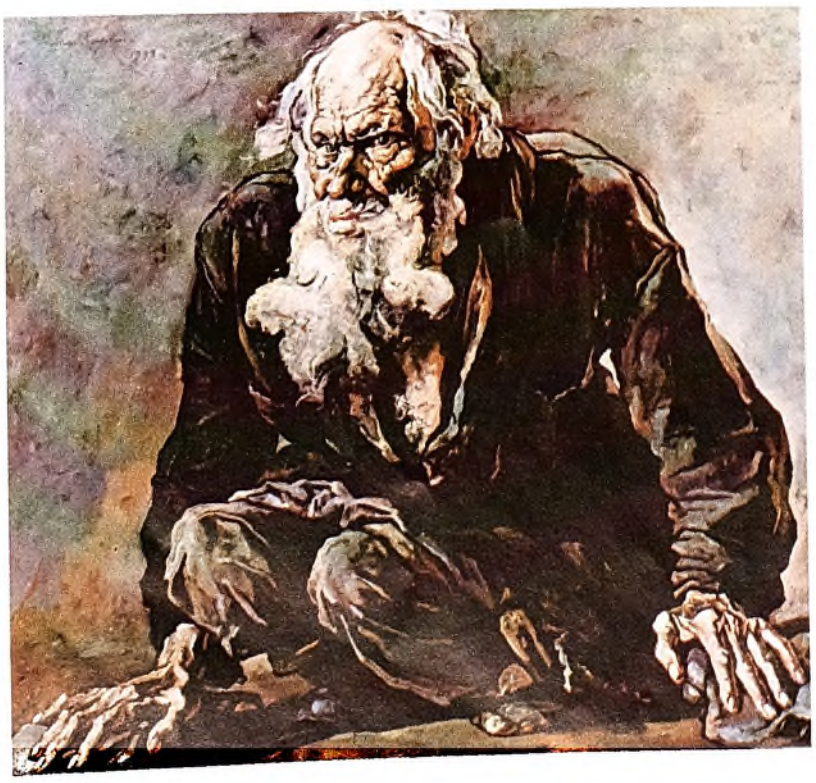


Northern Ballad. *The side panel of a triptych. 1942.*

Alexander Nevsky. *The center panel of the triptych.*

Father and Son. *Fragment of the study for the paintings* ***Vanishing Russia.*** *1931.*

Beggar. *Fragment of the same study.*



EVERYTHING in a painting must meet the highest artistic standards in color combination, composition, subject matter. Every stroke and line must be fully controlled by the artist; not a square inch of the canvas daubed, all of it painted—there must be no sloppy work. One must never forget that painting is a fine art. I have so great a respect for the labor required of an artist that I can hardly bear to look at the "masterpieces" of the abstractionists. These are sometimes painted, as they themselves admit, in 15 to 20 minutes, with complete disregard for the fundamentals of painting. How can I look at any work by an abstractionist seriously when the most precious thing on earth—man, his thinking, his actions—is of no consequence or interest to him. Man is dear to me; to the abstractionist he is an object of indifference. I believe a painting takes hard, honest work; abstractionists do not.

I have been working with the brush for 60 years; it has been my tool since I was 11 years of age. I know that talent is rare and something of a phenomenon. But I also know that it is only in work, in serious hard work, that talent is developed fully. Talent rejoices in work, triumphs through work, renews itself in work.

As a youth I was an icon painter, or, I should say, I began to learn to paint icons. Everything had to be drawn clearly, and I was eager to learn. Painting was never an idle pastime with me. I may not be a good artist, but I have never been a dilettante; I am a professional. My father, my grandfather and my great-grandfather worked with the brush. I wanted to do the same, and I did, becoming a professional to the core.

"Master" is an impressive word, and in most people it evokes a most respectful attitude. For the artist it is supreme praise. I would call Alexander Ivanov and Karl Bryullov two great masters of Russian painting. Whenever I visit Leningrad, I spend a long time at the Hermitage Museum before *Pompeii*, to assimilate anew the genius of its painter, Bryullov. Master of one's art is a great and honorable title indeed.

Of late we have seen how more than ever our people have been striving for the artistic, for the beautiful in their daily lives. In my opinion this conscious activity on their part—something no one can deny—places many obligations on the artist. The true artist reaches for his brush only when he feels he has something important to say to the people, something tested by his own experience, something he has seen and understood in life. Great works of art are so because they make every man an artist, teaching him to see and understand the beautiful, awakening his need for beauty.

I am proably restating a commonplace when I say that there are far fewer fine artists than the number who think they are. Russia gave the world a pleiad of great painters. For me, Alexander Ivanov represents the best of them. One cannot help marveling at his masterpieces. I can scarcely overestimate his influence on me as an artist—his psychological depth, his ability to reveal the philosophical meaning of the things he depicted, and, finally, his superb skill as a painter. I copied a great deal from Ivanov in my youth. I think it is a good way to heighten sheer skill.

Do not misunderstand me: I am not suggesting to young painters that this is the one and only road to follow. No artist has to follow in the wake of another. There are no formulas in art, no standard rules for how to become an artist. My eyes, my heart and my use of the brush are things I cannot give even to my favorite pupil.

Every human being sees life in his own way, feels it in his own way, and therefore can express it only in his own way. The creative personality of the artist depends on his spiritual make-up and temperament, on the degree to which he understands life's many-sidedness, how sensitive he is to his epoch, his time. And this in turn depends on his participation in and his unwillingness to stand aside as a passive observer of events. All the talk about variety of creative media, styles, characteristics is not merely a present-day vogue; it reflects the eternal concerns of the artist. Socialist realism embraces a variety of artistic approaches; that is the secret of its strength and of its attraction.

Our art is free, and it seems to me that creative freedom imposes certain obligations upon the artist. I would find it difficult to formulate them, but obviously they pertain to the artist's sense of responsibility; they have to do with his inner control over his work, with his self-control, with his efforts to conform to the standards of his society.

Innovation need not turn its back on tradition. The greatest innovators in art were also the greatest standard-bearers of tradition. Raphael sprang from Perugino; and Beethoven's First Symphony is in the tradition of Haydn and Mozart. We could cite innumerable examples. There is no art without beauty, but we must not confuse real beauty with a cheap counterfeit. True beauty lives in the works of Raphael, Michelangelo, Mozart, Beethoven, Glinka, Moussorgsky, Tchaikovsky, Pushkin, Ivanov and other such greats. We must fight for great art, for great beauty, for art that elevates man, ennobles him.

No artist can escape his own time. The *Peredvizhniki*, the wandering artists of nineteenth century Russia who rebelled against the classical school and exhibited their works as they traveled (see April issue of *USSR* magazine, pages 30-34), reflected the trend of their day, just as Soviet artists picture the characteristics of our time. I like the works of Plastov, Deineka, Nissky and the sharp, vivid satire of the Kukryniksy team—all contemporary Soviet artists. Plastov's heroes are peasants, village youths. Deineka painted our girls and young men of the thirties; when we looked at them, we felt that they were real Soviet girls, real Soviet boys. Deineka painted what he felt about the times; he was an artist of the Revolution. I painted different things in those days, but I regard myself also as an artist of the Revolution. I was painting the drama and the tragedy of old Russia on its way out; Deineka was picturing people entering on a new life—new people. But we were serving a common cause.

When I think of life, I think of the beauty of man, of his spiritual beauty, of the beauty of his ideas and his labor.

Soviet art is the expression of Soviet man. That is why it is beautiful. That is why it is true.

Courtesy of the newspaper Izvestia

QUERIES FROM READERS

QUESTION: "How does one go about corresponding with Soviet people?" ask several of our readers.

ANSWER: This is a very welcome question, since we feel that this kind of friendly correspondence contributes to understanding between our two countries. American boys and girls who would like pen pals should address their first letter to the Committee of Youth Organizations of the USSR, Kropotkinskaya Ulitsa, House No. 10, Moscow. Women readers of our magazine should write to the Committee of Soviet Women, Pushkinskaya Ulitsa, House No. 23, Moscow. Those who wish to correspond with people in their own trades or professions should address the All-Union Central Council of Trade Unions, Leninsky Prospect 42, Moscow.

QUESTION: What is the value of one ruble?

ANSWER: Approximately one dollar and ten cents.

QUESTION: Where do Soviet newlyweds go on their honeymoon?

ANSWER: That depends on their interests and how much they want to spend. Some take a trip across the country or abroad. Many people honeymoon at a resort, usually on the Black Sea, in the Caucasus or the Crimea, where the weather is warm and sunny almost all year round.

As for newlyweds who are still at college, for them it's the old Russian—and American—saying: "Love in a cottage," except that it is usually love in a tent rather than a cottage. Almost all students receive state stipends, and no one pays tuition. Even so, they usually spend the first month of married life modestly—but poetically—camping.

QUESTION: What conditions do Soviet farm workers have?

ANSWER: Farm workers in the Soviet Union are not seasonal workers. They are employed on sovkhozes (state farms) the year round and earn about the same as the average factory worker. They enjoy the same rights as workers in industry, and their rights are protected by the trade union.

A farm worker who falls sick is paid from 50 to 90 per cent of his average earnings (depending on how long he has been working). His sick leave payments come from the state social insurance fund, to which the worker does not contribute a single kopeck. State farm workers have annual paid vacations, and for many of them the trade union obtains accommodations at rest homes or vacation resorts either free or at greatly reduced prices.

The trade union negotiates a collective agreement with the management of each state farm. The agreement obligates the farm management to provide its workers with housing. The rent for these houses do not exceed four to five per cent of their earnings. The agreement also contains a clause on mechanization and on vocational training facilities, provided free of charge by the management, so that workers can equip themselves for better jobs.

QUESTION: What is the legal punishment for rape?

ANSWER: According to Article 117 of the Criminal Code of the Russian Federation, the punishment for rape is three to seven years in prison. If rape was committed with the threat to kill, or if serious bodily injury was inflicted, or if it was a second such offense, the prison sentence is five to ten years. If rape is committed by several persons or by a dangerous recidivist, or if its results are especially serious, or if it was committed on a minor, the sentence is eight to fifteen years in prison or may even be death.

QUESTION: What does a Soviet writer live on if he is just starting out on his literary career or if he is working on a long-term project?

ANSWER: The USSR Writers Union administers a Literary Fund for this purpose. The money in this fund comes chiefly from contributions of state publishing houses. The amount contributed is based on 10 per cent of royalties. This amount is taken from the publishing houses' profits, not from authors' royalties. Last year six million rubles in grants were made to writers from this fund, 130,000 rubles of which went to people who were working on new, big books. As a general rule popular writers have their books published in such large editions that they do not need such grants. As for young writers, the fund helps them pay for trips connected with work in progress, or to travel to conferences and courses, and subsidizes them when necessary. Last year young writers received 100,000 rubles from the Literary Fund.

QUESTION: A number of farm readers ask: "What is a personal plot? Is it the farmer's personal property? Can he sell it?"

ANSWER: No individual can own land in the Soviet Union since all land is public property and can be neither bought nor sold. A personal plot is acreage that the state sets aside for the personal use of those who live in rural areas, whether they are collective farmers, village schoolteachers, state farm workers, or agronomists. Invalids and pensioners also have the right to such personal plots. They vary in size from half an acre to 2.5 acres, depending on the region of the country, and are used for orchards or kitchen gardens. There is only one condition attached: No hired labor may be used to work the land. Everything grown on the plot belongs to the person who owns it. He may sell the fruits and vegetables he grows on it. A personal plot gives the farmer an income, not large, that supplements the major income he receives for his labor on the collectively owned farm.

QUESTION: How do you teach mentally retarded children?

ANSWER: We have special schools for these children, free, of course, as are all our schools. They give a minimum program of the regular school courses and teach the children a craft of some kind. The classes usually run to 10, with 15 the maximum. The stress is on individual instruction. After the teacher, the doctor is the next most important person in the school and gives the children whatever medical attention they need. There is also a speech therapist on the staff. The teachers and doctors are frequent visitors at the homes of the pupils and advise parents how best to bring up their child in the family group.

In the fourth grade the boys learn woodworking, metalworking, bookbinding and other crafts; the girls learn sewing and other household skills. In the last two years school lessons are combined with practical training in industry. After the pupils take their graduation examinations, which are given only in the specialty, they usually continue to work in the industry where they did their practical training.

QUESTION: Is there installment buying in the Soviet Union?

ANSWER: Yes. The first payment (made at the time of the purchase) is 20 per cent of the price of the article plus one per cent of the balance remaining for the credit extended.

The entire amount is paid over a period of from six months to a year. If the buyer is late with his installment, the article is not repossessed. As a general rule people pay their installments on time since there is no unemployment in the Soviet Union and the family budget tends to be stable. But if an unforeseen calamity does arise to prevent the buyer from paying the installment due, his term of payment is extended. In the case of a deliberate evasion of payment, the store can get a court order.

QUESTION: "I understand that the Soviet Union has more than 100 nationalities and small national groups living in national areas. Please explain."

ANSWER: There are more than 100 nationalities in the Soviet Union. The Russians, Ukrainians, Byelorussians, Estonians, and many other of the larger national groups live in union republics. These union republics include autonomous republics and autonomous regions composed of smaller national groups. Nationalities that number some tens of thousands are administered as national areas. These areas are parts of territories or regions with a homogeneous national composition. The national areas—there are ten in all—form part of the Russian Federation. Each such area has its own self-governing body—the Soviet of Working People's Deputies of the area—which is elected by universal, direct, and equal suffrage. Each national area has one deputy in the Soviet of Nationalities, one of the two equal chambers in the USSR Supreme Soviet.

QUESTION: Is overtime work permitted? How is it paid?

ANSWER: The law permits overtime work only with the consent of the trade union. Nevertheless, a worker is not obligated to put in more than two additional hours. The total overtime work per year cannot exceed 120 hours. There is another important condition: Those who attend evening schools, technical schools or institutes cannot be asked to work overtime. Nor are young people under 18 years permitted to put in overtime. The pay for overtime work is time and a half for the first two hours and double time after that.

QUESTION: Does the USSR have any societies for the protection of nature?

ANSWER: Yes, it does. Every one of the 15 republics has such a society. The one in the Russian Federation has seven million members. The state itself does a great deal to protect nature. Latvia, for instance, has special legislation to preserve its beautiful landscapes. ★

FIVE FLOORS IN FIVE DAYS

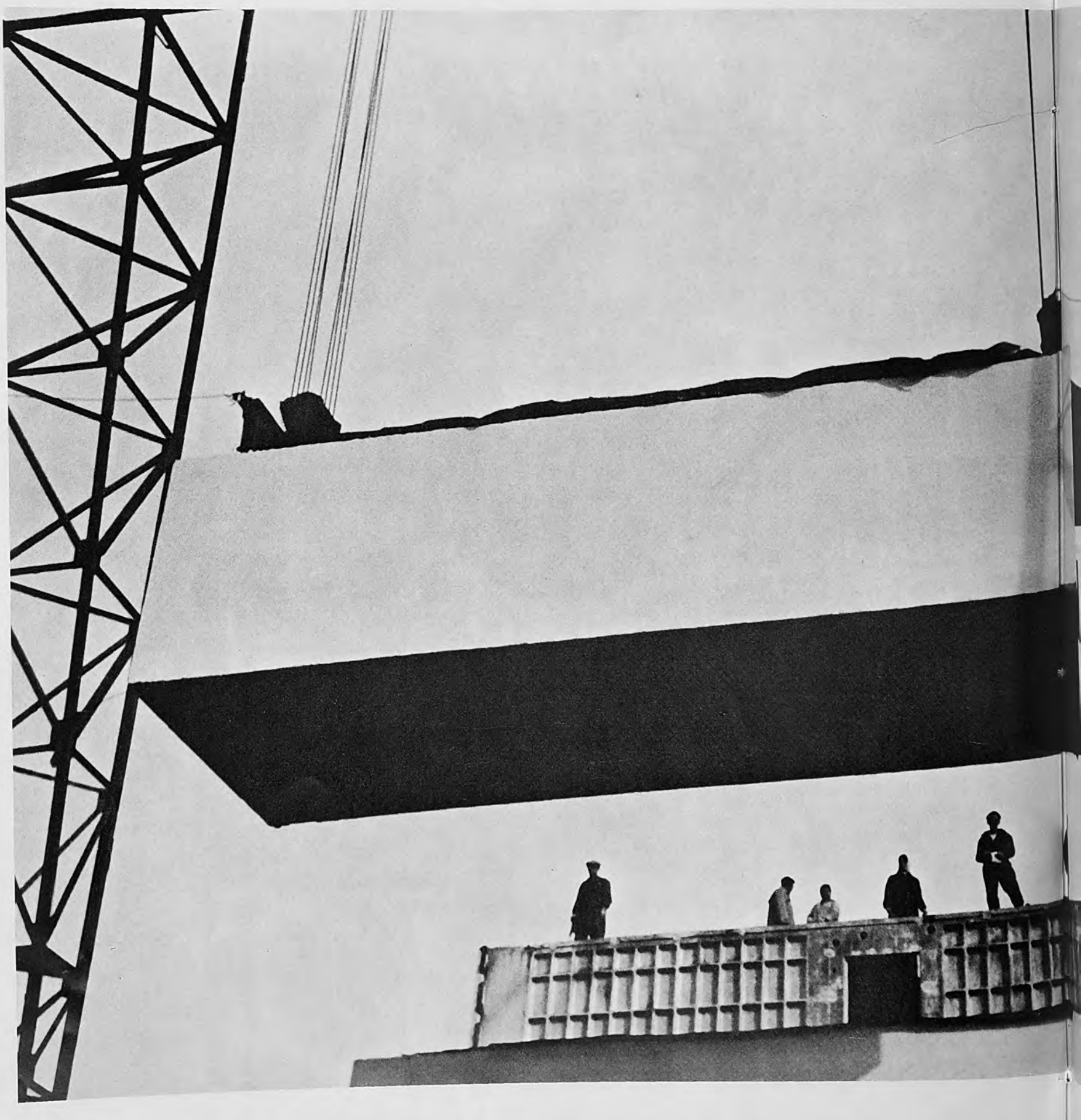
CHERYOMUSHKI, one of the newer residential districts in Moscow, was recently the scene of an experiment in high-speed housing construction.

At intervals of 30 minutes heavy trucks, each carrying a completely prefabricated apartment unit, pulled into a building site previously readied. The operation had to be done at night to avoid blocking daytime traffic. The trucks were carrying sizable loads—the units weighed from 18 to 28 tons each.

In the morning the first story of the building was finished. The next morning the second story was in place. By the fifth morning the five-story building was finished, complete in every detail.

This was an experiment not only for designers and builders but also for the workers of the reinforced-concrete section plant where the apartment units were assembled and loaded onto trucks for delivery to the building site.

In effect Cheryomushki is a city within a city. It has scores of self-contained communities, its own transportation system (including a new subway line) and, what is most striking, a continuously changing skyline because



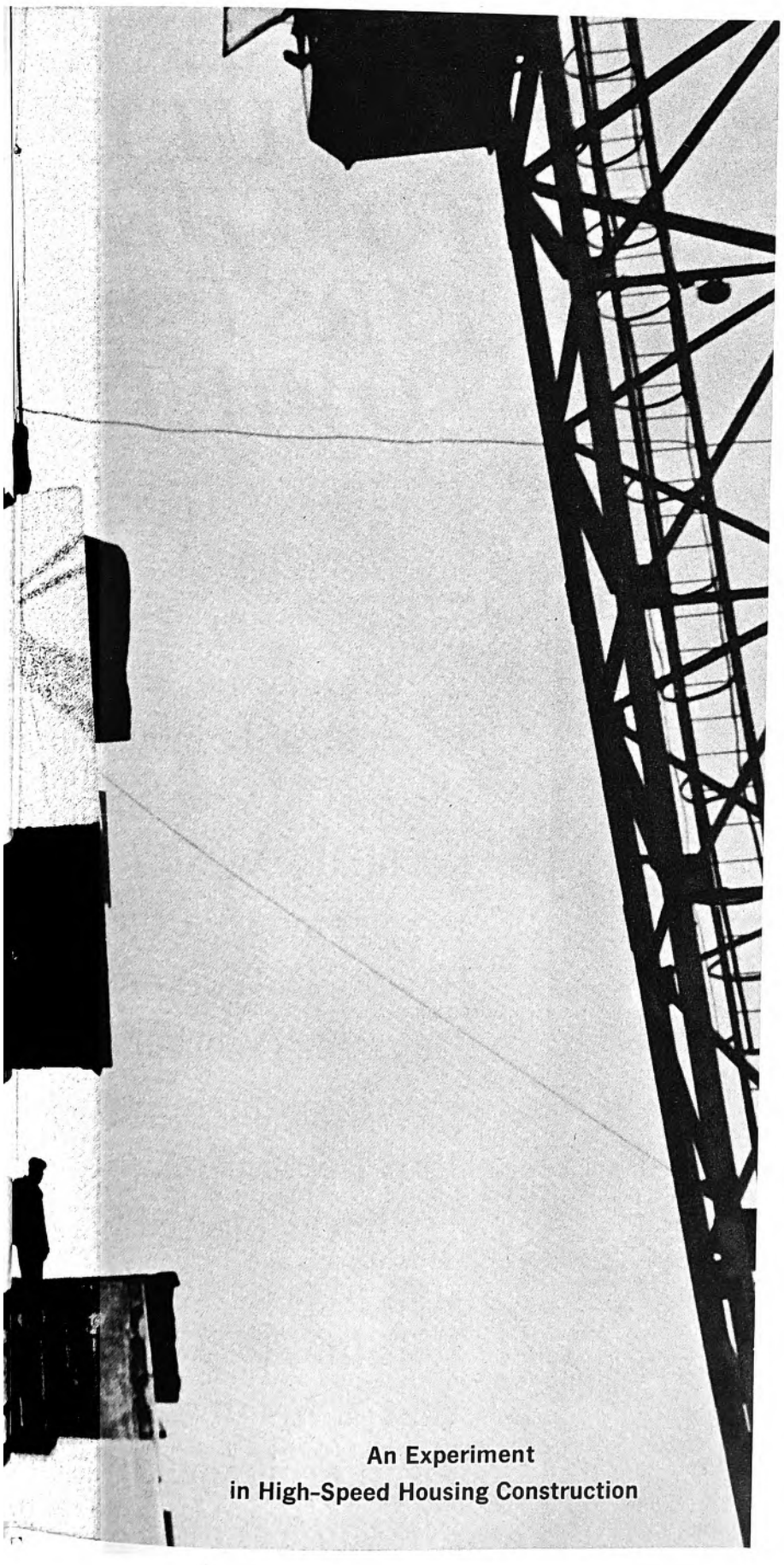
of unending construction. There it is, typical of present-day Moscow with its more than 100,000 new apartments erected every year. Cheryomushki was the first of a succession of giant housing projects and has evolved into a virtual field laboratory for prefab housing.

This giant laboratory, spread over thousands of acres, is providing the solutions to many of the problems in large-scale building—suitable architectural design, convenient apartment floor plans, and, of course, efficient methods of work organization.

In the Soviet Union "Cheryomushki" (literally "bird cherry trees") has acquired a new meaning, with connotations all its own. People now speak of Cheryomushkis in Baku, Kiev, Novosibirsk. But to get the feel and color of the word one must visit Moscow's Southwest District where the original sprang up on suburban wasteland.

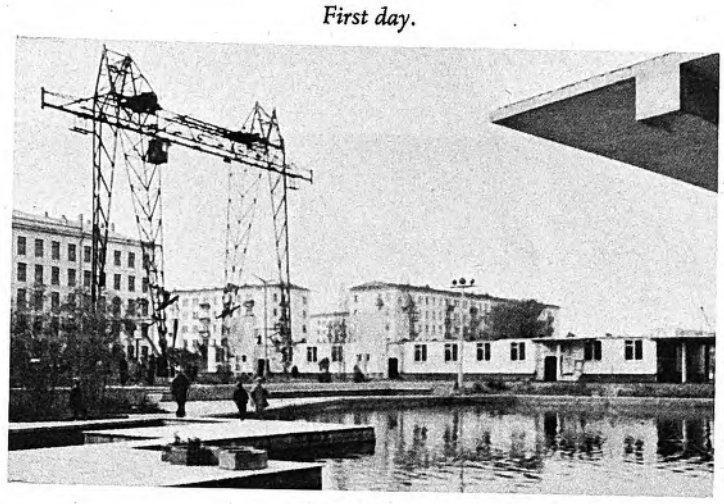
The plant-to-site method has begun to be routine for Soviet builders. There are now more than 2,500 reinforced concrete plants and 300 factories turning out large house panels, and their output keeps increasing.

Courtesy of the magazine Soviet Union

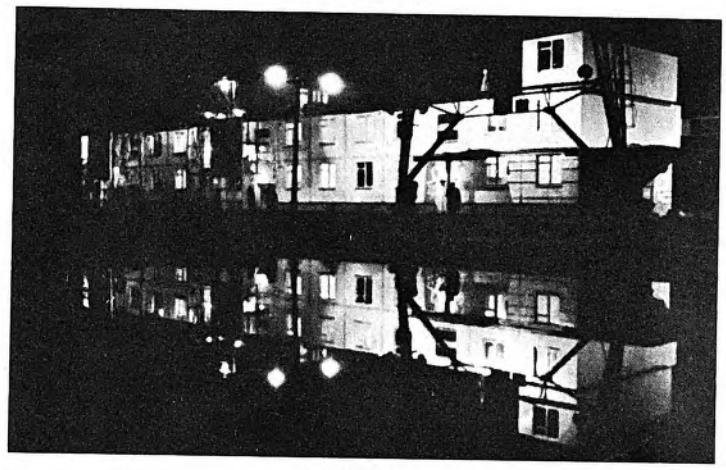


An Experiment in High-Speed Housing Construction

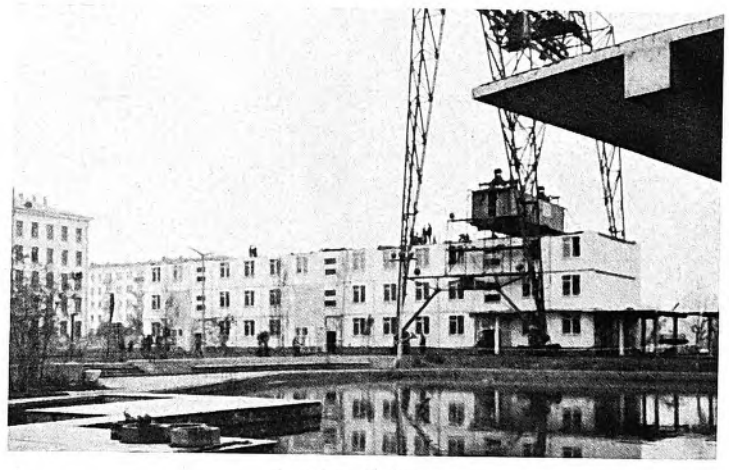
First day.



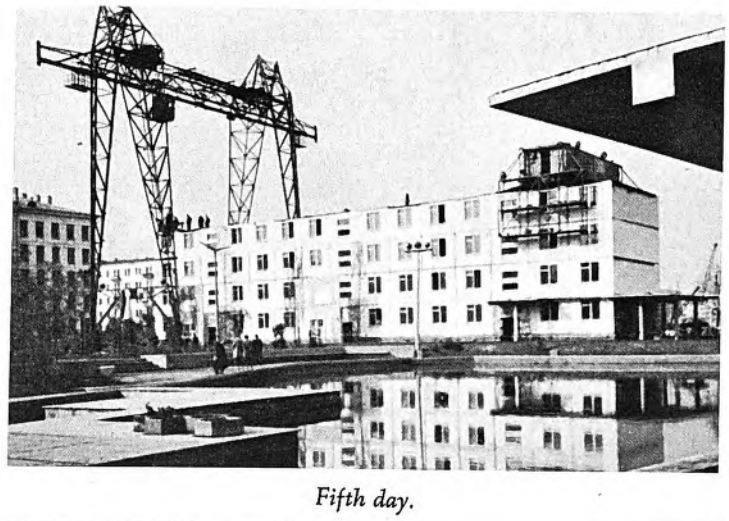
Second day.



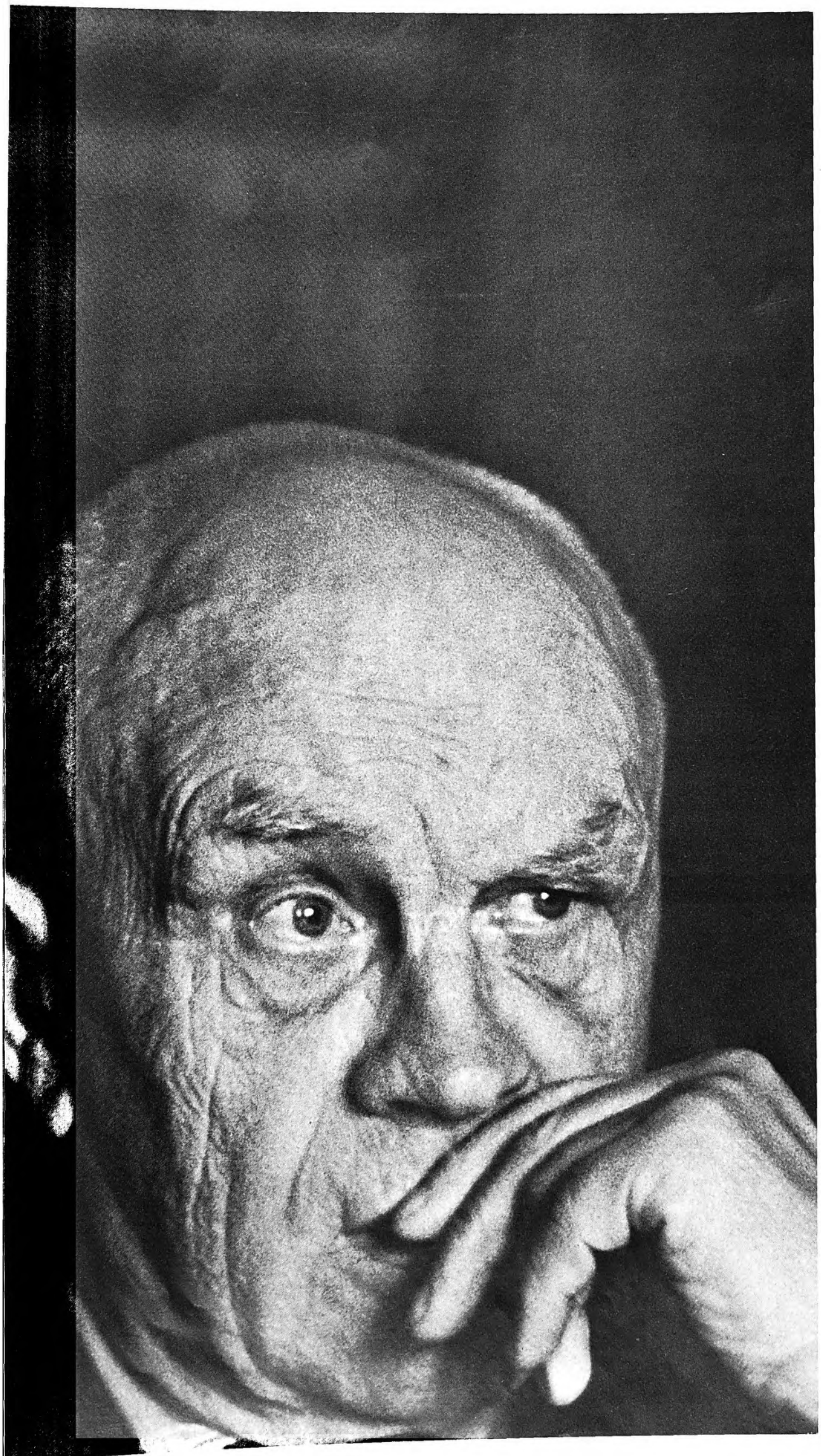
Third day.



Fourth day.



Fifth day.



HE WAS A DEPUTY TO THE FIRST SOVIET

Seventy-eight-year-old Pyotr Rumyantsev is a resident of Ivanovo, the textile town that set up one of the most famous of the Soviets of Workers' Deputies (Workers' Councils) during the 1905 Revolution.

He was elected to that first Soviet. He tells his story—and that of his town—in an interview with Nikolai Yefimov.

I would have liked going to school. But instead I had to go to work in a bakery when I was nine. My father, a stonemason, couldn't earn enough to feed the family, let alone send us to school.

My mother asked my uncle—he had some schooling—to teach me one winter. And that was the extent of my formal education, as a youth.

I changed trades often, looking for jobs, but finally settled in Ivanovo in 1898. There I became a weaver.

We worked as much as 12 hours a day, and were paid hardly enough to keep body and soul together.

I lived in a tiny cubicle in the factory barracks with 10 others. We slept on the floor, huddled together for warmth.

If we got sick, we had to manage as best we could. Even if you could afford to pay for a doctor, there was only one for every 8,000 people. Today Ivanovo has one doctor for every 240 residents and medical care is free.

I was luckier than most because I wasn't married. How the family men lived, I simply cannot imagine—and the women had the hardest time of it.

My brief winter of education made me a "learned" man in the eyes of my fellow workers; most of them couldn't even sign their own name. I was one of the men they chose to be on the delegation. We asked for a ten per cent pay raise in the spring of 1905.

"Impossible," declared Burilin, the factory owner. "I'm losing enough as it is! I ought to close the mills down, but I just haven't the heart to put all of you out on the street."

"Did you build your mansion with the money you lost?" I asked him.

Burilin had no answer to that. He refused to raise the wages and we decided to strike.

All the mills shut down on May 12, and three days later we formed our Workers' Soviet.

It had 151 members, I remember. Most of them were Bolsheviks, practically all of them workers.

There was a big difference between our Soviet and the official City Council—or Duma, as it was called. The Duma had 48 members: 37 manufacturers and merchants, 11 big landlords, but not one worker.

In fact, out of the whole population of Ivanovo —somewhere in the neighborhood of 100,000 at the time—only 396 had the right to vote!

The Soviet—our Workers' Council—met for the first time in Negorelaya Street. Thousands of workers stood outside, listening to the speeches through the open windows.

We drew up 31 demands, including an eight-hour day, a six-week maternity leave with full pay, nurseries, the right to form trade unions, the right to get together to discuss our problems, even the right to write to the newspapers without fear of reprisal.

We also demanded that the factory police force be broken up.

We got our answer a few days later. "Unacceptable."

But the Soviet printed the demands and saw to it that they were put into effect. Workers' militia units were formed to keep order and all government-owned wineshops and saloons were closed. Shopkeepers were forbidden to raise prices. The factory owners now had to go to the Workers' Council to get things done.

During the strike I met my future wife, Vera. She was a pupil at a local school for well-to-do young ladies and had come to a meeting to see "how the other half lived." She decided to join that other half!

Meanwhile the governor was preparing a bloody reprisal. He brought in some troops, and on June 3 they shot down a gathering of unarmed workers. The banks of the Talka River were red with blood.

A third of the Soviet's members were jailed, but the strike went on. It took more than ten weeks of slow starvation to get us to go back to work.

I went back to work with the rest of the fellows, but not for long. The owners had organized gangs of thugs to take care of the leaders.

I was stood up against a wall, and would have been shot had the revolver not misfired. Then they kicked me until they thought I was dead.

I was taken to the morgue with a fractured skull, broken elbow and a number of wounds. I've still got plenty of scars as souvenirs! After that, I was through working. My left arm was crippled for good, and they wouldn't hire me anyway. So I moved to a neighboring village.

But the lessons of 1905 were not forgotten. Twelve years later, in 1917, power passed into the hands of the Ivanovo Soviet of Workers' and Soldiers' Deputies without a single shot being fired.

The first big new building to go up in Ivanovo symbolized to me that we workers had begun to build our own future.

The Ivanovo textile mills, idle all through the years of the Civil War and foreign intervention, came alive again. New mills were built—the Krasnaya Talka, Dzerzhinsky and others.

Since the 1917 October Revolution I've seen 80 new factories go up in Ivanovo—but I still remember that first one.

In the years that followed the whole family studied hard.

Our three daughters and son were already at school when I sat down behind a school desk for the first time in my life.

My wife Vera still treasures a faded certificate awarding her a May Day trip to Moscow for work she had done in the drive to end illiteracy.

She taught youngsters between the ages of 12 and 18 who hadn't been able to go to school before the Revolution. And then in the evenings she taught adult illiterates.

Our town didn't have a college then. Now we have seven, and 16 secondary technical schools with a combined enrollment of 25,000 students. One student for every 14 residents—in a city of industrial workers! The cotton mills I knew so well now employ 5,000 workers, and one in every five is studying.

World War II left its mark on us, as it did on every family in Ivanovo.

Our daughter Galina had just graduated from the local medical secondary school and immediately went to work at an army hospital in Vladimir.

I was busy building convalescent homes for soldiers near Ivanovo, and my wife, a member of the City Soviet, was chief air-raid warden.

Our son Igor was seriously wounded in the fighting on the Leningrad front.

The war wrecked the lives of our three daughters. The men they were going to marry never came back from the front.

The problem of the lonely woman was a bigger one in our town than in many others. Thousands of women had lost husbands or sweethearts. In towns with iron and steel mills or other heavy industry some of the men had stayed behind; they were needed there as much as at the front. But in Ivanovo the women could, and did, take over the men's jobs in our comparatively light industry. So when the war ended, we had only three males to every seven women—including the children and the old folk.

The City Soviet decided to put up five large machine-building plants in the town to attract men from other areas. The government helped to finance their construction.

Slowly we began to have a better balance in population. Today 42 per cent of our population is male. This compares fairly well with the national average of 45 per cent.

We have our problems, of course—on the night shifts, for instance. We have been trying to eliminate night work altogether, but it isn't easy. A year ago one of our mills changed over to a system of two main shifts working a five-day week, with everyone doing two night shifts a month. Other mills are now trying the system out, but there is still a lot of disagreement about it. At one large mill even a proposal to try it for a three-month period was only carried by a slim majority.

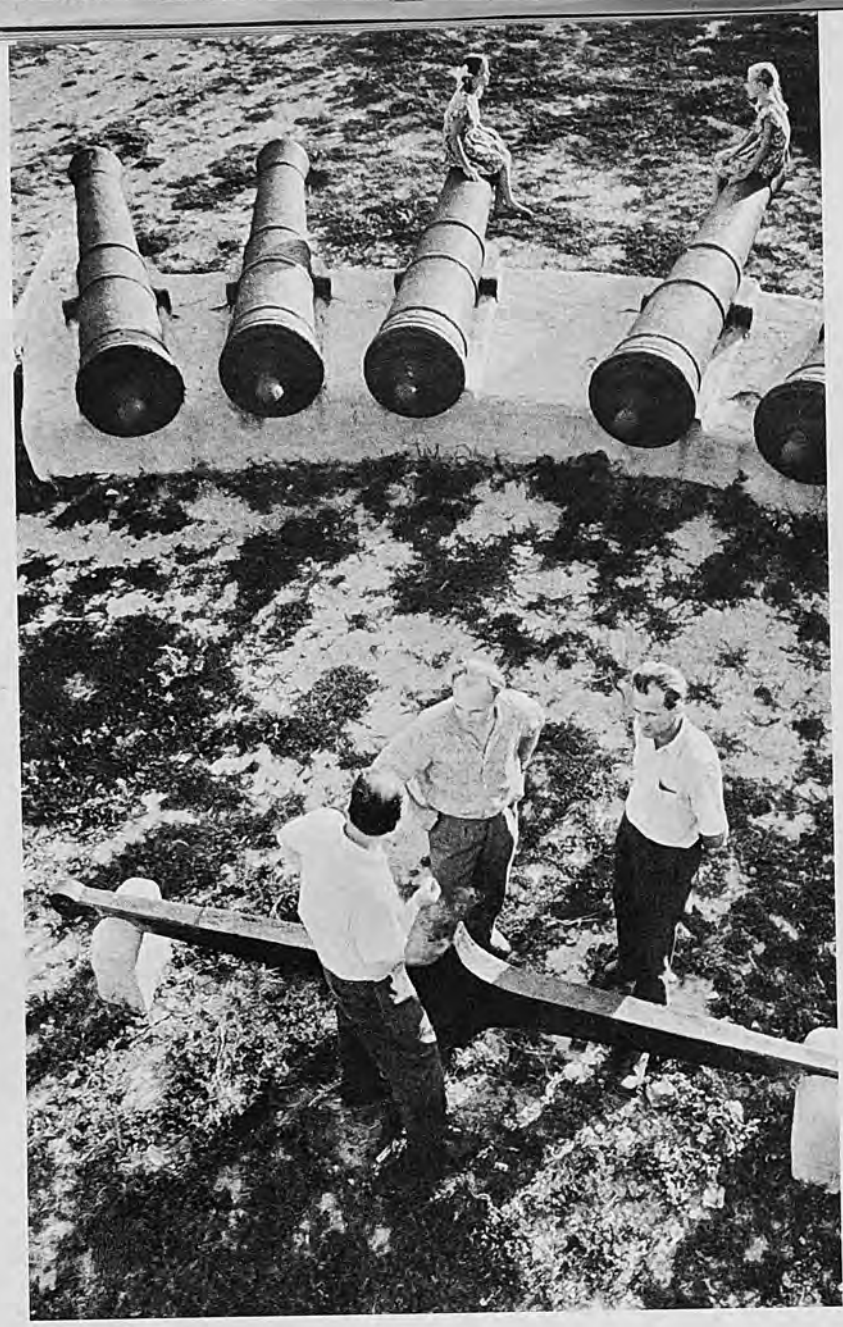
The big hitch is that it involves changing around the two days off. They still come together, but they don't always fall on the week-end—the problem still needs solving. We aren't sure about the solution, but we'll find one. As a matter of fact, we would have found it long ago, if it hadn't been for the war!

The years are beginning to tell on me—my heart acts up now and then. I retired on a pension some time ago, but I like to keep busy.

I'm head of a regional museum group that looks after local monuments and places of historical interest. I like doing that. I want the young people to know how and where we started. I sometimes think we aren't doing enough to remind them. But the important thing is that what we started is being carried on.

My granddaughter Irina—a very modern young lady—is studying to be a teacher of the Russian language and literature, like her grandmother. She wants to teach in Chukotka, in the Far North. I sometimes wonder how Irina manages to pack so much into her busy life. She never misses a good concert, and plays the piano herself. She is fond of poetry and knows many of our contemporary poets' works by heart.

Irina will make a fine teacher because she is a fine human being. I think she's typical of our young people. I don't pay any attention to those who complain that "young people were different in our day." ★



(Left) This Cossack country was not always quiet, as these guns testify.

(Right) The Cossacks fled czarist serfdom to the shores of the Don.

(Below) Now this peaceful Don region grows grain, fruit and grapes.

Reader Blackie James, 2402 Mann Street, Houston 16, Texas, asked us to do a story on the . . .

BY VLADIMIR ILLESH

PHOTOS BY ANATOLI GARANIN

In the quiet halls of the Novocherkassk Museum of the Don Cossacks, bearded warriors stare down at you belligerently from the walls. The hetmen's maces and ancient weapons gleam dully in the showcases; their horses rear proudly in the canvases. These exhibits tell the story of the "freemen"—the Cossacks who fled serfdom under the czars—of their bold raids in foreign lands, of their part in the peasant revolts. The best sons of the Don always sided with the oppressed.

You can sense the cold steel of the chains which fettered that hero of the Russian people, the Cossack Stepan Razin.

But it is time to be on our way to places where the modern history of this southern region of Soviet Russia is being made.

DON COSSACKS

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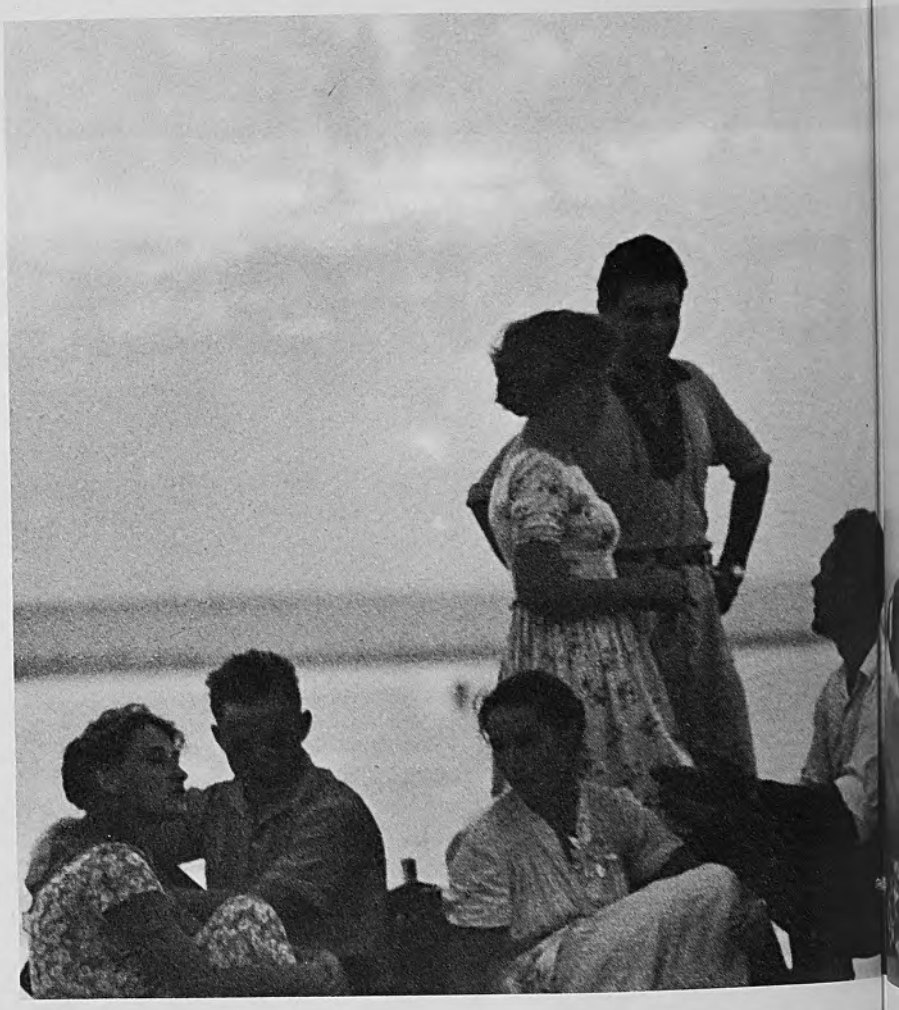

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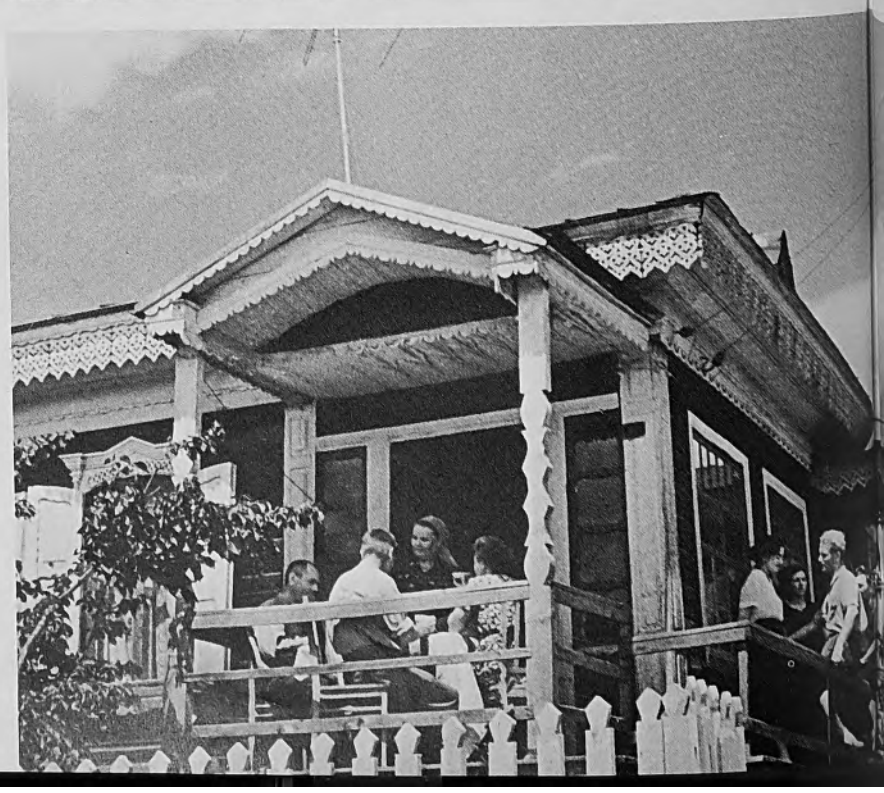


4

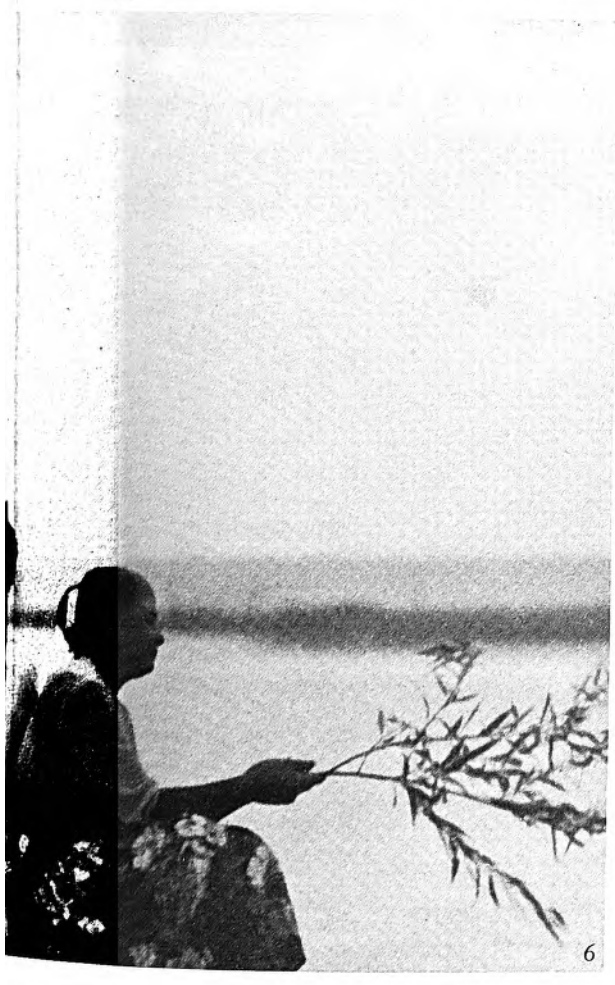
DON COSSACKS

FROM the hillside, made bare by combines, the houses of the ancient Cossack village of Melikhovskaya are hard to discern at first. The new school stands out like a double-decked steamer, farther back is an open air movie, and then orchards, orchards and more orchards stretch as far as the blue horizon. Nestled among the vineyards and fruit trees, the houses shimmer white, pale blue and pink. Near the landing stage, built for diesel-electric and hydrofoil ships, sharp-nosed Cossack fishing boats rock on the waves.

There are fields all around. Here and there above the stubble rise yellow stacks of straw. Against a background of ancient Scythian burial mounds big tractors are plowing. In the distance are cornfields and, of course, the vineyards. Although the emblem of the Don Army (a Cossack astride a wine barrel) can now only be found in history books, the excellent Don wine is still the pride of the region. Dairymaids and bulldozer operators, vegetable farmers, welders, winegrowers and mechanics —these people make up the Rodina Collective Farm, with the village of Melikhovskaya its center.

The Russian critic Vissarion Belinsky once wrote about the history of the Cossacks that it was "a tributary flowing into the great river of Russian history." The Cossacks have their own character and tradition to this day, but they no longer stand a caste apart. The Rodina Collective Farm, too, is in step with the whole country.

Courtesy of the magazine
Soviet Union



1. The forebears of these kindergartners were Cossack fighting men.

2. She could be a character from Sholokhov's And Quiet Flows the Don.

3. Modern appliances are now the commonplace in a Cossack household.

4. In the busy summer season Don collective farmers dine alfresco.

5. Today's Cossack song-and-dance group combines the folk and modern.

6. A summer evening on the Don River and a love song to set the mood.

7. Sunday dinner on the veranda is traditional for Cossack villagers.

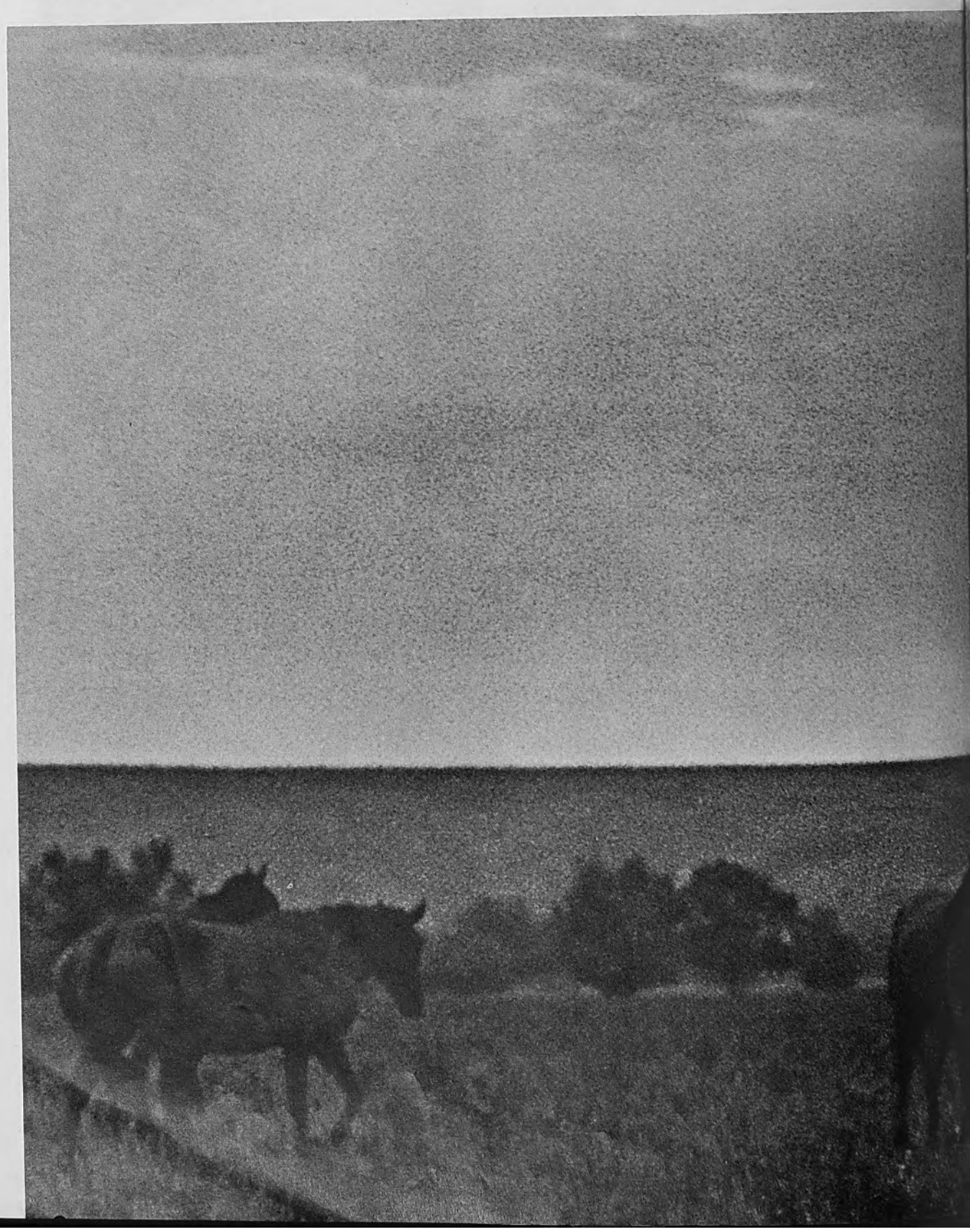
8. Melikhovskaya's village bookshop supplements a 9,000-volume library.

9. Off on a hike through their history-permeated native countryside.

DON COSSACKS

Much too large an audience for the village ensemble to perform indoors.

If he does not own a horse and ride like a demon, he is not a Cossack.



LET THEM VOTE!

I saw a boy in a hospital . . . . He had
No arms . . . . A shell at one fell stroke
Had crippled and had orphaned him . . . . The lad
Had then been five years old . . . . I spoke

To him and learned that he had played
The piano and had liked to bounce a ball,
A large, green ball . . . . And now, and now he stayed
In bed and turned away to face the wall

And hide the tears that sometimes came . . . . He lay
In silence, like a soldier, tight-lipped, white . . . .
His staunchness rent the heart and seemed to say:
Be cursed you fiends who bloodshed dare incite!

Oh armless, legless victims of the war,
Oh children who will run and dance no more,
How sinister and eerie is the sound
Made by your crutches striking the ground!

Do not forgive the wrongs that you have borne,
Do not forget the hurts you have endured,
The world against the threat of bloodshed warn,
Join those who fight that peace may be ensured.

You who have paid the price of strife and hate,
Stand up and boldly say that war must cease;
You, veteran of twelve, and you, of eight,
Lift up your stumps and vote for lasting peace!

Your tortured childhood will condemn and brand
The mongers of destruction and of death
That they may not escape our wrath and stand
Exposed before the peoples of the earth.

Translated by Irina Zheleznova

BY ANDREI SINYAVSKY

THE POEMS of Olga Berggoltz are perhaps the most tragic in contemporary Soviet writing. They convey the sharp and pitiless meaning of that tragedy of all tragedies—war. The Leningrad blockade, when 50,000 human beings died from hunger alone, left an indelible mark on those who survived, an exposed sensitivity to the suffering of others.

But sorrow, no matter how profoundly felt, does not necessarily convey the sense of tragedy. Tragedy is the suffering of the strong. It is born of great grief and great courage and stirs not pity so much as reverent admiration for the triumph of the human spirit.

This is Olga Berggoltz's poetry. Even in the grim hour of decision, when everything around him smelled of death, man stood up so strong that, looking back, we feel no sense of pity, only of pride, and even a curious envy for a lot so bitter and yet so happy.

Never was I so strong
As during that war-stricken fall.

We must remember that these lines were written when, as he withstood the blockade, a man took the measure of his own courage and of those who suffered with him. Happiness is a word Olga Berggoltz uses often as she tells the story of besieged Leningrad. It was a hard-won, stormy, cruel happiness, this happiness at death's edge.

It is this sense of the tragic that gives her poetry its haunting quality, that gives such poignancy to the most common objects. The strips of paper pasted on the windowpanes are "crosses of winter's Black Bartholomew," and the ashes in the makeshift shacks are "traces of the great fire that warmed the Leningraders."

She depends on no diversity of poetic forms, uses no unconventional effect in rhyming or metaphor and an almost unrelieved terseness, like the speeches Leningraders made during the war, which, says the poet, resounded over the radio like "oaths corroborated by

THE POETRY OF OLGA BERGGOLTZ

life," and again—"Leningrad let fall no empty words. She confirmed every word she spoke with all she had—her blood and her life."

Her poetic speech is terse, precise, naked, more like a black-and-white drawing than a painting, and subsists on a minimum of pictorial effects, on the spare rations of the blockade.

I say we citizens of Leningrad
Are undaunted by the roar of cannonades.
And if tomorrow we put up barricades,
We shall not quit our barricades.

Her verses are built more on intonation than words, intonation that is deeply tragic and highly personal. Her favorite forms are the diary ("Diary of February"), the letter ("From Letters on the Way") and the intimate conversation ("A Talk With My Neighbor"). Her poetry is completely honest, unafraid, uncompromising, reminiscent in a way of Mayakovsky's early lyrics.

From heart to heart
That way alone I
Chose for myself. It is straight and fearless.
And swift . . .

Her poetry is the song of the human spirit. Its theme is as large as the world—"the world and I" . . . "the truth of our life lives in my heart." She shows us the universe through the prism of her personal experience. She is there in all her poetry but with arms spread in a sweeping lyric gesture that says, "This is all mine!"

"Mine" is the life she lives with others, the common work, the common struggle. I feel, she says, "strong ties with everything around me, with the living, and with those who died for their country, with those being born, those who are growing, those who are working in Uglich, Leningrad and all over the land. . . ."

Courtesy of the magazine Novy Mir

WOMAN OF LENINGRAD

They'll make up songs about you, they will praise
All that you did and all you were,
And you will say, remembering those days:
"I . . . . I was simpler, yes, and gloomier.

"I was beset by fears, I felt depressed,
War sapped my strength and quenched my inner glow.
I did not dream of being happy—no—
I wanted nothing but . . . to rest.

"Yes, rest from worry, rest from death and cold,
Rest from the hopeless search for coal and bread,
From having to be brave while being told:
'We're hungry, ma,'
Rest from the awful dread
Of whistling shells, of never being sure
If he, my soldier, would come back again,
Rest from the need to hate and to endure,
The need to face a world of crushing pain.

"And yet, its mistress and its servant, I
In the bereaved and saddened town remained
To guard the flame of life that never waned,
That, stubborn as ourselves, refused to die.

"I shared my rations, hopes and all my fears,
Worked hard, pretended to be strong,
I dreamed of food, I wept when I had tears,
I combated my weariness with song.

"My face grew older, darker, day by day;
Dismayed, I saw it lose its fresh appeal.
But though my hair was slowly turning gray,
My hands became as hard as tempered steel.

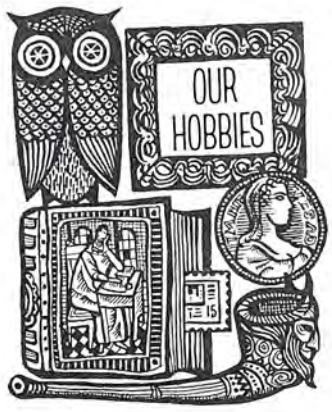
"Look—they are rough and worn with ceaseless toil,
They deftly plied a pick and used a spade,
They dug trenches and graves and tilled the soil
And learned to wield both scalpel and grenade.

"The war has left a scar I can't disguise,
That even time itself cannot erase—
Its suffering is stamped upon my face,
Its anguish is reflected in my eyes.

"Why, then, did you depict me, young and proud,
My smile defiant and my features bold,
Upon my brow no furrow, not a cloud,
My shining beauty wondrous to behold?"

To this the artist will reply with pride:
"To paint you thus my heart and conscience bade.
You . . . you are life and love personified,
The glory and the soul of Leningrad!"

Translated by Irina Zheleznova



SWORDS

Joe Ferrin, a 17-year-old high school student from Washington, D. C., who collects swords, wrote to ask the editors of USSR *for an article on sword collections in the Soviet Union.*

BY PYOTR YASHCHENKO

THERE are no private sword collections in the Soviet Union, although there are single items that are treasured as family heirlooms. Many museums have cutting and thrusting arms in their weapon collections.

The Museum of the Don Cossacks in Novocherkassk (North Caucasus) that I visited recently has an especially large collection—80 different kinds, including Cossack sabers. They may be roughly divided into four groups: ancient swords, those presented to Don Cossacks by the Russian czars, trophy swords and Cossack battle sabers.

Among the ancient ones are three Polovtsi swords. The Polovtsi were nomadic tribes who lived in the south of Russia during the eleventh and twelfth centuries. The swords were found during archeological excavations and are in a poor state of preservation.

In 1637-43 the Don Cossacks were engaged in a war against the Turks. A Cossack army of

Turkish saber in the Novocherkassk Don Cossack Museum. The hilt is Russian.

An inscribed Turkish sword in the collection from the end of the 18th century.

Sword presented to Hetman Matvei Platov by the London City Council in 1814.

5,000 held the Azov fortress against a 200,000-strong Turkish army for three full months and threw back 24 attacks. The siege of this fortress has come down in history as the "Azov Coop," because a Cossack chronicler wrote, ". . . and we were cooped up in Azov for 93 days and 93 nights."

Also on display are several Turkish sabers of the same period. The saber, or *kylych*, has a curved blade and a simple hilt without ornamentation. The museum has many Turkish trophy weapons of later times as well, among them two yataghans (straight-blade swords) and several ordinary ones with Turkish inscriptions on the blades.

The museum collection includes German, Persian, Hussar, Caucasian, Japanese and Chinese swords. A Bulgarian sword of the first half of the nineteenth century is displayed separately. Engraved on the blade are two clasped hands, symbolizing the friendship of the Russian and Balkan peoples.

Especially interesting are the 20 swords presented to Cossacks by Russian czars, each with a lengthy inscription. One such reads: "By the grace of God we, Catherine II, Empress of Russia," etc., etc., etc., "awarded this sword to *Sotnik* (Lieutenant) Ivan Platov of the Don Army for devoted service. Moscow, the twenty-seventh day of January, 1763."

The sword passed to his son Matvei Platov, who subsequently became the hetman (chief) of the Don Army. The Cossacks called him "The Whirlwind Hetman" for his outstanding bravery in action. During the Patriotic War of 1812 Platov, who commanded the Cossack armies, used the sword that Catherine II had given his father as a weapon in the Battle of Borodino.

The sword the Council of London presented to Hetman Platov on June 8, 1814, is considered quite unique. The English inscription on the blade reads: ". . . that a sword of the value of two hundred guineas be presented to the hetman Count Platov in testimony of the high esteem in which this court holds the consummate skill, brilliant talent and undaunted bravery displayed by him during the protracted conflicts in which he has been engaged to secure the liberty, the repose and the happiness of Europe." The hilt, ornamented with precious stones, bears the seal of the City of London on one side and Platov's monogram on the other.

Nicholas I, in 1826, presented the sword of the Russian Emperor Alexander I to the Don Cossack troops. This exquisite parade sword and magnificent scabbard is on display at the museum. The beautifully ornamented blade of Damascus steel was made by Zlatoust (in the Urals) masters.

In the Patriotic War of 1812 Cossack General Vasili Orlov-Denisov awarded Mikhail Nedoyedkov a sword for bravery. For 150 years the descendants of this Cossack hero passed it down from generation to generation. Last year one of Nedoyedkov's great-great-grandsons, living in Taganrog, made a gift of it to the museum.

In the collection are Cossack sabers of the Civil War period and the two world wars. The saber of Nikifor, one of four Privalov brothers who distinguished themselves in the battles against the White Guards, is among them, as are the weapons used by the prototypes of the heroes of Mikhail Sholokhov's novel *And Quiet Flows the Don* and the sabers of men of the First Cavalry Army.

One of the cases holds the sabers of the enemies of Soviet power in the Don area: the counterrevolutionary generals Kaledin, Mamontov and others. The scabbard of Kaledin's saber is richly incrusted. The general, happily, did not have much use of the blade: his army was smashed and he, despairing of success in the struggle against the Soviet Republic, shot himself.

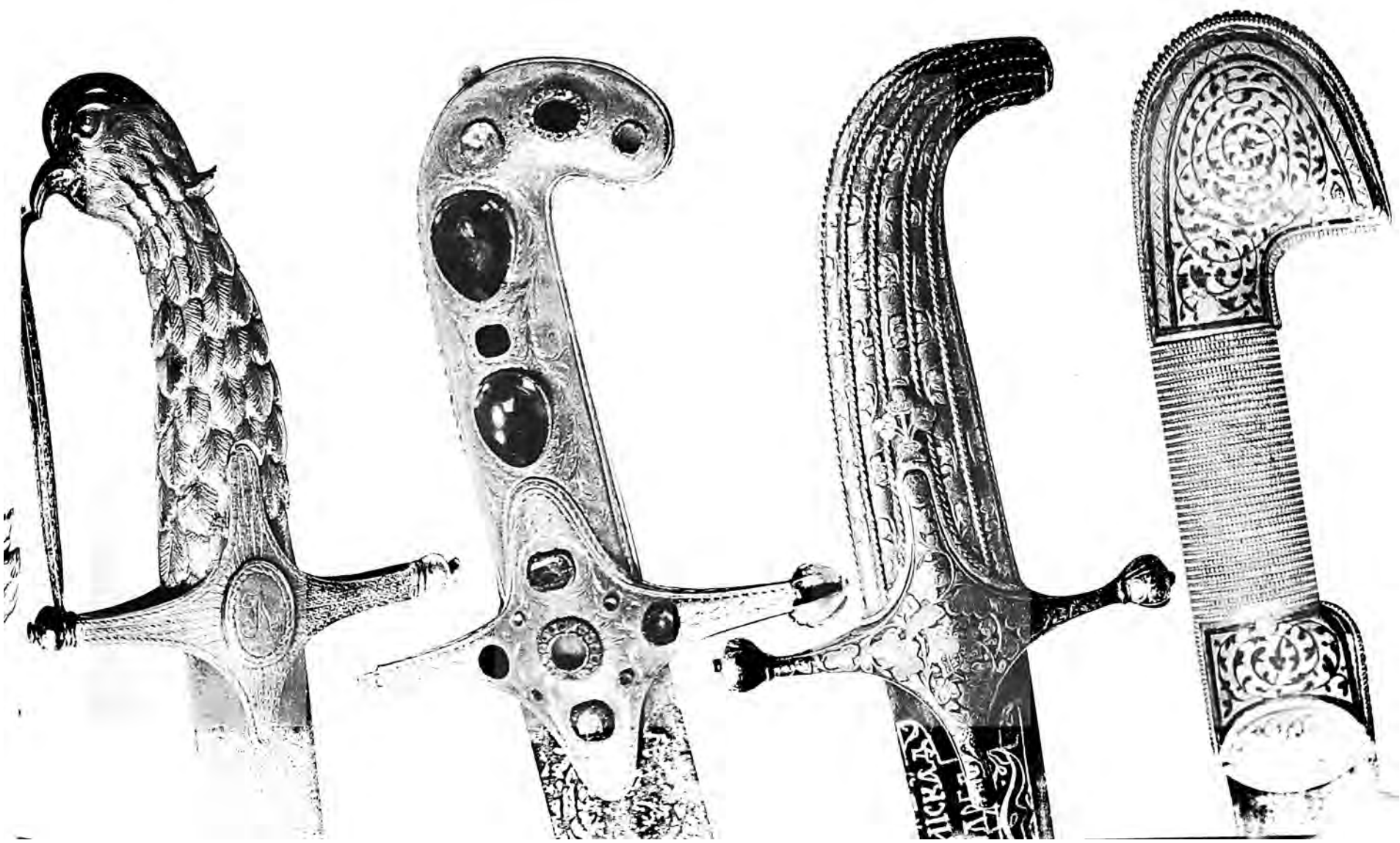
Among the weapons, banners and awards of the Guards' Fifth Corps, a Cossack army group which during the Second World War pushed back the Nazi divisions from the Caucasus to Austria, are the swords of the corps commander, Lieutenant General Alexei Selivanov, and other officers. Of particular interest is the saber of Pyoter Dorin with which he fought in three wars. It testfies to the fact that newer instruments of war notwithstanding, the sword in the hands of a Cossack remains a formidable weapon. ★

Alexander I presented this sword to Don Cossack Lieutenant Zakhar Yevstigneyev.

Another sword presented to Hetman Platov, this one for his 1796 Persian campaign.

One of the sabers presented to the Cossacks by Empress Yelizaveta Petrovna.

Mikhail Nedoyedkov won this sword for bravery in the war against Napoleon.



SATIRE—instrument of

BY SERGEI MIKHALKOV

BUILDING a communist society is a many-faceted and complex process in which the new does constant battle with everything that is old and dying. For this struggle criticism and self-criticism are proved and invaluable weapons.

We could say that satire is criticism expressed in an artistic, objective, dramatic and therefore particularly convincing form. That is why our Party, a party of remakers of society, values this sharpest of all weapons so highly.

In our treasury of satirical literature there are many excellent examples. But there is a marked dearth of such efforts currently.

Obvious

It is perfectly obvious that satire would have been relished by very few of our former regional officials and heads of republics. Very likely the author would have been accused of slander and would probably have had to fight for his right to speak up. But a writer—all the more so a satirist—must be a fighter, right up in front.

Why so little satirical writing? Why is it that satirical comedies, and comedies in general, have no real place in the repertory of our theaters? Why have so few of our comedy writers, masters of ridicule, given us any significant plays?

Traditionally, to celebrate certain great historic occasions, our people make a special contribution to the country—complete a building project ahead of schedule, or something of the sort. It is a way of reporting on their labor achievements to the country. But I don't know that anyone celebrates these holidays by changing his particular trade or profession.

No cabinetmaker starts producing machine tools for a red-letter day; no confectioner turns out pig iron. Why then do theater companies, whose weapons have been satire and comedy, playwrights, whose forte has been sparkling comedy and satire, turn to milder fare for these occasions?

Is it because certain theoreticians hold that satire and comedy are not serious enough genres for celebrations?

Indifference to the way satire and comedy are disparaged on our stage and screen hampers the development of our theater and the education of our people, especially the youth.

Frankly Expose

One would think that in this era of scientific progress, when we are conquering outer space, we should have the courage, more than ever before, to speak up openly and frankly about everything stagnant and backward, everything that gets in our way and holds us back on the road to communism.

Can our satire afford to bypass those who deceive the Party and the state, for example?

"Liars, humbugs, irresponsible windbags are our worst enemies," to quote Nikita Khrushchev. "They trample on the Party and state laws, on honesty and truthfulness. They harm our cause.

"How can we tolerate officials who engage in pretense, resort to padding reports, and make irresponsible statements! Such persons disgrace the good name of Communist Party members."

In our country we still have swindlers and scoundrels, plunderers of state and public property, diplomatic ignoramuses in our scientific institutions who never wrote the doctoral dissertations that bear their signatures. We have bigots and demagogues preaching morality, fools and numskulls, in and out of uniform, guarding safes containing government funds and documents. We have those who demand a dowry with the bride, and we have children of parents with Party cards in their pockets baptized in church.

Overgrown children still sue their aged mothers, loafers still engage in black-marketeering, drunkards and hooligans still disturb the peace of honest citizens, and callous bureaucratic officials still put the freeze on many a good cause.

There are only a handful of them, but they are still with us! They live among us, they are active, they buzz around and annoy us, they make trouble and interfere with what the rest of us are doing.

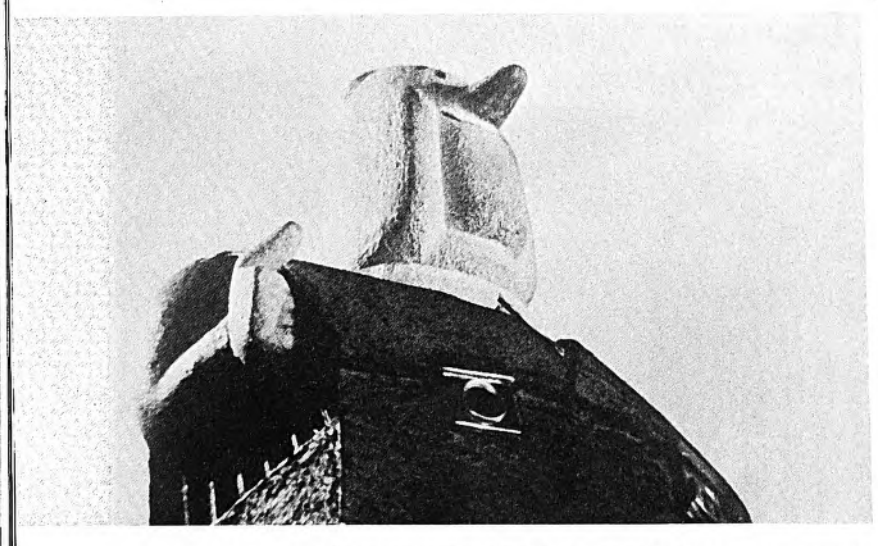
That is why we need satire. Who but the satirist can damn such types by holding them up to ridicule for the people to laugh at? Who can better expose and pillory them?

To discuss certain relevant problems I am compelled to draw upon my own experience.

Shaft Finds Mark

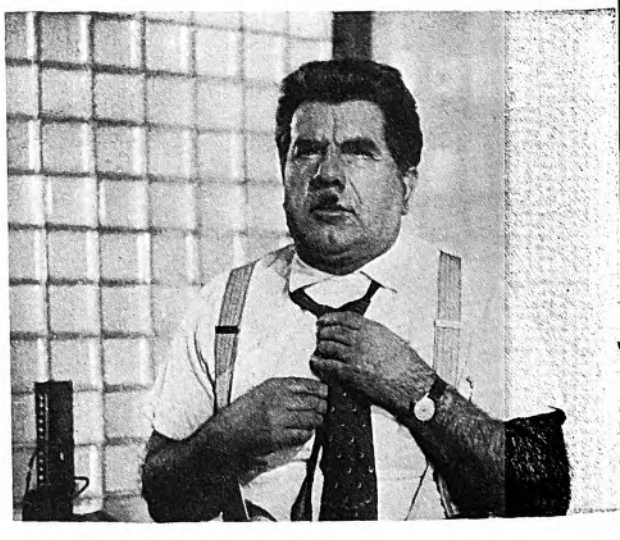
It is usually considered immodest for a writer, talking about literature, to mention his own creative efforts. It is perfectly proper, however, for any other Soviet citizen—textile worker or tractor driver, lathe operator or farmer, engineer

SATIRIC SPOTLIGHTS

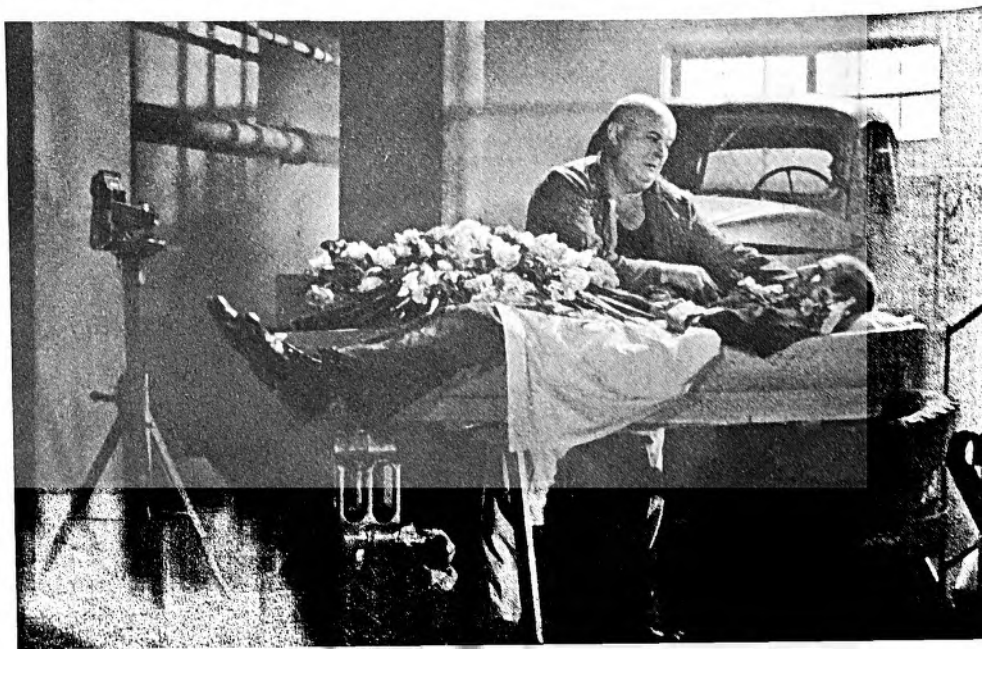


The actors in this Fitil *movie short are puppets, but the locale is the very real town of Dnieprodzerzhinsk and the leading character one of its officials. He is being feted on some anniversary or other and his thoughts are on everything but work. "In conference," the secretary tells all callers.*

The doctor has just examined bureaucrat Foofin—he's missing a heart! Hardly surprising. People sit for months in his office waiting for the great man to give them an audience.



In The Living Corpse, *Sergei Filippov, stage and screen comedian, plays the alimony dodger who sends his former wife a picture of his demise to get out of supporting their child.*



or scientist—to describe his work or creative experience from the rostrum at an important conference.

My comedy *A Monument to Myself* was published in the magazine *October* (No. 3, 1959) and produced by the Moscow Theater of Satire. Both the live show and the published version received good critical notices in the national press.

Naturally, I did not expect that everyone would take my probing kindly. That would have meant that my shot had been wide of the mark, that it had hit no one.

Satire is satire only if it infuriates some people, makes them lose their temper, makes them bellow from sheer frustration, drives them to write denials, and so forth; in short, when those at whom it is aimed strike back.

Therefore I was not surprised when my satirical picture of the philistine bureaucrat Pochesukhin got under the skin of one of the chiefs of the housing and communal services department of the Balakhna Pulp and Paper Factory. He found the play, staged by the drama club of the Pravdinsk House of Culture, offensive.

"Offended"

He complained to the factory Trade Union Committee. But instead of having a good laugh at his expense, as everyone else was doing, the committee censured the producer of the show.

An exceptional incident, you might say, good material for a skit. As a matter of fact, such a skit did appear in the press at a later date. Apparently my comedy's negative protagonist had alerted not only the "offended" but also his defenders.

When the Severodvinsk Theater wanted to stage the play, the chief of the Severodvinsk executive committee's cultural department, Sundukov, said—and I quote him verbatim—at a meeting of the local theater council:

"*A Monument to Myself* is interesting from the viewpoint of the actor and the director, but . . . the City Party Committee feels that it should not be staged at this time. . . ."

Naturally enough, the Severodvinsk Theater company gave due consideration to the Party committee's judgment and decided not to stage the satire. Their colleagues at the Novosibrsk Regional Theater went them one better. They rehearsed the play but never performed it for the public.

Play Rejected

And indeed, how could they have done otherwise after one of the top officials of the region said this about the play at a meeting of city activists: "In our day, with the country approaching communism, workers on the ideological front have a special responsibility. Even today we find instances of standards not sufficiently exacting. The regional drama theater, for example, has produced Sergei Mikhalkov's *A Monument to Myself,* a vicious piece that vilifies our way of life. Fortunately, the company itself had the courage to reconsider the matter and cancel the show."

That happened in 1959. But even today, it is when you reject satire, not when you accept and produce it, that you are called courageous!

I certainly do not think my comedy is perfect, nor would I have cited its checkered history except to point out that it so graphically illustrates the state of mind that still blocks the development of satire.

It is still much easier to accuse a satirical work of "reveling in shortcomings" than to give it the green light; what's more to the point, it is less troublesome, less of a responsibility.

"Whenever I play the role of a negative character," Meshinsky, one of the leading Maly Theater actors, once told me, "I consider it my Party and social duty to draw on all my talent in order to reveal to the audience the full ugliness of the character as depicted by the author.

"For the more I feel the part, the deeper and subtler my characterization, the more repellent the image I create, the stronger I make my antagonist, the positive hero.

"By himself, without this struggle against me, the positive hero would hardly be convincing or interesting. He emerges only in the process of surmounting difficulty after difficulty, in the grim struggle with evil, sometimes in a struggle with himself.

"And I, as the actor would have it, end up on my knees, exposed and destroyed, stigmatized, condemned by the audience — and personally happy to have done everything in my power to help truth triumph on the stage. . . ."

Courtesy of the magazine Communist

The manager of a Moscow construction agency, Venedikt Dunayev, and his assistant, Nikolai Farykin, are raked over the coals for negligence. Undelivered cement piles up along a suburban road. These satiric shorts spell out names and situations and spare no feelings.

SERGEI MIKHALKOV, the well-known Soviet poet and satirist, is editor in chief of a new film board that produces satirical shorts. Very special newsreels these are—ten minutes each of packed dynamite that explodes with shattering effect.

These *Fitil* shorts strike with such accuracy at their targets that they move audiences to loud expressions of indignation.

A recent undertaking, the satirical films have already won a host of ardent partisans and a not inconsiderable collection of enemies—the aforementioned targets, individuals whose activities and behavior cannot bear close examination, let alone the glaring spotlight of these movie shorts. Now and then one of these people, furious at being exposed to public view, threatens to sue the film-makers for libel.

Fitil finds the documentary short the most effective medium for its satire, although it has used other forms—caricature, lampoon, anecdote, animated cartoon and topical revue.

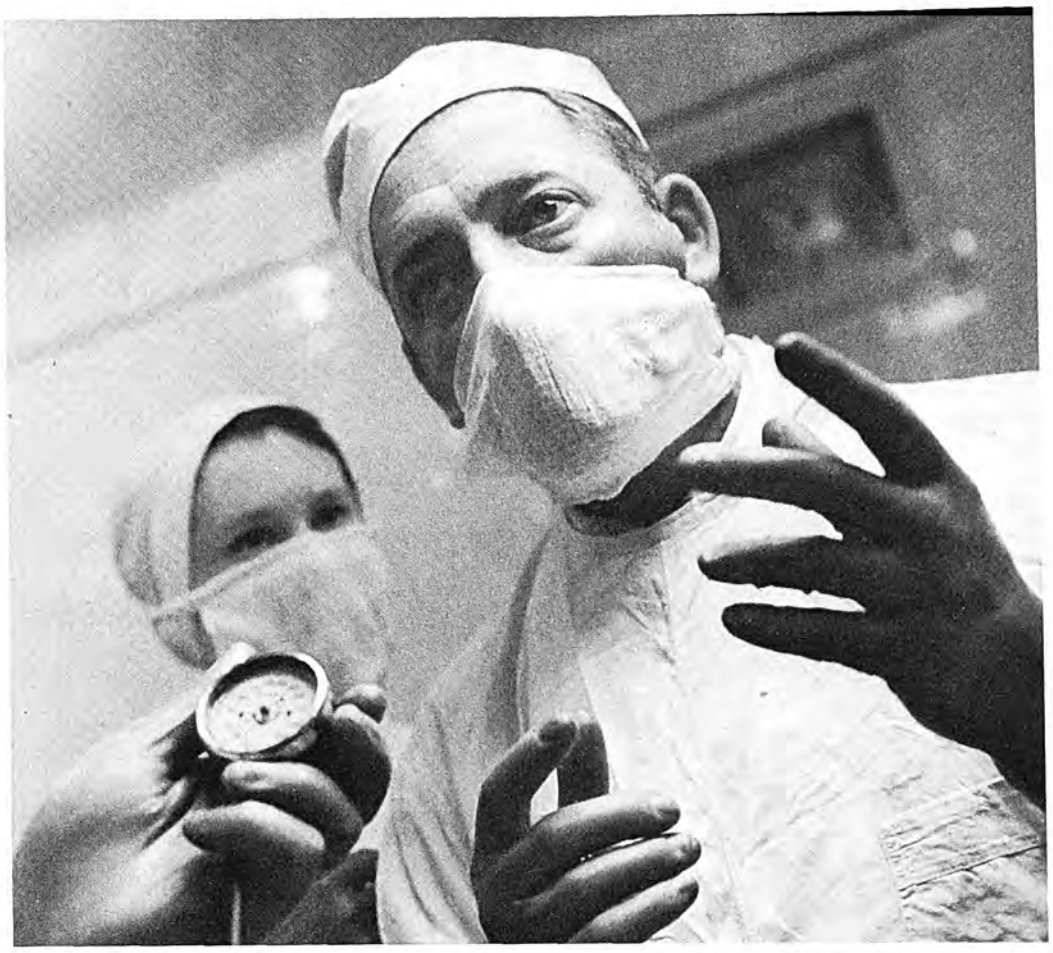
One short is about Soldatov, chairman of the Vologda Economic Council. He is shown in front of his big shining limousine. The unsuspecting chairman has a broad smile for the camera. But the shots that follow elicit no smiles from him or anyone else, for they show valuable machinery criminally neglected in warehouses under Soldatov's charge.

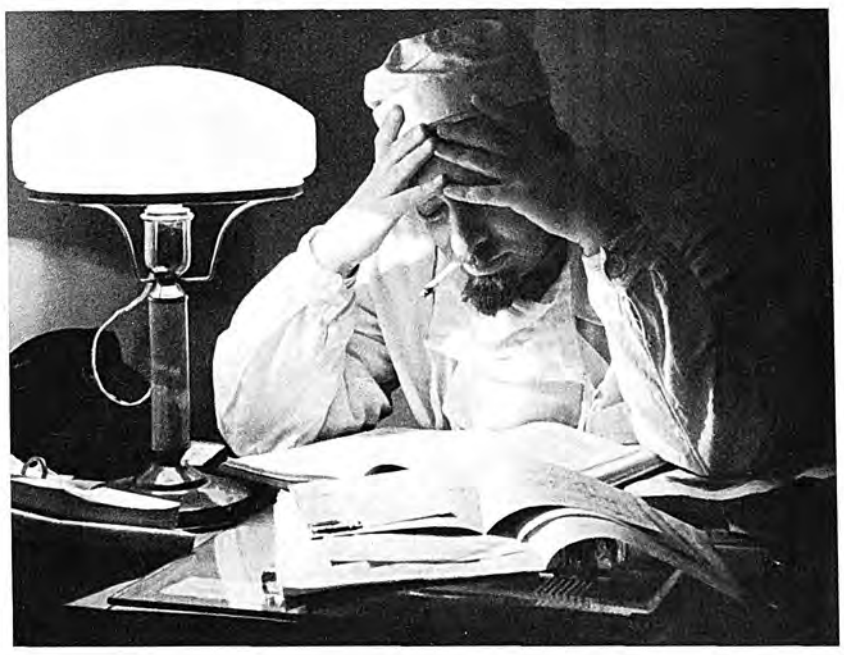
Another satiric short, this one in the form of a lampoon, holds up to ridicule Sabelnikov, chairman of the Vitebsk City Soviet, who can think of nothing more constructive than to order the city's finest monument demolished.

In the sketch "A Pathological Case," the target for satire is a certain Foofin, a leading town executive. When Foofin takes a medical examination, it is discovered that he has no . . . heart; and all his talk to convince the doctor that he has one does not help. The idea of the film is to show that a man who can keep his visitors cooling their heels for hours in his waiting room cannot possibly have a heart. The part of bureaucrat Foofin is played by the famous Igor Ilyinsky, noted for his comic roles.

"The Living Corpse" is another short with an actor playing the part. Sergei Filippov plays the irresponsible father who is even willing to be photographed in a coffin rather than contribute to the support of his child. The film is studded with the names of real people who have abandoned their children.

That is how *Fitil* deals with people who defy our laws or scorn the morality of Soviet society. ★





A SURGEON'S NIGHT

BY YEVGENI KRAVCHUK

PHOTOS BY YEVGENI TIKHANOV

THE operation was a difficult one. When the anesthetic haze cleared, the woman opened her eyes. In response to the reassuring smile of the doctor the corners of her lips twitched slightly in gratitude. Then her eyelids closed and she dropped off into a calm sleep.

The doctor had done his job hours ago and should have gone home to his family. But the danger point had not yet passed and he stayed close by—to be on hand, just in case.

Dusk was changing into night. And as the shadows thickened, and tiredness set in, doubts began to crop up—as they do after every operation. Had he done everything possible? Foreseen every eventuality? He turned the case over in his mind, referred to books, read and reread the case history. But the doubt remained. Outwardly, he looked as cool and confident as ever, but the dead cigarette between his lips gave him away.

That was how the night passed for surgeon Igor Borisovich Rozanov, one of many he had spent that way. It was only at dawn that the lines of strain on his face eased. The patient was safe. Another life saved by compassionate and knowing hands. ★

HEALTH AND MONEY

BY GRIGORI CHUDAKOV

WHEN I was through asking Dr. Vasili Zakharchenko questions, he said to me, "Would you believe it, this the first time in all my many years of practice that I've ever had to think of medicine in terms of money."

Dr. Zakharchenko, Honored Physician of the Russian Federation, has been directing the Pokrovskoye-Glebovo Clinic for 12 years. The hospital has departments for surgery, general therapy, ophthalmology, nerve disorders, tuberculosis, and others. Heart and lung surgery is done right at the hospital, and treatment is given for malignancies of the lung and oesophagus, for blood diseases as well as the more common ailments. The staff consists of 115 physicians, six professors and twelve assistant professors among them, and the required complement of trained nurses and attendants. There are beds for 730 patients.

I had been collecting data for an article on the cost of medical care, talking to various people on the staff.

Roman Smelyansky, an oculist, told me about a young worker by the name of Vasili Kuznetsov who had come in two years ago with a metal splinter in his eye. The splinter had injured the lens and caused an infection. It was removed but the infection progressed, and there was serious danger that the patient would lose his eye. Several injections of antibiotics were made under the mucosa. The infection finally cleared up, but the man still could not see because a cataract had formed. Surgery was indicated, but because of the condition of the eye, it could not be done immediately. The patient left the hospital and returned in three months, when the cataract was removed. His sight was restored, but, as frequently happens in such cases, the operation caused heterotropia, or squinting. Another operation had to be performed to correct the defect. All told, the patient spent about four months in the hospital and his treatment included several very delicate operations.

"It would be hard to estimate the time and energy the medical staff spent on that patient," said Dr. Smelyansky, "and still harder to translate it into money terms. We do not even have a way of figuring what an operation costs. Since the patient pays nothing for one or several operations, regardless of whether they are simple or complicated, his total costs are equal to the number of operations multiplied by naught—ergo—to zero."

Alexander Kozhemyakin is a specialist in heart surgery who has performed hundreds of operations. Many of the thank you letters that come in to the hospital are from people who owe their health, sometimes their lives, to his skill.

After a difficult operation it is the usual practice for patients to be kept under observation by the hospital physicians for a long period, sometimes years. Whenever necessary, they are hospitalized for more thorough observation.

Five months ago Dr. Kozhemyakin successfully operated on 25-year-old accountant Valentina Loginova for a complicated mitral deficiency of the heart. Four months later she reported back to the hospital for an examination by her surgeon and internist Vera Chebotareva. They concluded that the girl was doing well. Later on the doctors may think it advisable to repeat the examination, and the patient will then be admitted to the hospital again. Valentina is not worried about the cost of all this—the state foots the whole bill. I asked the hospital pharmacy about the cost of the medicines used during the operation on Valentina Loginova's heart. They calculated that it came to 23 rubles. In 1962, they told me, the hospital spent more than 120,000 rubles on medicines alone, not including dressings and related items.

Noted specialists from other clinics or institutes are sometimes invited by the hospital for consultation. A consultation fee is from 20 to 25 rubles. This does not affect the patient's budget, but it does the hospital's.

How much, I asked the accountant, does it cost the state to maintain a bed in the Pokrovskoye-Glebovo Clinic?

"Figuring treatment, wages paid to physicians and service personnel, the cost of feeding patients, medicines, dressings and the other things a modern hospital needs, the average cost of a hospital bed is 1,762 rubles a year. Multiply that by the number of hospital beds in the country, and you have quite a figure." ★

WE

BY GERSTEN KOPYLOV

PHYSICIST

SKETCHES BY YURI CHEREPANOV

A tourist, as people in the Soviet Union use the term, is a person, generally youngish, with a knapsack on his back, good stout shoes on his feet and an incomprehensible urge to climb mountains. There will be, say people who make prognostications on these matters, about 12 million Soviet citizens in 1963 qualifying under that definition. They will be taking 350 different itineraries planned by their touring clubs—40 of them new ones—through the Caucasus, the Crimea, Transcarpathia, the Baltics, Siberia and the Far East, and there will be two and a half times as many tourist trains going to these places as last year.

WE are tourists. We belong to that group of people whom compassionate women collective farmers of Moscow Region ask: "And how much do they pay you poor creatures for doing this?" Only recently we were teachers, builders, theatergoers, booklovers, 17-year-old girls and 40-year-old bachelors.

But none of that counts any more. We are now homeless people of undifferentiated age without a past. We proudly wear our uniform—a checked sports shirt. Its colors bespeak the fact that we cannot be considered serious people. We are capable of sitting down on a crowded sidewalk, pouring a glass of soda water over a friend, and no one would bat an eye, no one would say a word—we are tourists.

The First Day

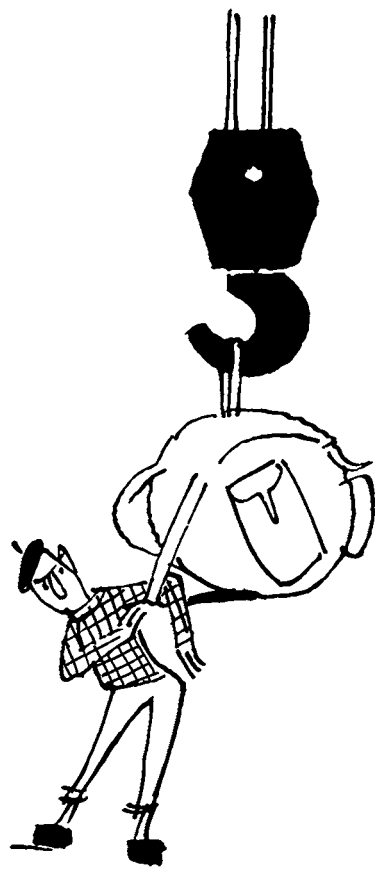
They tried to frighten us all day. The senior instructor, with a kindly expression on his face, and an ordinary instructor, without any expression on his face, seemed to vie with each other in begging us not to go on the hike: It was going to rain, we would have to walk knee deep in mud, there were nine mountain passes to cross, mosquitoes galore, a hundred broken rules, heavy knapsacks, the appellation "anemic" repeated at intervals, and fines for losing and spoiling our borrowed equipment. And so we would do best to admit right off that we could not take it and give up the idea. We would not be penalized in any way if we did.

But no one made the admission, and the next day we set off for Chemal in the Altais, where the attacks on us would be repeated with new energy, and a natural selection would be made. There, consistent with Darwin's teachings, only the fittest would survive.

OF THE TOURIST TRIBE

The Second Day

Today we did automobile hiking. We packed our knapsacks in the morning after we were given our equipment and food. We threw our bags into the bus and then crowded our own bodies into the space that was left. We handled



the job so successfully that, in addition to us 17, an elderly man with a grimly sporting look on his face also made himself comfortable in the bus. A representative of some important tourist agency, he was on his way to inspect tourist camps. He would be making the trip from Chemal with us ordinary tourists. His fat, new, shiny knapsack would lie in the same pile with our initiated bags, which were not ours but the tourist organization's. Our tourists, lost to shame, separated his sleeping bag from his knapsack and used it to sit on.

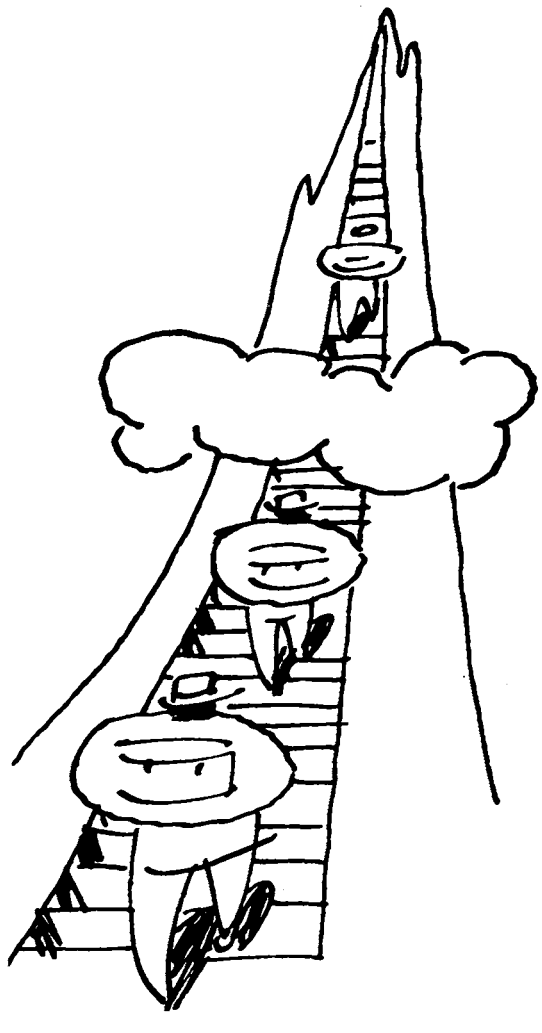
But that detached bag represented only the first drop in his "pot" of patience. Our cultural organizer Tolya soon remembered that we must not eat our piece of bread without giving thanks and mobilized everyone for choral singing. The concert began. The authorized representative bubbled and boiled, and was heard to mutter that people who had neither a voice nor an ear for music should not be permitted on hikes.

The Third Day

In the morning we stood in line near a long rope thrown across the Chemal River in the Altais. When a person's turn came, he was trussed up with two ropes that crossed each other on his body as though he were a gift package being tied up in a store, he was attached to the big rope by a piece of iron, and then pushed down from the high precipice. Like a puppy, when he hit the water he dog-paddled as fast as he could to the other shore. There the victim was gathered into the embrace of the instructor, and those who had already been through it unpacked the sufferer and restored him to his senses.

In camp we discovered two unorganized tourists who had gone fishing and brought back five young Altai spotted burbots. Valya, our fisherman, was all excitement at first, but after he inspected their fishing tackle, he calmed down.

"These creatures who call themselves fishermen," he said, "are using just a plain old rod and the usual hook. Any idiot can catch fish that way. Let them try using a fancy reel and spoon bait and go after salmon trout, not burbot!"



The Fourth Day

After a few more hiking lessons we took a day off to do nothing in camp. We played ping-pong and established who the champions were: Inna among the women and Arkadi among the men. Except that Inna beats the men as well. She

plays like a demon. If she loses, she repays the victor with violent hatred, but if she wins, she entertains only the most tender feeling for the person she beats.

When Arkadi wasn't playing ping-pong, he was fussing with Rucksack. That's the tourist organization's dog. She also answers to the names Tarzan and Pyos (Dog), although in her place I'd have a more definite opinion about my sex. Arkadi has a passion for teasing Tarzan and he never misses a chance to shove a small twig up her nose that the animal grabs at with her teeth. Only when we used the same twig on him did Arkadi stop.

The Fifth Day

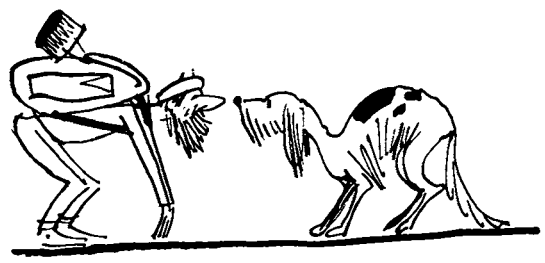
Today we covered a lot of distance, about 12 miles. In the Altai they use a progressive method of movement for tourists: pushing. The usual way is: The tourist keeps moving until he is tired, then he sits down, rests and eats. But the present-day tourist is an irresponsible creature. Leave him on his own and he'll lose himself in the Altai forests, as far away from camps and bases as possible, find himself a nice spot to lie down, and while away the trip swimming in the mountain river, boiling compote and picking off ticks.

We follow this procedure: Before starting off on our next stretch, we load the food on horses.

WE OF THE TOURIST TRIBE

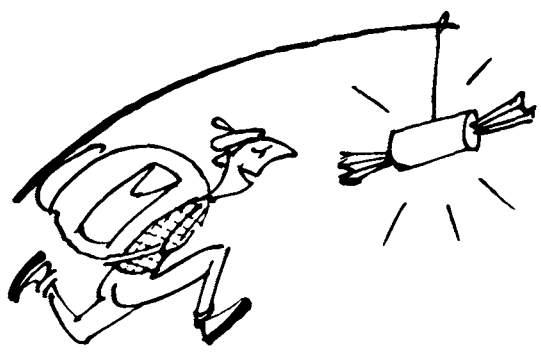
The horses trot off, and we have to chase them until we catch up. When we do, a bonfire and boiling water awaits us, and for being so obedient, they give us hot food. After dinner we start the same thing all over again.

Gradually you acquire the knack. Whether you have to or not, you keep moving forward in the horses' track. That, in brief, is how you establish the conditioned reflex that distinguishes the trained tourist from the tenderfoot. Load a



heavy bag on the latter, and instinctively he'll throw it off and sit down to rest. But your tourist — he no sooner feels that impossible weight on his shoulders than, like Pavlov's dog, he begins to salivate profusely, his eyes seek the road, and he submissively hikes as far as he's told to in the expectation that he'll be fed at stated intervals.

On the occasions when we did stop, we indulged ourselves to the limit, swimming in the cold Karakol. We lay down right on the stony bottom, and the turbulent waves rolled over us, freshening us both physically and morally. The most stalwart of us were able to lie there all of two minutes at a time. That means the Karakol is not a real mountain river. In a real mountain river you don't get in all at once, it's a



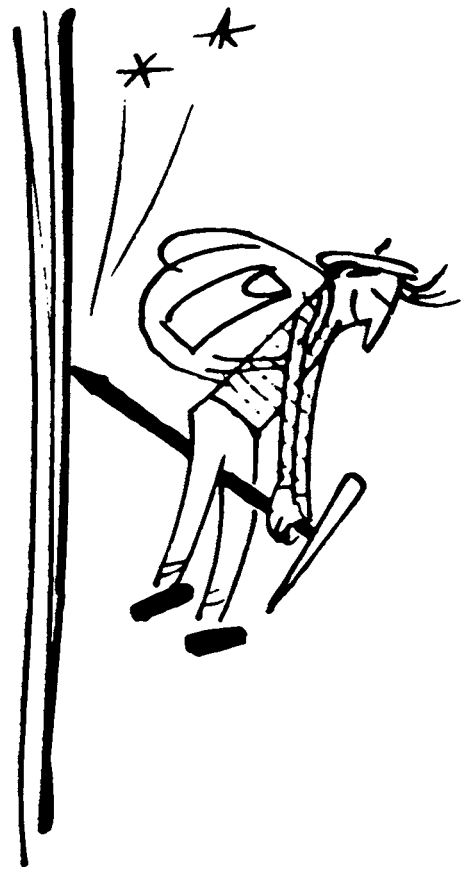
piecemeal operation. You hold on to the stones with your hands and work with your feet. First you put your left foot into the water and say "Ah . . .!" Then you put your right foot in and again say "Ah . . .!" Then you squat, emit a shriek of terror and go flying out to dry land and a towel.

The Sixth Day

We came to another mountain pass, and although it was easier than the others, the descent was slightly steeper, gayer, and dirtier. We descended, racing with one another, in complete disorder and with no regard to rank.

The Seventh Day

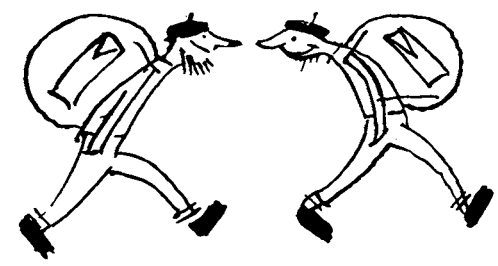
I particularly remember our march through a burnt forest, our search for cedar nuts, and the first little village we had seen for days. What pleasantly surprised us was that they asked Moscow prices for the cedar nuts they had for sale. It was nice to feel the breath of the capital in such an out-of-the-way place.



When the heat, the mosquitoes and Rucksack became too annoying, we found small talk a great help. We had quite a number of people who were accomplished at this kind of conversation. Valya small-talked about the past theater season; Alik quoted selected items from the latest Paris volume of newspaper bloopers; Volodya talked about coin collecting; Raya delivered an enlightening lecture on the hospitality of the Kirghiz people. We also listened to reports on underwater hunting, Armenian cooking, a mercury heart, a Pamir cave, how to trap lions, and many other such useful topics.

The Eighth Day

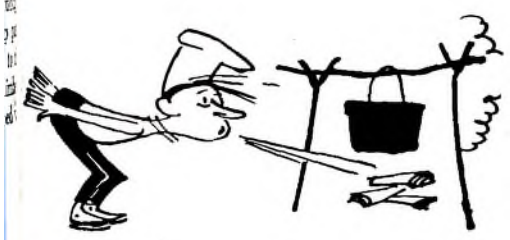
In the morning we set off for the notorious Verblyud—Camel—the last Altai peak on our route. At the foothills of this peak our instructor gave us the lesson on "Ascending and Descending Mountains." He first explained that we must move our feet not simultaneously, but alternately. We must breathe, he said, either through the nose or the mouth, any other way of breathing would not do. He devoted the rest of his talk to the fifth point of support (the backside) and its role in climbing down mountains, demonstrating his very considerable knowledge and experience in the subject.



When he thought we were frightened enough, he began the ascent. About the going up part, there is nothing to relate. All the way up to the peak were steps that generations of climbers had carved out, and we quietly ascended via that stairway.

From the top we had a picture of a landscape on all four sides. We looked at it while taking our pulses. Then we began to compose a note. A whole library of notes had already accumulated on the summit, but to add your own was the custom here. In the old days Altai climbers used to carry stones up to the peak; now they carry paper.

After that our instructor explained how we were to descend. He said: "Until now you climbed up; now you'll be doing the same thing but in reverse. In other words, you now have to go down instead of going up. Going up, you walked singly; going down, you will have a tendency to group, fall over each other. When you went up, you worked with your heart; now you'll be working with your feet. . . ." He continued explaining things during our descent as well, stressing the basic role of the aforementioned point of support in mountain climbing and detailing the most common accidents—broken ribs, crushed pelvises, the varieties of leg fractures. It was all very interesting.



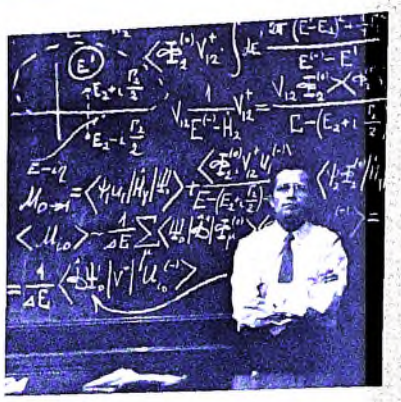
The Last Day

The last morning and the last ascent. We were all buoyant and gay, even our "griper" abstained from his normal morning complaint: "Another breakfast, another climb! I'd give anything for supper and a bed!"

A great part of this diary was written right on the spot. The rest was written later. Many events are not reflected in the diary. Our historian is to blame. Instead of honestly and painstakingly describing the sights along the way, instead of listing the names of rivers, passes, the fauna and flora of the Altai, instead of recording the folk songs, instead of all this, our historian tried to show how witty he was. One does not make light of the things the many millions of Soviet members of the touring fraternity hold sacred.

With this self-critical declaration, the author concludes his diary. ★

IN THE NEXT ISSUE



Photographer Vsevelod Tarasevich calls the August cover *A Duel*. Who is the man in the picture? Will he become the slave or master of the powerful forces he has summoned to life? The spotlight of our next issue is on Moscow State University—on how the scientists of the future are being molded; on undergraduate life in the classroom and on campus.

The Altai is mountainous country extending for more than 100,000 square miles in the heart of Asia. It contains practically every element listed in Mendeleyev's Periodic Table, and articles made of Altai gold, silver and precious stones are world famous. **Mountains Old and Young** tells the reader all about this and antlers too.

"Whereas some people believe that the horse is the most hard-working creature, Mikhail is convinced that it is the mosquito, which works three shifts in a row and knows no rest, just like the human on whose back it is 'working.' " Thus opens the story **I'll Return** by Valeri Gorkin. You will find out who Mikhail is, what happened to him on a "lucky" Friday the 13th, and why he has one home in Moscow and one in Siberia.

Some of the other articles in the August issue are:
On the Eve of the Third Spartakiad, describing the mass sports competition that attracts up to 60 million Soviet challengers; **Ilya Repin,** continuing the series on fine arts; **American Geochemists in Moscow,** on the conference commemorating the centenary of the birth of Academician Vernadsky.

NOVOSTI PRESS AGENCY

USSR

SOVIET LIFE TODAY

Whalers Man receives a tremendous number of products from the huge aquatic mammal called the whale. Here is a story about Soviet whaling expeditions and the life, work and leisure of their crews.

Trade Unions Their composition; range of activities; legislative influence; control over social and cultural services for the working people; newspapers, including *Trud (Labor)*, a daily with nation-wide circulation.

Magnitka An article about a plant that consumes a mountain of ore, the function of labor in management, and how the profitable operation of Soviet enterprises benefits the workers of the country.

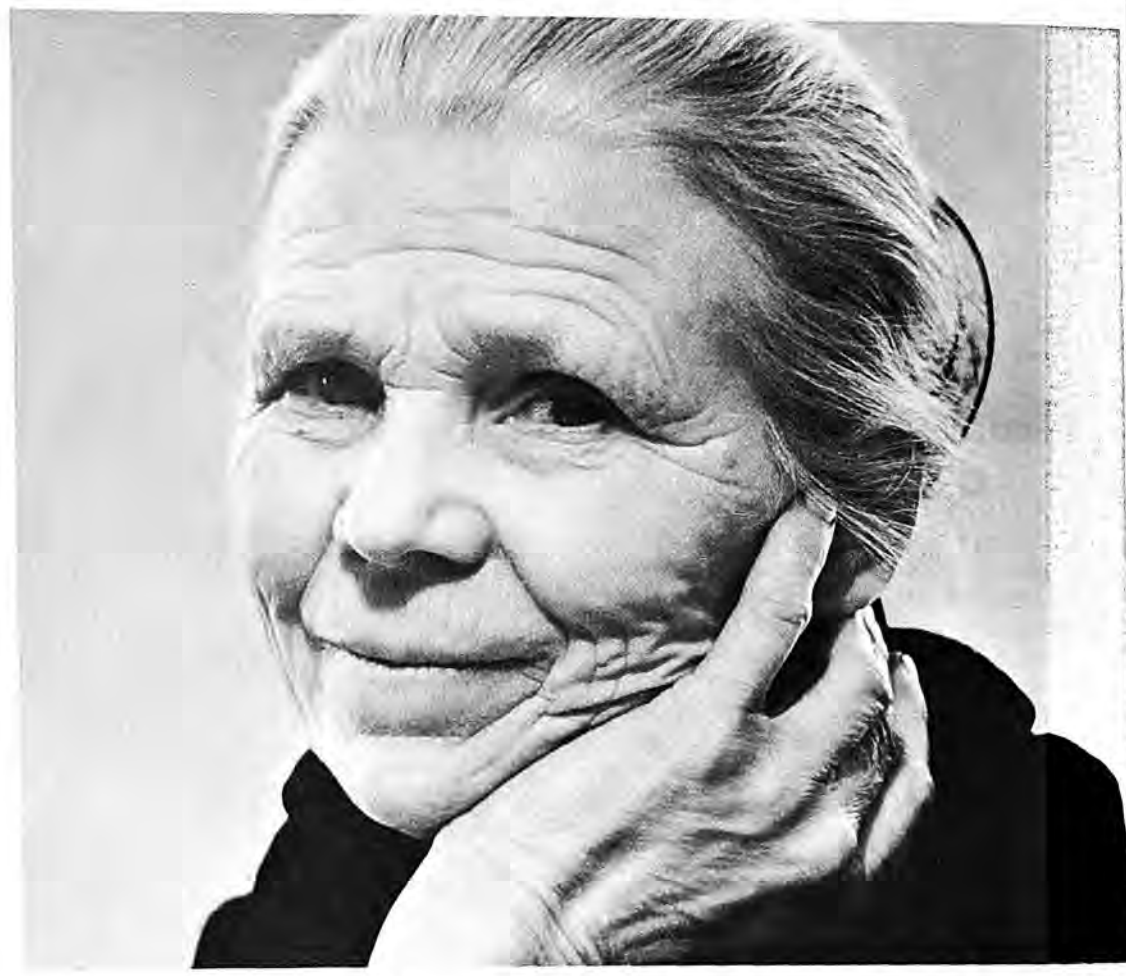
COMING SOON

"Dear Olga Ivanovna,

"We take great pleasure in informing you that your son Mikhail performs his army duties conscientiously. He has made excellent progress in his military and political studies, and is one of the best soldiers in his regiment.

"The commanding officers wish to express their thanks to you, his mother, for having brought up such a fine young man."

The letter was signed by Captain N. Kozlov and Communist Party Secretary A. Fedotov.



A WAR WIDOW

BY LYUBOV BURANOVA

I WANTED to meet the soldier's mother to whom this letter was addressed, and who, I soon learned, was a war widow.

Although I had been told Olga Ivanovna was a small woman, I had not expected to find her so slight and gentle. She could not understand why the newspapers were interested in her.

She was no backward *babushka,* she had been a working woman all her life, "part of the collective," as she put it. She read newspapers and knew that people who distinguished themselves on the job, or who saved someone's life, or who made some scientific contribution got their names in the papers. But there was nothing remarkable about her. I tried to explain, but she only shook her head doubtfully.

"Well, I hope you haven't mixed me up with somebody else," she finally said.

With the windy steppe road behind me, the cottage glowed warm and cheerful. Olga Ivanovna was a visitor here too. It was her tall, statuesque daughter Lida who was the mistress of the house. Lida moved with grace and ease in the living room which seemed too small for her hefty, broad-built father-in-law with his two-year-old granddaughter comfortably cradled in his arms. I noticed his eyes, wise and knowing, tearing from long-accumulated grit and darkened by rings of coal dust.

I had come to the colliers' settlement where Olga Ivanovna was visiting her daughter after a trip I had taken to Kharkov. There I had talked to Olga Ivanovna's other children. (A mother is judged by her children. "Look at the fence and you'll know the cottage, look at the mother and you'll know the son," runs an old Russian saying.) Vasili and Victor were married, with homes of their own and sturdy little daughters. Vera was still single and lived with Olga Ivanovna. All three were factory workers, well thought of. Their younger brother, Mikhail, they praised highly and seemed to agree that he was the "clever and handsome one" in the family. In every home, including Lida's, they showed me his photographs. And he did look handsome, tall and stalwart in his soldier's uniform, with a determined mouth and firm, bushy brows. From her children I learned that another son, Pyotr, had been killed in the war.

And now, speaking to Olga Ivanovna, I very gently asked about that other son. As soon as the words were out of my mouth, I cursed the profession of journalism that makes such busybodies out of us. Olga Ivanovna looked so small and frail that I was overwhelmed with pity. But I had underestimated her strength. She did not flinch at my question. As she began to speak, she merely squared her shoulders, which made her look taller, and her gaze seemed directed over my head.

Her story went back to 1943. With her children she was caught in the fierce fighting at Kharkov, the tide of battle now receding, now engulfing this large city. Civilians took cover in abandoned dugouts. Many lived in barracks. Luckily Olga Ivanovna had a wheelbarrow into which she could pack her young children and get them away from the fighting zone.

Pyotr, her eldest son, who was seventeen, helped push the wheelbarrow. He was at her side when she received the news that her husband had been killed. Next morning she saw Pyotr to the fighting line and there learned that her brother had also been killed. At dusk the air was thick with the cries of the womenfolk: "The enemy's turned Shmarevka into shambles!"

She had to get to Shmarevka no matter how—easy enough with a car but an impossible distance by foot. She started out at night.

What a night that was!

On her way to Shmarevka, half walking and half running, Olga Ivanovna, who was 40 then, might have recalled something of the life that lay behind her, the way people do at such moments. Her thoughts, however, were elsewhere. The country around her was in flames. And much as she dreaded the worst on her arrival in Shmarevka, she knew that she must summon the courage to return at once. She had left the children in the barracks. (Good Lord! The flames were not coming from that direction, were they?) Lida, who was taking care of the two younger children, was only nine herself. She had trembled with fear when she saw her mother leave. What would happen to the children if she could not come back? When the beam of a searchlight cut through the darkness, she slumped down on the ground. At the sound of voices, she shrank back in terror. And all the while at the back of her mind there was the question: What would she feed the children on her return in the morning? There was only a half glass of millet left, wrapped in a bit of cloth. The thought that Lida might spill it made her shudder.

At dawn Olga Ivanovna arrived at the battlefield. All thoughts of her children, save the one she now sought, faded from her mind. She crouched low over the mounds. During the night the dead bodies had been powdered by snow. She used her handkerchief to brush the snow off the faces. On all sides other women were doing the same thing.

Mothers, sisters and wives on a battlefield after the guns had ceased to roar is a scene as old as time, often pictured in the tragedies of our classics. But the women around Olga Ivanovna did not wear black flowing garments, and their arms were not flung above their heads in theatrical gestures. Like her, they were dressed in short cotton-padded coats and clumsy, heavy-soled felt boots. They did not wring their hands. They were too busy moving the men who showed signs of life, dragging them to the roadside in the hope of stopping a passing ambulance. Olga Ivanovna dragged the bodies, too, her heart torn between hope and despair. She had searched the field carefully—could Pyotr possibly have escaped death?

But she found him all right—at the very end of the village, sprawled near a stack of hay. With her numb fingers she removed two icicles from his face; they were frozen tears.

Olga Ivanovna returned to the barracks. Hastily she began heating the little stove and cooking the gruel. But the hungry children did not look at the steaming gruel. They stared at their mother.

"Why are you staring at me like that?" she asked.

"Mother, your head is white as snow," Vasili said. "There is only a small black streak in the braid."

She told this in an even voice. It only made the wartime horrors more vivid. I could almost see her bending over her son's dead body and whispering—"My child!"

In the autumn of 1943, that same year, Olga Ivanovna decided to go to the village of Rogan, hoping to barter for potatoes. Her brother's widow and children lived in Rogan, and she would be able to stay with them. On her way to the village she kept hearing the thunder of explosions. But she had grown used to it, with the frontline our men were holding stretched so far and wide.

When she rolled her wheelbarrow into the village, the German bombers had just left it. The ground was strewn with the dead. Her brother's wife had been killed on the spot with a baby in her arms. With cries of "Auntie!" the two other children ran to Olga Ivanovna. She knew their dead mother had kin in the village. But when she took the children round from one relative to another, all of them had little ones of their own and nothing to feed them. She packed Victor and Vera, her little nephew and niece, into the wheelbarrow and returned to the barracks with them instead of the promised potatoes.

"You're mad, Olga, what will you do with them, you have three of your own and you're only a shadow of yourself," the other women who shared the barracks gasped.

"We'll share whatever there is," she cut them short. And setting the children about their tasks, one to graze the goat, another to dig potatoes in the field and still another to mind Mikhail, her youngest, she went off to her job. Olga Ivanovna was working as a stoker at the time, not because she could not find an easier job—there were plenty of jobs to be had—but because the hours were convenient. She worked a 24-hour shift every third day and had two days off in between. This gave her time to wash, sew for and feed her big family. What it meant to feed so many mouths those days she did not even want to recall. Others, however, told me that, fighting off sleep and fatigue, sometimes shaking with fever, she farmed a little plot of land with a rickety wooden plow to supplement the family's scant war rations.

Her recollections were about her children, but they gave me glimpses into her own heart and mind. She told me how she kept finding a crust of bread or a sticky lump of sugar in her blouse pocket at work and could not figure out how they got there. Trying to fall asleep one morning after her night shift, she watched Lida through half-closed lids giving the family breakfast. And then she saw something that made her jump to her feet. Victor had broken off a piece of his bread and, tiptoeing to the peg where her blouse hung, had slipped it into the pocket.

"Child," she cried. "Don't you know I don't go hungry? I have my meals at the factory."

Olga Ivanovna paused and involuntarily made a gesture to show me how she had pressed the boy's head to herself. It was then that I noticed her hands. The wrists narrow, the palms broad and square, the slightly bent fingers strong and sinewy. My first impression was that the hands were too big for so small a woman, but then I realized how much they belonged to her, how strong they had had to be.

As she related all this, Olga Ivanovna fumbled for words and thoughts. Her tone was matter-of-fact, self-effacing. That too, was very much a part of her completely self-denying character.

"The children had it hard and I had it hard," she concluded her story of those trying years. But the story would be incomplete without this scene.

Days when she received cookies for the children on her ration cards, she would bring an apronful home and divide them into five equal piles, one for each child. After eating a few, the children would return the rest and say, "Please, Mother" or "Please, Auntie, put them away for me." The cookies were a rare treat, and she did this so that the children would see for themselves that each one was getting a fair share. Olga Ivanovna made it a point never to distinguish between her own children and her nephew and niece. "They are all my own," she would say, distributing her affection equally. And her nephew and niece never doubted her fairness and her love, and repayed her with the same love.

Fairness was a quality Olga Ivanovna set great store by. She called fair the decision of the Kharkov workers to take over the guardianship of war orphans. Vera and Victor had their guardians, too—the workers at the ball-bearing plant. The director of this plant, according to Vera Ivanovna, was also "fair." He would walk into their wooden barracks and ask the women what they were most short of, and then send them an extra supply of coal or food. When holidays came round, all her children were treated fair, each getting a sweet or some new clothes. The schoolteachers and the instructors at the vocational school were fair, too. And as for the staff of the hospital where Olga Ivanovna had been working as a nurse for ten years, nobody could be fairer.

At this point in the conversation her daughter's father-in-law lost patience. "Everybody's good, everybody's fair," he said sarcastically. "To hear you talk there are no blackguards in the world."

"There are, I suppose," replied Olga Ivanovna. "I just haven't come across many."

"Were your husband's relatives fair?" he continued. "Why, they refused to have you under their roof and you spent your first years of married life moving from place to place. And what about young Victor's uncles?"

The old man had evidently touched a soft spot there. Olga Ivanovna, who until then had been calm and self-possessed, now had tears in her eyes. But, there was really nothing so sad about the story she told me.

After his army service Victor decided to get married. But he didn't have the money for a proper wedding and asked his uncles to help him. They reminded him that he was an orphan and that people would not think it amiss if he had no wedding party. Why didn't he just sign at the registry office and be done with it?

When he got back home, Victor dropped onto his cot and lay there with his hands behind his head. He did not have to say much, for Olga Ivanovna had read his thoughts.

"Imagine reminding him he was an orphan when for years I had been trying so hard to make him forget it! I went to Vasili, to Lida and her husband and wrote to her father-in-law here. They all did what they could, and Victor had as fine a wedding as anyone."

First I had been struck by Olga Ivanovna's strong square hands, and now it was her eyes that caught me. They were a bright blue with no suggestion of the fading that comes with age. And in those shining blue eyes of hers I now read that the great purpose of her life had been to give these five children of hers a mother's devotion.

Olga Ivanovna cheered up again when the family photographs were produced. There was Lida with her pupils at the vocational school, Vasili in a sailor cap, Vera in a college preparatory class, her daughters-in-law in their wedding gowns, her grandchildren in toddler suits, baby carriages, or at New Year's parties. There was a group photo with Olga Ivanovna at a sanatorium she had stayed at that belonged to the army. Olga was in the first row between two colonels.

Obviously not altogether satisfied with Olga Ivanovna's account of herself, her daughter's father-in-law took me aside. He suggested I ask about her hard life as a young girl when she, a child herself, worked as a children's nurse. Or about how she and her husband began building a house of their own and were stopped by the war; later the house was taken apart for lining dugouts. He, too, warned me not to think Olga Ivanovna was as gentle as she looked. She could be hard as flint when necessary. A patient in the hospital where she worked, discovering that her surname was Deineka, told her that he knew a man by that name who had settled in Siberia after the war. "I could tell by his accent he was a Ukrainian. Not your husband, by any chance?" he asked casually, and added: "These things happened after the war, you know." "Even if he was, I wouldn't want a husband like that," she cut him short. When Lida heard the story, she wrote to the Deineka in the town the man had mentioned, but that Deineka turned out to be a much younger person. Olga Ivanovna was angry about it, and for a long time would not forgive Lida for doubting her father's good name.

All I could say to the father-in-law was that one could write reams about a mother like Olga Ivanovna. Later I recalled Gorky's words, "The story of a mother's love is endless."

Courtesy of Izvestia

our calendar

July 10, 1918. The first Soviet constitution, the Constitution of the Russian Federation, was adopted. It laid down the rights and privileges won by the people in the October Socialist Revolution. The constitution formally proclaimed a new social and state system in which power was put into the hands of the Soviets of Working People's Deputies, freely elected by the people and subject to recall by them. The Soviets not only legislate and control the enforcement of laws but they also have executive power.

The constitution also legalized the people's ownership of the means and instruments of production and abolished private capitalist and landlord ownership. Many of the nationalities living in Russia—the Tatars, Buryats, Bashkirs and the peoples of the Far North—were given the right to form their own autonomous republics or regions within the Russian Federation.

The Constitution of Soviet Russia remained in force until the Union of Soviet Socialist Republics was formed and the first Constitution of the USSR adopted, in 1924.

July 11, 1918. The Soviet Government adopted a decree to set up a People's Commissariat of Public Health (now the USSR Ministry of Public Health). protection of the working people's health became an affair of state importance. Diseases like malaria, plague and relapsing fever have been completely eliminated in the USSR; tuberculosis is on the way out. Medical services are free. The Soviet Union has 38,707 hospitals and out-patient polyclinics, 180,000 medical students and 448,000 doctors—20 for every 10,000 inhabitants.

July 14, 1956. On this day the USSR Supreme Soviet adopted the Law on State Pensions. A woman is entitled to an old-age pension at 55, after 20 years of work; a man, at 60, after 25 years of work. Factory and office workers whose jobs are especially difficult and mothers of large families are entitled to pensions five years earlier. The State Budget for 1962 allocated 8.1 billion rubles for pensions. The law also provides for pensions to the disabled and to families who have lost their breadwinner. Pensions are tax exempt.

July 29 is the ninetieth anniversary of the birth of the great Russian singer Antonina Nezhdanova (died in 1950). The first lyrico-coloratura soprano of the Bolshoi Theater, she ranks with such greats in music as basso Feodor Chaliapin and tenor Leonid Sobinov. She was an outstanding representative of the Russian school of singing.

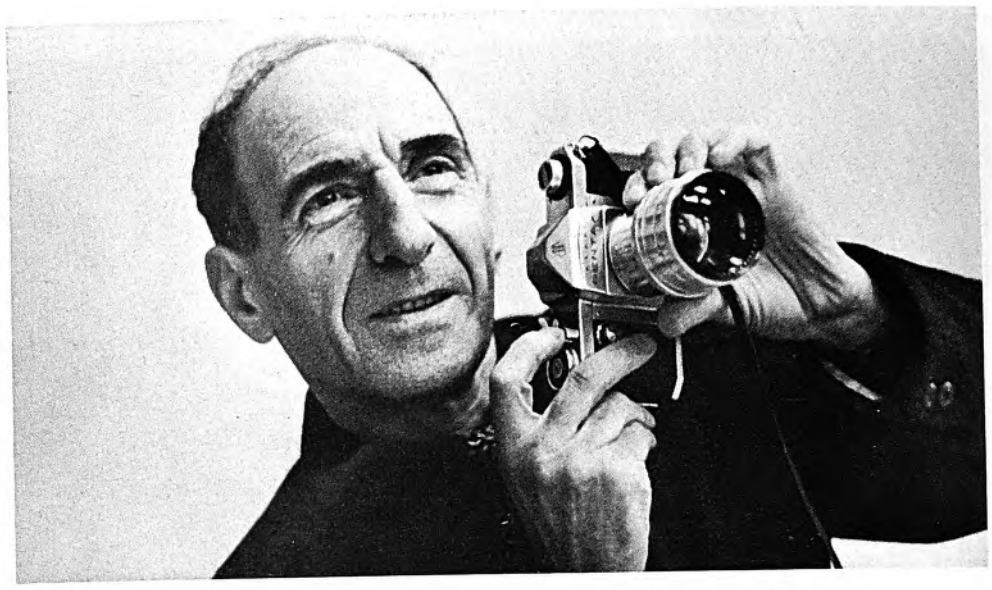
July 31, 1957. The CPSU Central Committee and the USSR Council of Ministers adopted a decision "On the Expansion of Housing Construction in the USSR." As a result of World War II, 25 million people in the Soviet Union were left homeless. In the first 12 years after the war Soviet housing construction had lagged behind the country's requirements. The decision aimed to end the housing shortage in 10-12 years. Between January 1957 and January 1963, 12 million apartments were built in urban areas and 3.8 million houses in the countryside.

A third of the country's population, 75 million, have moved into new living quarters during the past six years. Several factors account for this fast-paced building: it is extensively financed by the state, large panel prefabricated construction is widely used, and the number of plants producing these panels and other building units is continually increasing. ★

PHOTO OF THE MONTH

By Mikhail Ozersky

November 7, 1936. "That day thousands of Muscovites gathered in Red Square to mark the 19th anniversary of the October Revolution. People who seemed to have come straight from the battlefield appeared in the holiday columns—the legendary soldiers of antifascist Spain. They were given a thunderous welcome. I called that photo *No Pasaran.*" The photo and caption are by news cameraman Mikhail Ozersky. For his story turn the page.



NOVOSTI PRESS AGENCY NEWS PHOTOGRAPHER

MIKHAIL OZERSKY has changed jobs only twice in his 35 years as news photographer —he started at TASS, moved to *Pravda* and is now with the Novosti Press Agency. Nothing about this small, rather diffident man suggests his nose for photo news or his inexhaustible energy.

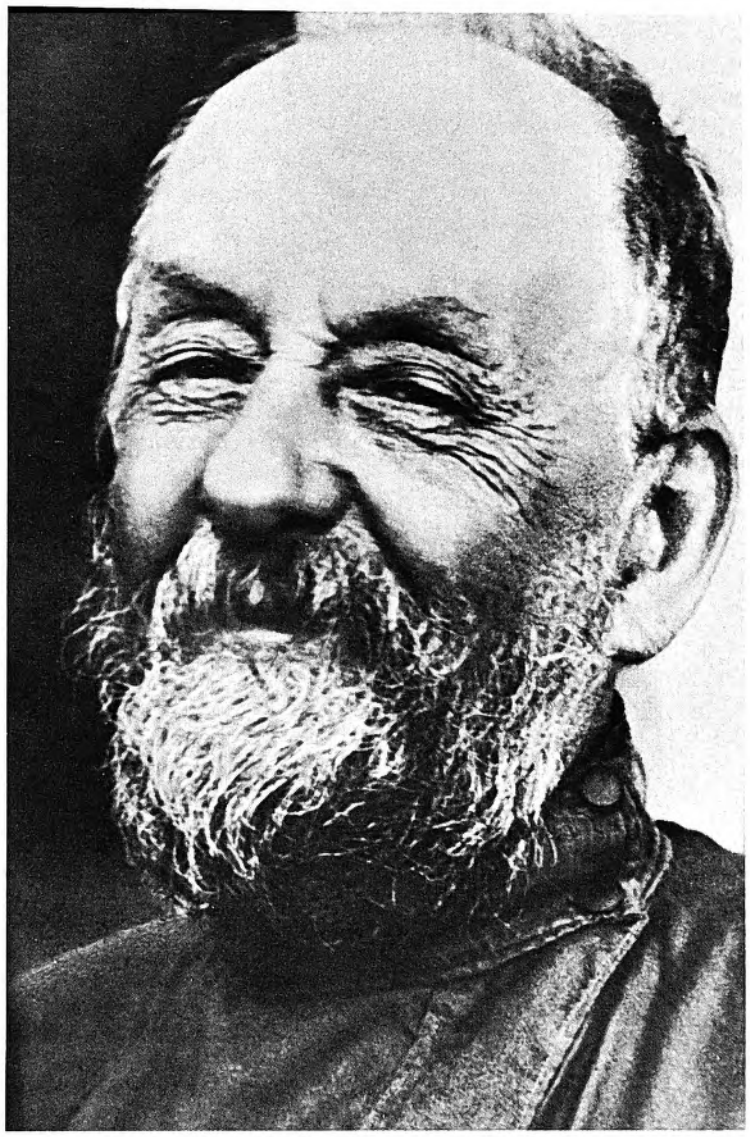
Among fellow cameramen, he has an almost legendary reputation for getting to where news is being made—by plane, train, a passing car or truck, or on foot, if necessary—anything that will get him there before anyone else.

His pictures are simple in composition; he does not go in for trick shots or unusual camera angles. What Ozersky has been doing these three and a half decades is photographing Soviet history.

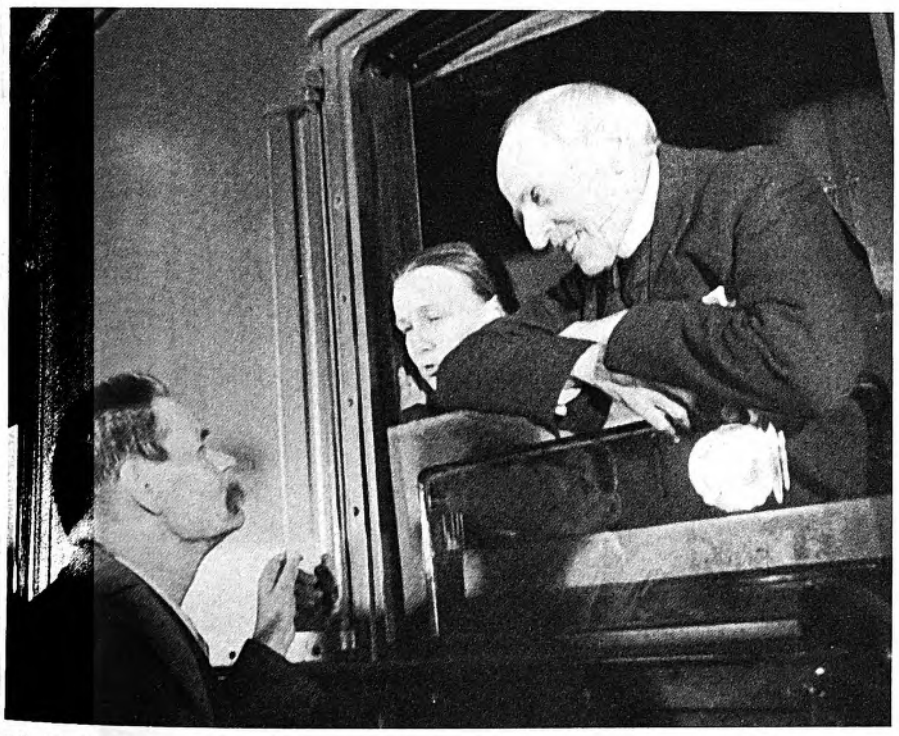
These photos, a tiny sampling of the hundreds that have appeared in newspapers and magazines all over the country, were taken mostly in the thirties. The captions are his own.

His pictures have won prizes or honorable mention at many Soviet and international exhibitions. He is 65 years old now and can retire on pension. But this indomitable news photographer cannot see himself superannuated. And at an important theater opening, a press conference or a construction site you will find Ozersky adding to his photo chronicle of the Soviet Union's life. ★

July 1945. The banner of victory hoisted over the Reichstag, the Soviet Army began to demobilize. Farmers, engineers, steelmen, doctors hurried home to get down to the job of rehabilitating a war-ravaged country. I remember Muscovites greeting that first train of demobilized soldiers at the Byelorussia Railroad Station, people with a whole fieldful of flowers to welcome their fathers, brothers, sons, sweethearts.



July 22, 1932. We were rebuilding society here on earth. Our scientists were looking toward outer space. Konstantin Tsiolkovsky, founder of the theory of interplanetary flight, was dreaming of manned cosmic rockets. He said, "There is one thing that I am firmly convinced of, that the Soviet Union will be first." I met the pioneering scientist in Kaluga where he lived and worked. His hearing was poor, but he saw into the ages. This is the first time this photo has been published.



July 21, 1935. From its very beginning, the young Soviet Republic made friends the world over. Its birth was hailed by Anatole France, Henri Barbusse, John Reed, Bernard Shaw and millions of lesser-known people. On this day, at 10.45 P.M., our good friend Romain Rolland was leaving for home after a tour of the country; Maxim Gorky was seeing him off.

May 1939. It is ten years since the country's farmers merged their small plots into big collective farms. Giant plants, built in the early thirties, turned out tractors by the thousands. Girls vied with one another to learn how to run them. I was in the Ukraine at the time and saw the way collective farmers applauded the enterprise of their women.

November 30, 1962. It was springtime for poetry, that late autumn day when 16,000 people crowded into the Sports Palace in Moscow for a poetry reading. There could have been more but the capacity of the hall did not permit it. I saw the autograph hunters attacking Sergei Mikhalkov and whole editions of volumes of verse bought up in practically no time.

ON THE EVE OF THE F

A USSR-USA track and field meet, the fifth, will be staged at Moscow's Luzhniki Stadium on July 20-21. This popular annual contest between the two countries, leading contenders for international sports honors, is already responsible for 11 broken world records.

Another vital feature of this track and field rivalry is its large contribution to stronger friendly contacts between the two countries.

These comments, suggestions and predictions are by Soviet athletes who competed in the previous "matches of titans."

TWO SUGGESTIONS

IGOR TER-OVANESYAN

WORLD BROAD JUMP RECORD-HOLDER

MARCH FROM *AIDA*

VICTOR TSIBULENKO

OLYMPIC JAVELIN CHAMPION

I particularly remember the closing ceremony at Palo Alto.

The contests were over, but the crowd stayed on. There was a standing ovation when the Soviet and American athletes came out and circled the track in Indian file to the strains of the famous march from *Aida*. I carried the Soviet flag; and John Thomas, the American flag.

We had been told to cut across the field, turn right, move on for about 50 meters and then

"I'LL TACKLE 7 FEET 6 INCHES"

VALERI BRUMEL

WORLD HIGH JUMP RECORD-HOLDER

What struck me most at Palo Alto was the way the American fans cheered me on to my record-breaking jump.

I was the only one left when the bar was lifted to 7 feet 1¼ inches. The stands suddenly began chanting: "Seven and five! Seven and five!" The crowd of 100,000 was set on having the world record broken on their home soil.

The excitement infected me. A spring of strength somewhere inside me began to bubble. I felt fine, in high spirits. The jump sector was ideal, the sky cloudless, the air clear, and, most important, 100,000 pairs of eyes were riveted on me. A combination like that makes it easy to set a new high. I made it "seven and five."

John Thomas, who performed in Moscow two years ago, knows that our fans are just as enthusiastic and full of life as the Americans, that

A STIFF FIGHT

PYOTR BOLOTNIKOV

WORLD LONG-DISTANCE RUN RECORD-HOLDER

I don't think I'll ever forget what happened on the first day of the Philadelphia meeting. The runners in the 10,000 meter had not yet passed the midway mark when Robert Soth suddenly sprinted wildly ahead of the rest of the field. Our Hubert Parnakivi gave chase and caught up with Soth past the 6,000-meter mark. This premature spurt in the intolerable heat sapped the strength of both men. A mile from the tape Soth slowed up, staggered, turned around for some reason, and then fell flat on his back. The poor chap was unconscious when they carried him off the field on a stretcher.

It was the first time I ever saw anything like that happen, and I hope the last. Parnakivi was also on the verge of collapse when he staggered over the line.

The reason for this dramatic episode, I think, was that at that time the Americans had no long-distance runners of world-competition cali-

FROM PALO ALTO TO LUZHNIKI

VASILI KUZNETSOV

EUROPEAN DECATHLON CHAMPION

I was impressed by all four of the previous meets, but most of all by the Palo Alto meet. I remember Stanford's excellent sports facilities. It has everything that even the most exacting athlete could ask for. Personally, I felt as though I could run or jump forever on the emerald-green grass of the Stanford stadium without tiring, or simply lie down there for hours and hours. Everything was lovely in Palo Alto.

"WE'LL TAKE TEAM HONORS"

GAVRIIL KOROBKOV

USSR HEAD COACH

I believe that the Palo Alto meet was the best of those held between the two countries to date. A great deal of credit for this should go to Payton Jordan, a fine fellow and one of the world's best track experts. He told me frankly that he had set himself the task of making up for the somewhat poorly organized Philadelphia meet. Payton coped with the task handsomely.

U.S. coach John Elkers impressed me very much, an easy man to talk to and an all-around fine fellow. We quickly found a common language and got along very well all the time.

When the chief judge, Cap Haroldson, tossed a half dollar for "heads" or "tails" to see which team would start, John said to me: "Honestly, I'd like to see that half dollar land on its edge."

An hour before the opening event Elkers came into my room, handed me a little box, wished me luck, and left. Inside the box was a half dollar standing on its edge and a card that said: "May it go like this. John Elkers."

FTH USSR-USA MEET

I have two concrete suggestions I want to make. I believe it would be worth while to have future USSR-USA track meets run like an Olympic program, with three competitors, not two as now, entered in each event by each country. The scoring could still be confined to the best two, as it is now.

A reserve man makes the team results less chancy. Then too, the third man will give the other two more confidence—very important, especially in the broad jump, where every challenger jumps cautiously, always plagued by the fear that he might overstep the mark.

By the way, this won't improve the chances of Soviet jumpers at meets; it will do just the opposite. Thus far, I'm the only one who has jumped 26 feet in the Soviet Union, while the United States has 14 men who have done it.

march off. But when we got to the edge of the track, John and I looked at each other and grinned, clasped hands and turned . . . left, starting an unforgettable 400-meter march past the stands.

Looking back, I saw all the athletes, rivals a half-hour or so ago, now striding along smartly, in pairs, with clasped hands, all smiling. The big brass band was drowned by the roar from the stands as we filed by. A forest of hands rose above the rows of cheering spectators. It was a stirring finish to the "match of the titans."

Maybe it isn't becoming for an army officer to get sentimental, but at that moment I felt a lump in my throat and tears in my eyes. I wasn't ashamed of the tears, and I'm sure that my friends weren't ashamed of theirs either. They were the overbrimming sentiments of warm friendship.

hey'd like every contender to take top place. Right now, they're waiting for the tenth round of our lengthy duel. I'm making thorough preparations for this next meeting with John. The same for Gene Johnson. I don't think that Gene has shown the best he has yet; we can all look for surprises from him.

I'm a little tired of answering the question about whether it's possible to clear 7 feet 6½ inches. I'll say again that it can be done, but I don't say that I'll be the one to do it. I don't want to be that immodest, but like any other athlete I'm trying for a better record all the time. High jumpers are putting up a tough battle for every fraction of an inch. Right now, I'm working for a 7-foot-6-inch jump. That's what I'm going to try for at the coming USSR-USA meet.

ber. They thought that by sacrificing Soth they would wear down the opposition and give Max Truex, the other U.S. contender, a chance to win.

Ordinarily a sacrifice is fine, but in this case t was a gamble that called not only for superuman self-control, but for speed, endurance nd all-around physical conditioning—all of which the U.S. long-distance runners were short f at the time.

I've said all this to show that my American competitors have learned a lot from this sad lesson. Their standards are noticeably higher now, especially in the 5,000 meters. Last year Jim Beatty cut the national record down to 13 minutes 45 seconds, or 5.6 seconds better than my best in 1962. And Max Truex once during that season covered 12½ laps one second faster than I did—the reason I expect a keen contest in the 5,000 meters at the Moscow meet. It's hard to say who will be stepping on who's heels.

Although I won the two-day "marathon"—I nean the decathlon—I was not satisfied with he results, sorry that I was over 30 and that n injury prevented me from turning in a better erformance.

Young Paul Herman put up a stiff fight at 'alo Alto. In my opinion he is a highly promsing decathlete. In time he should be a worthy uccessor to a topflight performer like Rafer Johnson, whom the United States must sorely miss these days.

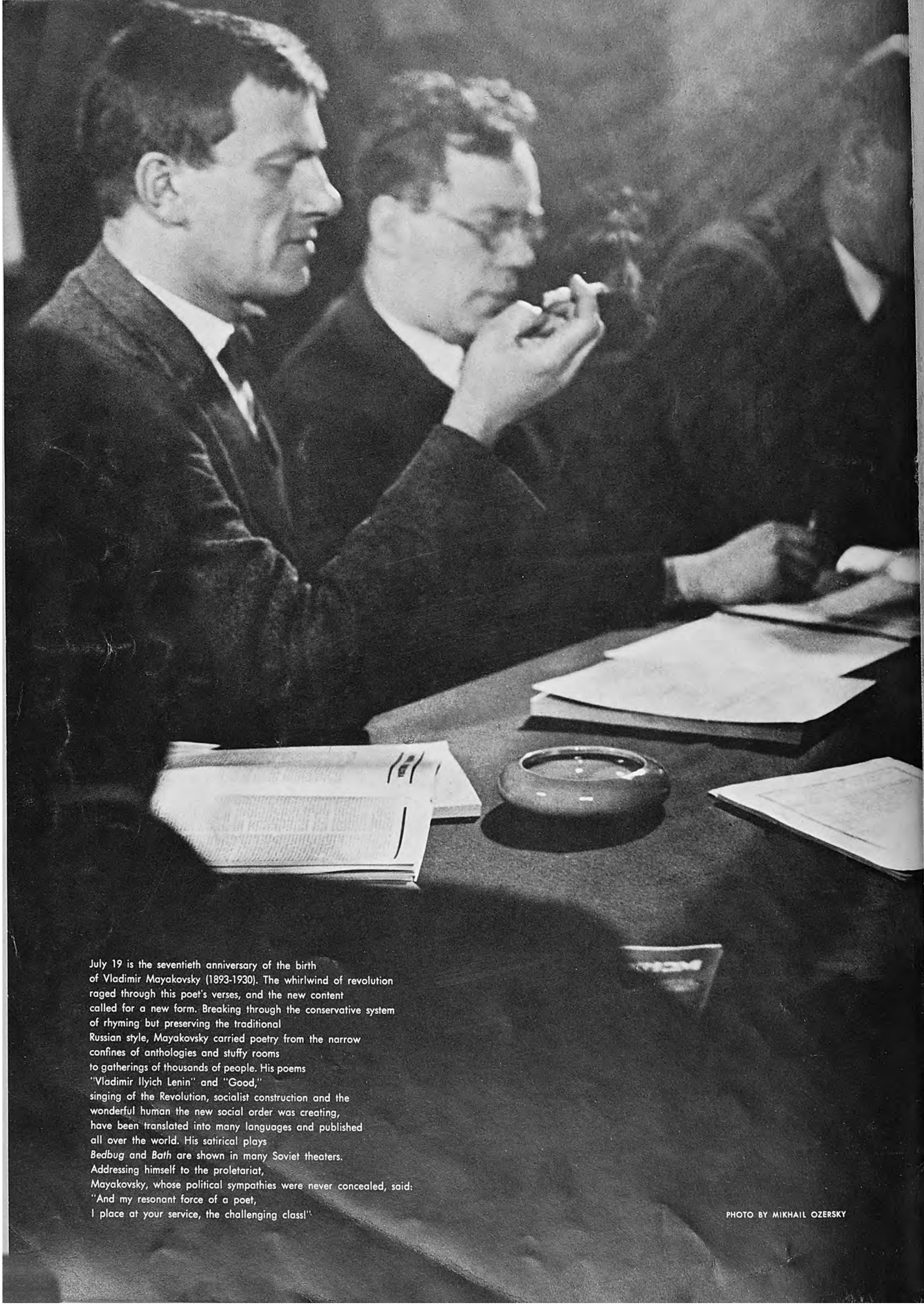
I'm ready to take on Paul again and am looking forward impatiently to our meeting in Moscow. Incidentally, I should let him know that he will be facing another rival besides myself—Yuri Dyachkov, a 22-year-old student from Tbilisi, whom, I'm sure, we'll be hearing about before very long.

It really did go like that. Both sides chalked p world records and team honors were split, ie men taking them for the United States; and ie women, for the USSR. It was only a margin f four points in the team score, gained by our de at the very end of the contest, that pushed ie half dollar down.

I would like to mention the friendly comients in most of the U.S. newspapers on our ist appearance. In his article in the *Palo Alto imes*, headed "Olympic Spirit Prevails at Stanford," Dink Templeton described the friendly atmosphere of the competition between the best athletes of the two countries. He expressed the hope that the atmosphere would be as friendly at the fifth meeting in Moscow, the sixth in the United States and all subsequent meetings. I do too.

As for the sports side of the matter, I think that we'll take team honors again. I'm certain our side will win, and the gap in points in the men's division will be narrowed considerably.

UNDERWATER HUMOR



July 19 is the seventieth anniversary of the birth
of Vladimir Mayakovsky (1893-1930). The whirlwind of revolution
raged through this poet's verses, and the new content
called for a new form. Breaking through the conservative system
of rhyming but preserving the traditional
Russian style, Mayakovsky carried poetry from the narrow
confines of anthologies and stuffy rooms
to gatherings of thousands of people. His poems
"Vladimir Ilyich Lenin" and "Good,"
singing of the Revolution, socialist construction and the
wonderful human the new social order was creating,
have been translated into many languages and published
all over the world. His satirical plays
Bedbug and *Bath* are shown in many Soviet theaters.
Addressing himself to the proletariat,
Mayakovsky, whose political sympathies were never concealed, said:
"And my resonant force of a poet,
I place at your service, the challenging class!"

PHOTO BY MIKHAIL OZERSKY

USSR

SOVIET LIFE TODAY

AUGUST 1963
25 Cents

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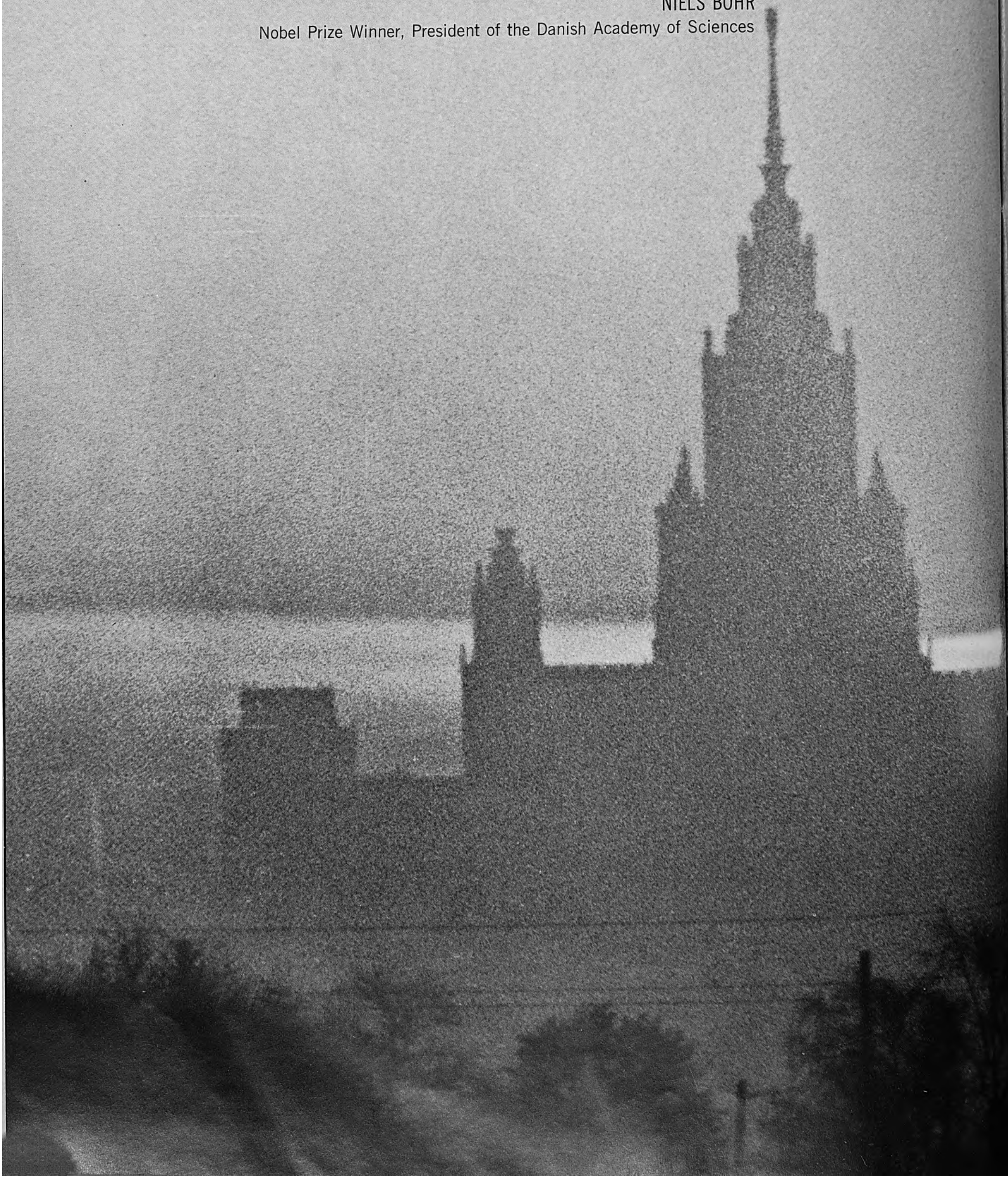
"Seagull Calling" page 22
New Man in the Making page 38
Greatest Battle of Armor page 59

OHIO STATE

This university with its wonderful buildings, its huge library and magnificent equipment is a symbol of the unity of human knowledge.

NIELS BOHR

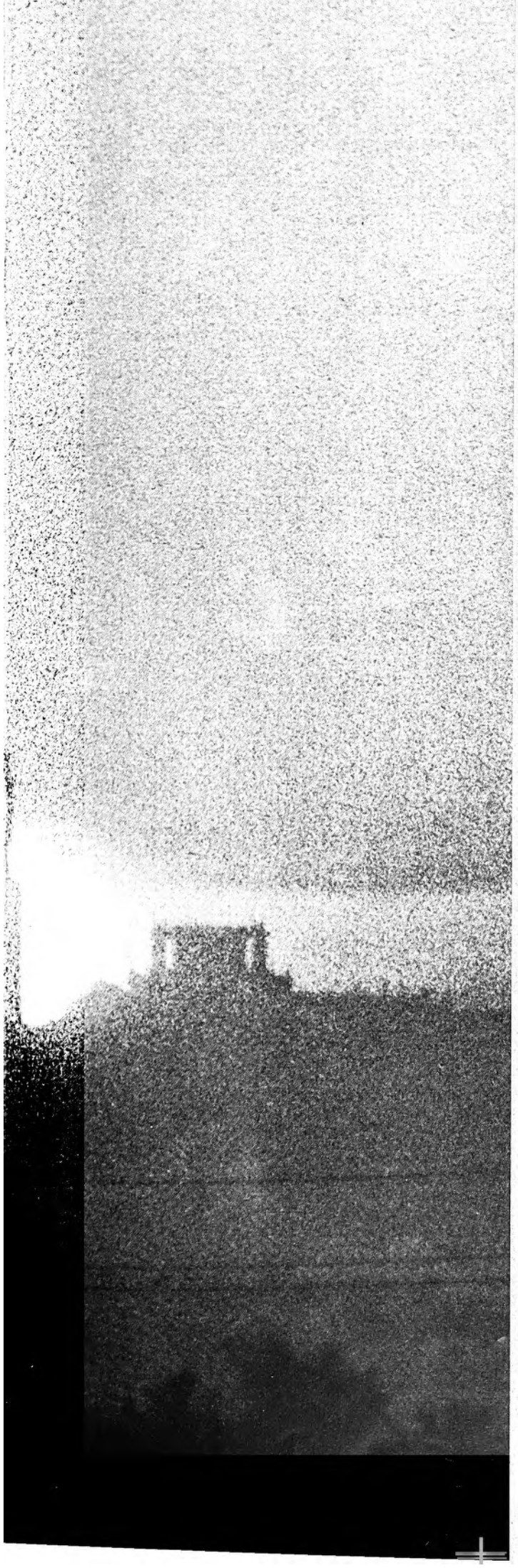
Nobel Prize Winner, President of the Danish Academy of Sciences



MOSCOW UNIVERSITY

School of Scientific Inquiry

BY ACADEMICIAN IVAN PETROVSKY
PRESIDENT OF MOSCOW STATE UNIVERSITY



THERE are 40 universities in the Soviet Union, one in every large city. But Moscow University occupies a special position by reason of its age, tradition, and academic stature.

The university was founded in 1755 by the eminent Russian scientist Mikhail Lomonosov, whose name it now bears. Among its students were such famous Russian writers as Alexander Griboyedov, Mikhail Lermontov, Fyodor Tyutchev, Ivan Turgenev, Anton Chekhov, Alexander Hertzen, and the renowned critic Vissarion Belinsky.

In the nineteenth century the university initiated a tradition it still follows—to invite its most capable graduates to join the faculty. Nikolai Zhukovsky, an authority on aerodynamics, physicists Alexander Stoletov and Pyotr Lebedev, botanist Kliment Timiryazev, and physiologist Ivan Sechenov were students and then instructors at the university.

Mathematicians Pavel Alexandrov and Andrei Kolmogorov, chemists Alexander Nesmeyanov and Vladimir Kargin, and others who were Moscow University freshmen three or four decades ago are today its distinguished professors and scientists.

Thus far I have mentioned alumni known the world over. But the university has graduated 100,000 less famous men and women who have made their various contributions to the sciences and humanities, 60,000 of whom were graduated after 1917.

Despite a diversity of teaching methods, our professors have one aim in common: to develop in their students creative initiative, to instill an interest in scientific inquiry and painstaking research, to help their students grow into people who are capable of scientific thinking, who knows how to raise and solve problems.

The youth newspaper *Komsomolskaya Pravda*, in a recent forum on the training of researchers, carried an article by Academician Alexander Alexandrov, President of Leningrad University. "A student," he wrote, "is not a vessel to be filled but a lantern to be lighted." This is precisely what we strive for when we lecture, conduct laboratory sessions and even when we take part in the discussions that go on in student dormitories.

Our students carry on research under the guidance of professors and associate professors. Many of them do independent experimental studies and make original reports at scientific conferences. The best student work is published in scientific journals.

A young scientist can do fruitful research only if he has a dialectical approach to phenomena. He not only must know his general field but must be conversant with the very latest work done in his particular specialty. That is to say, his scientific background must be comprehensive. This has important bearing for the university. First, the theoretical and pedagogical level of the faculty, the university's brain center, so to speak, must be high. We have some of the most celebrated men in their fields lecturing for us, many of whom work at research institutes. Consequently, students learn not only what has been achieved but the direction that research is taking. We try to have each lecture and laboratory assignment go beyond the limits of what is already known.

Secondly, there is the material basis of science teaching. The state spends a great deal of money to keep the university laboratories up to date. One of the complex of university buildings on Lenin Hills houses a computer center and another an astronomical observatory. We have our installations for nuclear research and the biggest units in the country for aerodynamic experiments. For closer contact between students and scientific laboratories we have organized university branches at the most important centers of the USSR Academy of Sciences. The largest is at the Joint Nuclear Research Institute at Dubna where some of our seniors do their practical training. We also send our students for practical training to Gorky University, where the courses in radiophysics are taught on a very high level.

We try to keep our students informed of major trends in science abroad. Our libraries, at the disposal of students, get all the most important scientific publications from the United States, Britain, France, Czechoslovakia, Japan, Canada and other countries.

We cordially welcome foreign professors who lecture for our students. Moscow University has agreements on scientific cooperation with the Universities of Warsaw and Berlin, with Prague's Charles University and with Columbia University and the University of California in the United States.

This kind of exchange, it seems to me, serves more than scientific aims. It helps us to understand one another, which is especially important in our day.

Now I want to turn the floor over to my young colleagues, students of the journalism department of Moscow State University. They will give you more detail about themselves, their studies, their work, their everyday activities, and about everything else that goes to make up university life. ★

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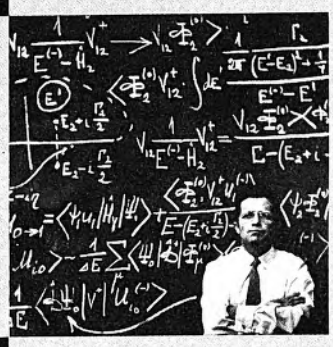

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Front Cover: Vsevolod Balashev, Doctor of Science, teaches physicomathematics at Moscow University's Institute of Nuclear Physics.

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WE OF

THE sophisticated senior at Moscow State University (M.S.U.) will nonchalantly inform the applicant that passing the entrance examination is not half so hard as sticking it out for the prescribed five-year course. But the raw candidate, listening deferentially, thinks: "If only I can get in, the rest will take care of itself."

As trying as the years ahead may be, the thought uppermost in the mind of the applicant is to get in.

In August, before the new term begins, thousands of young people flock to the new university buildings on Lenin Hills, where the physics, chemistry, mechanicomathematics, biology and soil, geology and geography departments are located; and to the old buildings in the heart of Moscow, where the history, philology, journalism, law, economics and philosophy departments are.

Entrance examinations are a harrowing experience for even the brightest applicants.

Last year of the 9,000 young people who applied to the natural sciences departments, only 2,050 were accepted. In the physics department alone not more than 650 students made it out of 2,723 applicants.

With 20 applicants for each place in the philology department, the marks students received in the examinations in their special subjects decided the day. The special subjects in the physics department, for example, are mathematics and physics; in the philology department the student takes an examination in Russian and a foreign language, and has to write a literary essay.

The entrance examination requirements for people with a work background and for ex-servicemen are less stringent. Consideration is given to the fact that such people cannot compete on an equal basis with boys and girls just out of school. For this academic year in the chemistry department, the required passing mark in three subjects totaled 15 for candidates straight from secondary school, and 12 for those coming from industry. (The marking system in the Soviet Union is: Excellent = 5, Good = 4, Fair = 3, Poor = 2.) In the English section of the

OUR TRENDS

Main Aim: Molding of the New Man

We can only visualize the Soviet society of the future in broad outline, but we do know that its function will be to create conditions enabling every citizen to become a high-principled, qualified and active participant in public life. It would follow that the citizen will have to assimilate not merely a required sum of general and specialized knowledge but the scientific world outlook and the moral values of the new society. And this will be a requisite for not only a part of the population, but for the whole nation, for every citizen.

Man's intellectual progress has always been the primary concern of Soviet society and the Communist Party, its vanguard. This is particularly so today, during the transition from socialism to communism, a new and higher stage of social development.

M.S.U.

BY VLADIMIR SHMIGANOVSKY AND YURI YUSHA
STUDENTS OF THE JOURNALISM DEPARTMENT, M.S.U.

philology department the passing totals were 14 and 11 respectively. A candidate who does not make the grade in our competitive examinations can apply for admission to another college where the required mark is not so high.

About a hundred vacancies at our university are annually reserved for applicants from the other 14 union republics, who take the entrance examinations at colleges in their home cities. Needless to say, students from other parts of the country can come to the capital and be admitted on the same basis as Muscovites.

These days, so far as choice of specialty is concerned, there is practically no difference in the distribution of the sexes. At one time young women favored philology and history. The philology department was even jokingly called the "brides' department." Today, out of the 1,780 students enrolled in the mechanicomathematics department, the toughest at the university, 650 are young women.

A wall newspaper. *The Geologist,* carried an open letter by third-year students of the geology department to Professor Kudryavtsev, the dean, which started a debate on the relative importance of theoretical study and practice.

"What do you think of the letter?" students asked one another.

"I agree with it," some said. "It's time we realized theory isn't everything. We have to work with hand as well as with brain."

"You're wrong there," said others. "First and foremost, you have to have a good grasp of theory."

At this point in the discussion, Semyon Skuratovsky, one of the geology students, jumped up on a chair and yelled across to Alexei, a fellow student: "You've been in luck, traveling with geological parties. You're as good as a geologist already. But look at us, we sit here counting pebbles, getting nowhere. Theory alone won't get us anywhere."

More and more students clamored for a course of study that would strike a better balance between theory and practical studies. Instructors and professors got into the debate. A committee of students and teachers was set up to revise the syllabus. As a result, the number of hours allotted to practical work in the senior year was doubled at the expense of more intense specialization in the theory course.

Today practical training plays an important part in the course of study of every department. After completing a three-and-a-half-year theory course, chemistry students have ten months of practical training at chemical plants; students in the natural sciences get their practical training on scientific expeditions. Last year 68 university expeditions traveled to the Caucasus, Kazakhstan and the Far East. The natural sciences departments alone spent 1.5 million rubles on research.

History students get their practical training by going through archives and researching at libraries, museums and schools; future economists work at central statistical agencies and planning offices of industrial enterprises; students of journalism spend work periods at newspaper offices.

The experience acquired in this practical work is summarized in the term papers we write at the end of each academic year. In the last year, under the guidance of a professor or assistant professor, we work on a diploma project; it must be an independent experimental or theoretical study. This is where the practical experience we acquired in our work training stands us in good stead. It is noteworthy that half the diploma projects in the physics department are now defended at factories or laboratories.

And yet, when all is said and done, it is theoretical knowledge that is of greatest importance. The theory is given at required lecture courses and seminars by leading specialists.

"Come to our lecture on the Greek classics; you'll enjoy it," fellow students in the philology department told us the other day.

The last time we had taken an ancient literature course was in our freshman year, and we accepted the invitation rather skeptically. Since the philology department is only one floor above ours, at least we did not have to go far.

The hall was packed to overflowing, and the students listened entranced to the lecturer, Professor Sergei Radzig, a venerable octogenarian. As he recited for us in Greek the monologues of Achilles, Odysseus and Penelope, we could almost see the deathless scenes that Homer's imagination had created.

There are professors in every department whose lectures one would not miss for the world, even if the most exciting game of the year, say between the Spartak and Dynamo soccer teams, was being played that day. No student of the physics department, for example, would be likely to cut a lecture by Academician Artsimovich. His lectures, those of the mathematician Academician Alexandrov, the chemist and Nobel Prize winner Academician Semenov, and other eminent scientists are always original and inspiring.

Needless to say, not every one of the lectures we hear at the university is a revelation. There are professors who are dull and platitudinous. In our sophomore year, for example, we thought we were not getting enough out of our course in philosophy. We sent a delegation to Eleonora Lazarevich, the assistant dean, and shortly afterward she arranged for us to have another lecturer.

Optional attendance at lectures is a privilege only the most capable students enjoy, to give them more time for independent work. Forty of our fourth-year students are not required to attend lectures.

However, quite a number of others, who have not been granted the special privilege, make a habit of cutting theirs. This anecdote sheds light on the attitude of these students.

"How long will it take you to learn Chinese?" A professor, a graduate student and an undergraduate were asked this question in turn.

"Three years, I believe," replied the professor, plucking at his gray beard.

"I'll manage in a year," said the graduate student.

The undergraduate merely asked briskly: "When is the examination?" The implication is that if he had to take the examination the next morning, he would learn the language that night.

However, we know only too well that students who loaf all year and get down to work just be-

(Continued on page 42)

Of course the main feature in the construction of communism is the creation of its material and technical basis, that is, the development of the productive forces to a level high enough and versatile enough to provide an abundance of goods and services so that all the needs of each individual can be satisfied. But there is another very important aspect of the process—the spiritual aspect. For this society we must educate a new kind of man, a man who is collective- and international-minded, a creative man, a man who could not even think of separating "things for me" from "things for society."

It was this spiritual aspect of the development of Soviet society at its present stage that was discussed at the Communist Party Central Committee Plenary Meeting held in June. It was a very representative forum. Besides members of the Party's leading bodies, it was attended by representatives of all the union republics and all the regions of the Russian Federation, people working in the arts and sciences—writers, teachers, newspapermen, radio and television workers—more than 2,000 in all, a considerable number of them non-Party people.

There was a broad exchange on all phases of the ideological work of the Party and other organizations, and measures were worked out for expanding and improving this work. On pages 38 and 39 there is a resumé of the main report by Secretary of the Central Committee of the Communist Party of the Soviet Union Leonid Ilyichev, in charge of ideological questions of the Central Committee. (The magazine will carry more detailed material on the plenum in the September issue.) Even this fragmentary material will show what serious attention is paid to problems of ideology and ethics in every sphere of thought and action. We would like to stress here only the following features of our ideology.

The approach to the problem of ideology in the Soviet Union is humanistic. Essentially it reduces itself to this question: How best can society and the state help the citizen to develop his capabilities? All ideological work has this as its direction and aim.

Our refusal to tolerate antisocial behavior stems from the most basic principle on which the Soviet Union was founded. This is the logic of the position: Our society, which has rejected the basic manifestations of social injustice (private ownership of the means of production, exploitation of man by man, aggressive wars and racial discrimination), has no intention of putting up with these "lesser" manifestations of the old way of life—idleness, stealing, bureaucracy and hooliganism. Such deviations from the general civic honesty and decency of our society stand out as plainly as noxious weeds poking through the fresh greenery of a new crop.

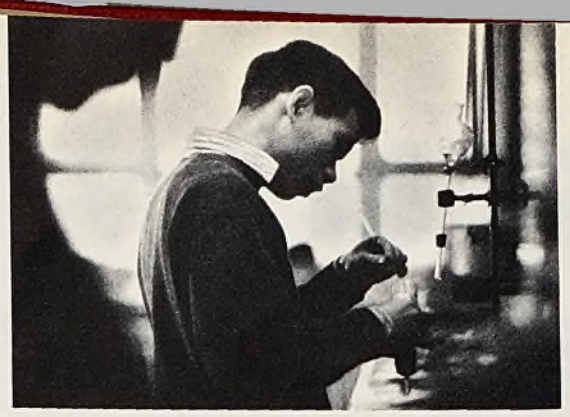
The concern of the recent Plenary Meeting with people who violate the normal standards of Soviet behavior is not because there are so many of them—actually they form a negligible number—but because even the very small number cannot be justified socially and will not be tolerated.

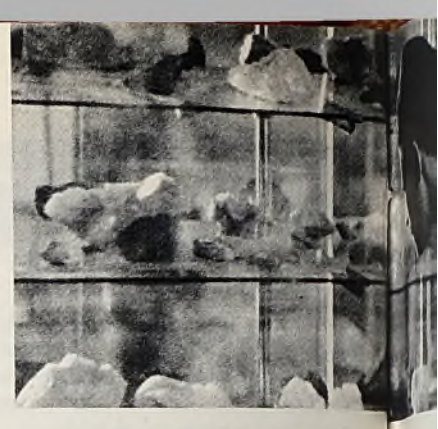
Soviet society should educate every citizen. That is one of the imperative conditions of our ideological work. No one is to be "forgotten." Communist democracy means that every man becomes an active citizen.

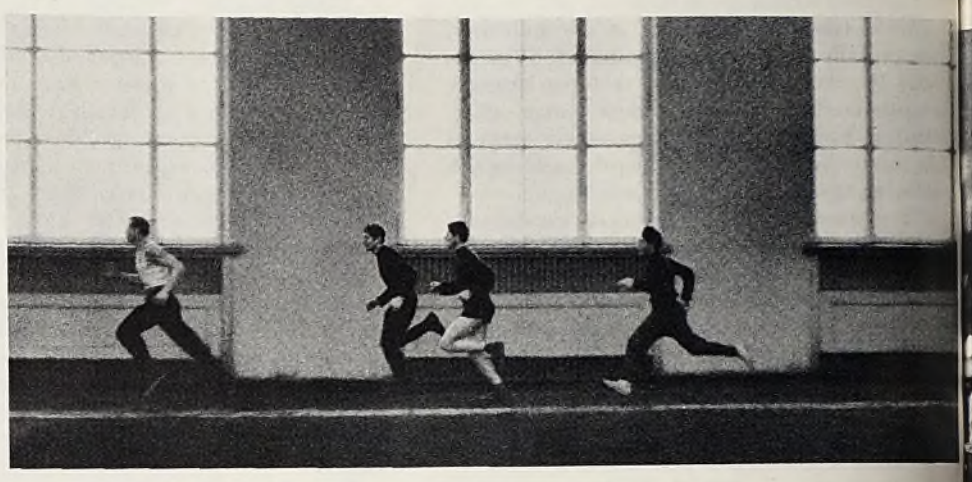
And one final point: Is it possible to educate man to a consistent collectivism so that he lives by, and not only formally subscribes to, the basic motto of communism, "Man is to man a friend, comrade and brother"?

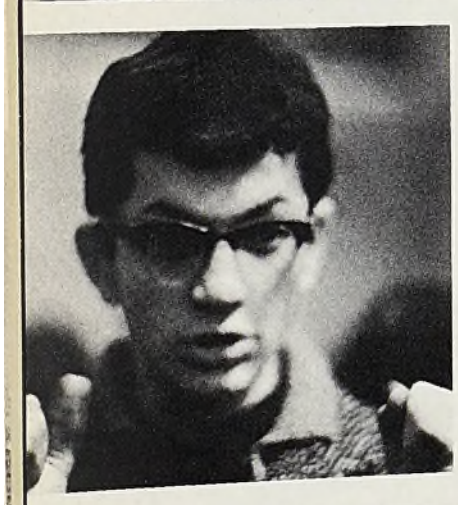
We in the Soviet Union believe it possible. Man's social attributes are not superimposed; they are an inherent part of his nature as a social being. They will reach complete fruition in the beneficent climate of the new society. ★

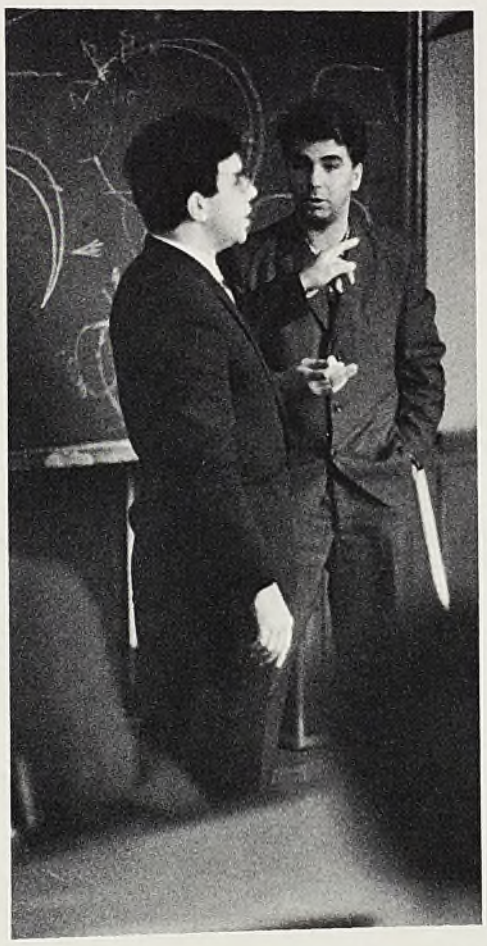
IN MINDS AND CHARACTERS WE VARY

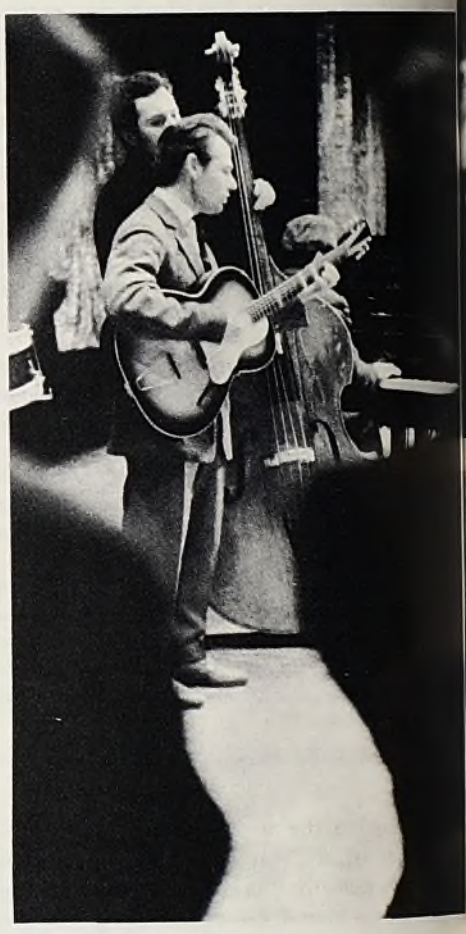


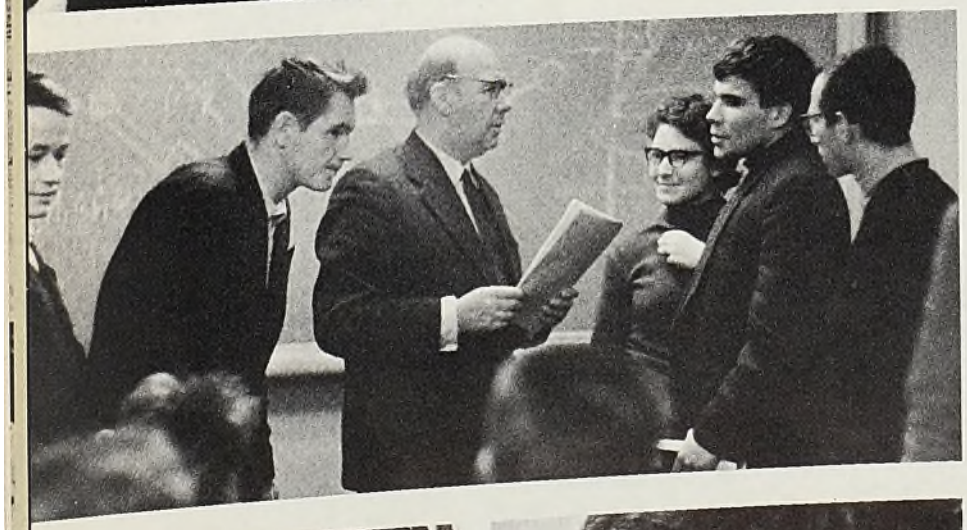












M.S.U.

FACTS and FIGURES

Moscow State University has:

13 departments (six departments in the natural sciences, six in the humanities and an Institute of Oriental Languages);

an institute for the advanced training of scientists;

220 chairs in the sciences;

4 research institutes (nuclear physics, astronomy, mechanics and anthropology);

250 laboratories;

163 study halls;

3 museums (geology, zoology and anthropology);

8 field instructional and research stations;

a botanical garden and its branch;

4 astronomical observatories.

Moscow University is attended by:

15,500 students in the day division;

11,000 students who hold full-time jobs, in the evening and correspondence divisions;

2,900 graduate students;

students of all the 67 nationalities inhabiting the Soviet Union;

2,500 undergraduates, graduates and trainees from 72 countries;

6,628 women.

Moscow University faculty has:

3 Nobel Prize winners;

18 Lenin Prize winners;

75 State Prize winners;

29 members of the USSR Academy of Sciences;

47 corresponding members of the USSR Academy of Sciences;

57 members of academies in the union republics and of specialized academies (agricultural, medical, etc.);

371 professors;

2,700 assistant professors, instructors and research workers.

The university's mechanicomathematics department has:

a computing center;

laboratories at the Institute of Mechanics;

laboratories for statistical methods.

The physics department has:

cryogenic and hydrological laboratories;

a laboratory for studying cosmic rays;

an astronomical institute.

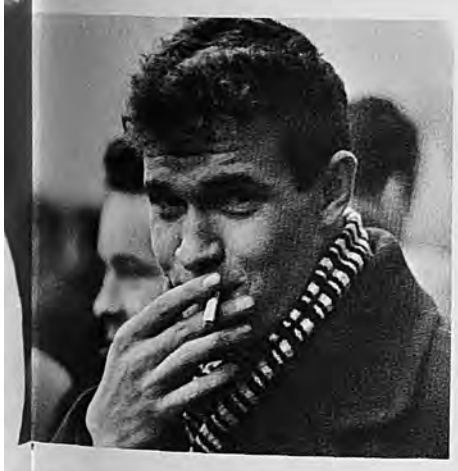
The biology and soil science department has:

three instructional and research stations;

a research institute.

The journalism department has:

its own print shop.



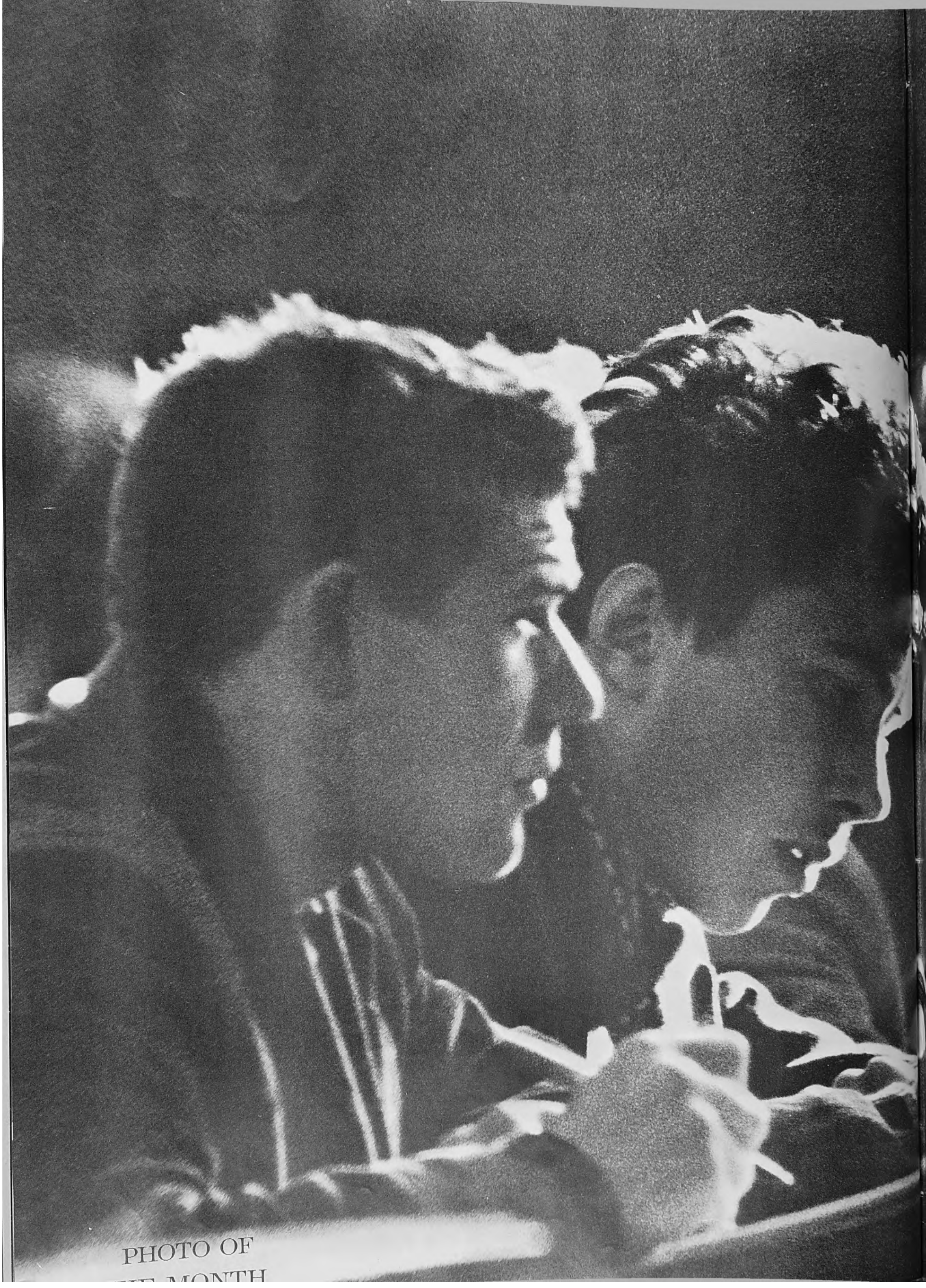


PHOTO OF

You can become a Communist only by enriching your mind with the knowledge of all the treasures created by mankind.

VLADIMIR LENIN

(from speech at the Third Congress of the Young Communist League)

TO SERVE THE PEOPLE

The Public Opinion Institute of the newspaper Komsomolskaya Pravda *submitted the following questionnaire to students at Moscow State University:*

1. *What motivated you to choose your particular specialty?*
- ***a) family tradition***
- ***b) its romantic aspect***
- ***c) comparatively easy work***
- ***d) desire for popularity and fame***
- ***e) natural ability or inclination***
- ***f) high-income potential***
- ***g) desire for cultural environment***
- ***h) the infeasibility of following your natural inclination***
- ***i) haven't thought about it***
- ***j) other reason***

2. *What is your professional goal?*

3. *Do you think you will achieve it?*

4. *What other interests do you have?*

5. *Where and how do you expect to apply your knowledge after graduation?*

6. *Is anything likely to interfere with your plans?*

The questionnaire was filled out by about 1,500 students. Though the material is still being studied and the final results not yet tallied, with the kind permission of the institute, we are publishing some of the more typical answers.

V. BLINOV, 21, history, freshman; father dead, mother on a pension; from Vologda

1. My inclination, of course, and the romantic aspect of the profession, too.
2. To be useful to people, to be of service always. I want to teach and be able to give my students more than I received from my teachers. What the reason was I do not know exactly; perhaps it was due to the remoteness of the district where I went to school. But the fact remains that I got very little out of school, particularly in art and music. I should like now to fill that gap in my education and learn as much as possible about everything so that I can bring music and art to my pupils.
3. I have no doubt about it.
4. My chief interest, my real passion, is history. Besides that I have been studying music, its history and literature.
5. The knowledge I acquire I want to use in teaching. Linking school with life implies not only training for industrial or farm production but turning out educated people who know quite a lot and who want to know still more.
6. Nothing can block my plans since they coincide with the aspirations of all people.

ANONYMOUS, 23, biology, sophomore; parents both workers; from Siberia

1. The possibility it offers me for living and working to my full capacity.
2. To conquer cancer—not alone, of course. I will be happy if even a minute part of my efforts contributes to this victory.
3. I probably will not succeed alone, but all of us together certainly will!
4. I like Prokofiev, Picasso, Hemingway, among others.
5. Wherever I am needed.
6. War.

YURI VOROBEI, 18, journalism, sophomore; mother an engineer; Moscow

1. Family tradition? I am the first in my family to take to the pen. Romantic aspect of the profession? Well, there is romance everywhere; all one has to do is find it.

Comparatively easy work? Not that I can see!

The desire to achieve popularity and fame? Everyone wants that.

Natural inclination? I don't quite understand. There is such a thing as inspiration, it seems to me. Perhaps the word is "ability."

Never thought about it? I don't think there are such people.

2. Now: to know as much as possible, to know about everything; to know and understand life.

Later: to give people all I can, and even a little more. What for? So that man may become wiser, prouder, nobler; so that communism may become a reality sooner.

3. That's hard to say, but I believe I will. I must!
4. I go in for everything, especially science (chemistry and physics, to be more exact). I devour a lot of books, attend lectures in physics and chemistry at the university and at the Polytechnical Museum.

I'm very envious of my friends who chose the natural sciences, because they will some day be masters of the planets. I should like to understand, at least as a layman, what is happening in science today.

5. Where and how I am most needed by the people.
6. I am attracted most to technology and science, and I am afraid that they may take precedence over my passion for journalism. I have already been playing with the idea of going into physics or chemistry after I finish my journalism course. How I can link these things up in the future is something I don't know as yet. There are precedents, of course; take novelist Mitchell Wilson, for instance.

N. ZVEREV, 29, economics, senior; father a worker, mother dead

1-2. At the risk of sounding pompous, I would say that my main aspiration is to understand the profound processes, stimuli and principles behind the development of human society. I am firmly convinced that the future belongs to communism, the system of social organization that will best further the happiness of humanity. My major goal is to spread the teachings of Marxism, the most advanced socioeconomic teachings.

3. Yes, if there is no war; if I am not killed in case war does come.
4. Who is not drawn to the arts nowadays? I also have an interest in community activity. Football, chess, dancing, a glass of wine and a song around a festive board—I find all these things very pleasant.
5. I intend to teach political economy.
6. No, because the first part of my goal has already been achieved. When students were assigned jobs recently, I got the one I wanted. I'm going to Siberia to teach, and I think that's great!

ALEXANDER GERASIMETS, 21, law, junior; parents are mining engineers; from Perm

1. My natural inclination.
2. To combat crime. I hope to devote most of my attention to crime prevention. The legal investigator who exposes a criminal deserves credit, but the one who prevents a crime deserves twice as much credit.
3. Of course, since everything depends on me, barring an accident.
4. I go in for fencing; I'm the best fencer at law school. I'm fond of the theater. About literature—a man who doesn't keep up with the literary monthlies ought to be ashamed of himself.
5. I intend to be a legal investigator for the public prosecutor.
6. If you want a thing badly enough, nothing will prevent you from getting it.

N. KOLBINA, 25, philosophy, fourth year; mother on pension; from Pervouralsk (Sverdlovsk Region)

1. One cannot answer this so simply. I had many motives, but the major one was my desire to get as much all-around knowledge as possible.
2. My aim? Very broad—to give the people all I have learned at the university, and to learn from them what best they have. I would very much like to tell and show people that

AND THE COUNTRY

there is much beauty in life, that people are the most beautiful part of living. I want people to live with the thought of great things and not be swallowed up by petty details. I want people to be constantly amazed and delighted by beauty.
3. It will be hard, but I certainly shall!
4. Apart from my studies, I like the theater, particularly the Student Theater at the university. In my opinion it is the best theater in Moscow.

I am also very fond of music. We have concerts twice a month at the university given by famous conductors, pianists, violinists and singers. I used to be crazy about Svyatoslav Rikhter; now I am just as mad about Rudolph Kerer, who plays at the university frequently.

Another one of my passions is travel, which affords one the opportunity to meet all kinds of people.
5. Wherever I am sent; it doesn't matter. I hope to teach historical materialism or esthetics at some college; or even better, social science in a secondary school. I like to work with young people, though I am sometimes frightened by the thought that what they will turn out to be when they get out into the world will depend on me to a great extent.
6. There are things that can interfere with my plans, of course: insufficient knowledge, for one; lack of self-confidence or too much confidence, for another; inertia....

N. AFANASYEV, 24, history; father a disabled war veteran, mother a housewife; from Orenburg

1. All this seems a bit naïve to me. Life presents us with such a variety of motives, as you list them, that one can only guess at the prime one. My chief incentive, I think, was the wish for a higher education so I could "come abreast of the age." I think that a man's value to society is not in his diploma, an official document, but in the inner wealth he has accumulated in the process of learning. Without that wealth he will be of little use.
2. To better the lives of the people as much as possible. I would like the people to live handsomely—both materially and morally. Communism is a complex phenomenon with more than a material-technical basis. Needed too is a communist consciousness. Man must be reared with the idea that he is necessary to all mankind; it will prevent him from hiding inside his shell. This is the important educational process, in which I hope to take part.
3. Will I succeed in my aim? I will be able to answer that question when we have built communism. Those who drew up the questionnaire will have to wait a while.
4. For a long time I was engrossed in literature and art; I felt that life had meaning only when linked with art. Later I came to the conclusion that literature and art were one-sided, because they both dealt mostly with a search for personal happiness. This, as I see it, is impossible without the happiness of society as a whole.

I am studying history now. I consider the study of social sciences valuable only insofar as they can be practically applied today; otherwise we will only have science for the sake of science, and art for art's sake. That is why I do community work, lecturing to construction workers.
5. I was born in a village, and although I have lived in the city since I was 12, I've been watching life in the countryside. A great deal still needs to be done in the villages. That is why I intend to use my knowledge there, where it is most needed. Moreover, I do not intend to be simply a children's moral mentor—which is what the rural teacher usually is—but a practical worker, an educator who goes outside the classroom to teach.
6. I don't think anything can block them, for my aims are not merely pious hopes without real foundation. My intentions were prompted by life—by my service in the army, my work at a plant, and by my peasant parents. It will not be simple, of course, but it should be an interesting life, and I want to live as interestingly as possible.

ANONYMOUS, 21, physics; father on pension, mother a housewife; from Pensa Region

1. My natural ability and the desire for fame.
2. To understand nature and to work out a universal theory of matter.
3. Probably not altogether, but to some degree.
4. I go in for sports a little to keep from turning into an old man at the age of 25. I am also active in the community—to get the habit of working with people and prevent myself from turning into an apolitical amoeba.
5. Sphere of activity—physics; place—a research institute, if possible.
6. My own laziness, perhaps; not enough time in this short life; lack of ability; no solution to my research problem; war; or an accident.

N. OVCHINNIKOV, 27, law, junior; mother an office worker, father dead; from Moscow Region

1. The chief motive was to get a general education in the social sciences that would enable me to be well informed.
2. I hate the indifferent and the callous, bureaucrats and red-tapists, slanderers and bribetakers, parasites, and people who destroy the most precious thing of all—human life. I should like to be a lawyer, devoting myself to the fight against everything that hampers our progress, thereby making my modest contribution to the great cause of building the new society.
3. I think I will. My aspirations are high but, I think, feasible. The important thing is to hold to your goal faithfully; not to be sidetracked by the petty things of life, but to march along a straight clear path.
4. I am fond of literature. I have the works of Pushkin and Tolstoy on my bookshelf. I love the first for his clarity, and the second for his mature wisdom. I also like Soviet writers—Gorky, Mayakovsky and Sholokhov. I am fond of the theater; the Moscow Art Theater is my favorite. I am in Komsomol (Young Communist League) work up to my ears.
5. I'm going to be a legal investigator.
6. That is hard to say until I finish my studies.

B. PONOMARYOV, 24, philosophy, sophomore; father an office worker, mother a teacher; from Barnaul

1. Not one of the motives listed in your questionnaire applies to me.
2. Any trade and any profession must be thought of in relation to the way it benefits people, society. That is why I am surprised that your questionnaire left out as a motive "usefulness of the profession." Every type of work is useful, of course. What is important is the degree of its usefulness. I am trying to say that the work of the physicist, biologist or philosopher gives society more than the work of the cleaning woman. Philosophy, particularly logic—to which I intend to devote myself, plays an exceptional role in modern life, in science and technology.

It seems to me that the difficulty and usefulness of science attracts people more than such factors as romanticism, comparatively easy work or high salary. As for the desire for fame, I shall cite Darwin. He said that the desire to find a place in life is an ambition that has always played a large part in human existence.
3. Yes.
4. One cannot help being interested in literature nowadays. Art is part of the life of every Soviet citizen; particularly the young people. Sports is an important hobby too. In the perfect society the athletic coach will be considered a scientist.
5. That depends on the progress of my studies.
6. Only war could block my plans, but I am sure there will be no war.

VALERI PETROSYAN, 20, chemistry, junior; father an engineer, from Baku

1. My natural inclination, or to be more exact, my interest in chemistry and my feeling about chemists—I find them very congenial people.
2. The point is that there is actually no limit to science; a real scientist, especially a young one, should not think of final aims. But I intend to work hard and diligently, and devote my life to my favorite sphere of knowledge.
3. Oh yes, I'm sure of it!
4. Literature and the arts. I think it is foolish to pit physics against poetry, science against art.
5. I would very much like to stay on as a member of the chemistry department of the university. But if I don't succeed, I shall work just as enthusiastically wherever I am sent.
6. I don't think I'll get a job at the university because industry needs young chemists so urgently.

S. KAZARINOV, 20, geology, freshman; father a geologist; from Moscow

1. The romantic aspect of the profession and also my natural inclination. I say natural inclination because, like many others, I am attracted by the secrets of nature yet undiscovered, by the riddles yet unsolved.
2. Geology followed purely practical aims for a long time. Its development as a science is comparatively recent. Its progress has been particularly rapid in our time because of the breakthrough into outer space and because of technological development. What is my aim? I hope to fill in at least one tiny gap in the science of geology, just one of the blank spots of which there are so many.
3. I don't know. I think it would be presumptuous for me to give a definite answer to that question.
4. Literature and technology.
5. I haven't thought of that seriously yet; I still have four years of study ahead.
6. Nothing, aside from an accident.

N. GETLING, 18, astrophysics, sophomore; father an engineer; from Moscow Region

1. My natural ability.
2. My goal is to get the best scientific answers to the research problems I will be working on. I expect to be concentrating on the physics of the sun, if possible. There are many discoveries lying in wait for the researcher in this field of investigation. Whether I'm capable of solving them remains to be seen.
3. I hope so.
4. Music. I've begun to take piano lessons.
5. That is a difficult question. At any rate I should like to work where my knowledge would be of greatest use.
6. Nobody can be sure he will not run into difficulty where his work is concerned. It is not easy to foresee the obstacles that may arise. What is important is that they do not catch a person unawares and confuse him so that he stops working.

B. N., 21, mechanicomathematics

1. Family tradition? To some extent, yes. My parents are scientists and explorers.
2. In science one often runs into this dilemma—there are a thousand paths, but only one is the right one. Finding it is often a matter of luck, no matter what people say. There is no guarantee against failure or against the chance that someone else may reach your goal before you do, and with far less effort too. I would, of course, like to be the first to achieve my goal; but if I am not, I have promised myself not to be envious. I shall know that my efforts have helped someone reach the heights, someone who did not have to duplicate all my preliminary probing. That is how I see my work.
3. Nothing will stop me, unless I die, become ill, or fall victim to some unforeseen catastrophe.

I've forgotten the possibility of war, of course. War is something that will block everyone.
4. Since I'm not well, I don't go in for sports very much. My illness is not fatal, but it's unpleasant. I am an ardent tourist. I like biking and canoeing; if only I had more time! Community activity? By all means! Literature? Art? Yes. Music? An emphatic yes—and not only classical but light music too.
5. Where will I work? Where the Job Distribution Committee sends me. But wherever that may be, I shall do my best—letting nothing stop me. I hope to be useful to science, to our science and, hence, to our people.
6. I've sent this questionnaire a bit late, but it got to me only just now. Though late, I hope it will show that this so-called "modern youth"—which today is the target of much criticism—really thinks. ★

NO SCIENTISTS WITHOUT

The editors asked five distinguished Moscow University professors these questions:

What is your aim as a teacher?

What do you value most in a young researcher?

REM KHOKHLOV

Physicist, Corresponding Member of the USSR Academy of Sciences

My aim is the same as any teacher's—to pass knowledge on to students and teach them how to solve scientific problems.

In a young researcher I value most of all initiative, enthusiasm and industry.

ANATOLI PROKHOROV

Physicist, Corresponding Member of the USSR Academy of Sciences

The aim of the teacher is to share his knowledge. I particularly like lecturing to seniors. Not only do they show a lively interest in science, but they have enough background to ask complex questions.

I place independent thinking and initiative above everything else in a young researcher.

The teacher is the person who must transmit to the younger generation all the valuable accumulations of centuries without transmitting prejudice, sin and disease.

ANATOLI LUNACHARSKY

First People's Commissar of Public Education

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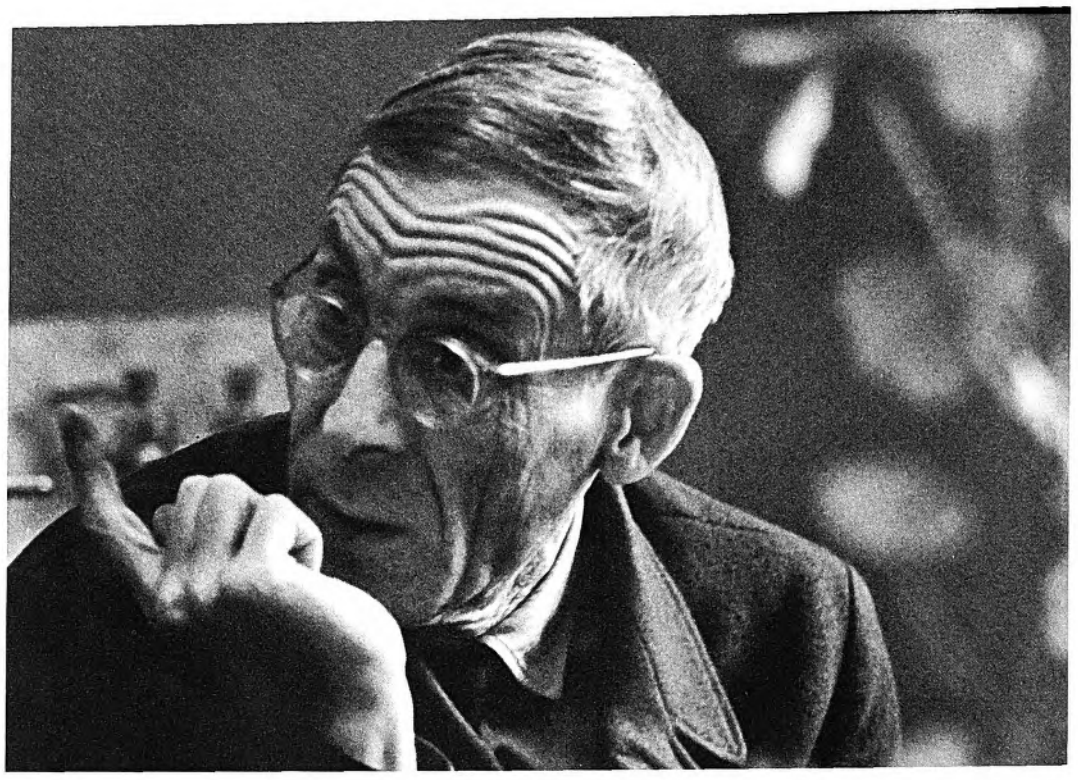
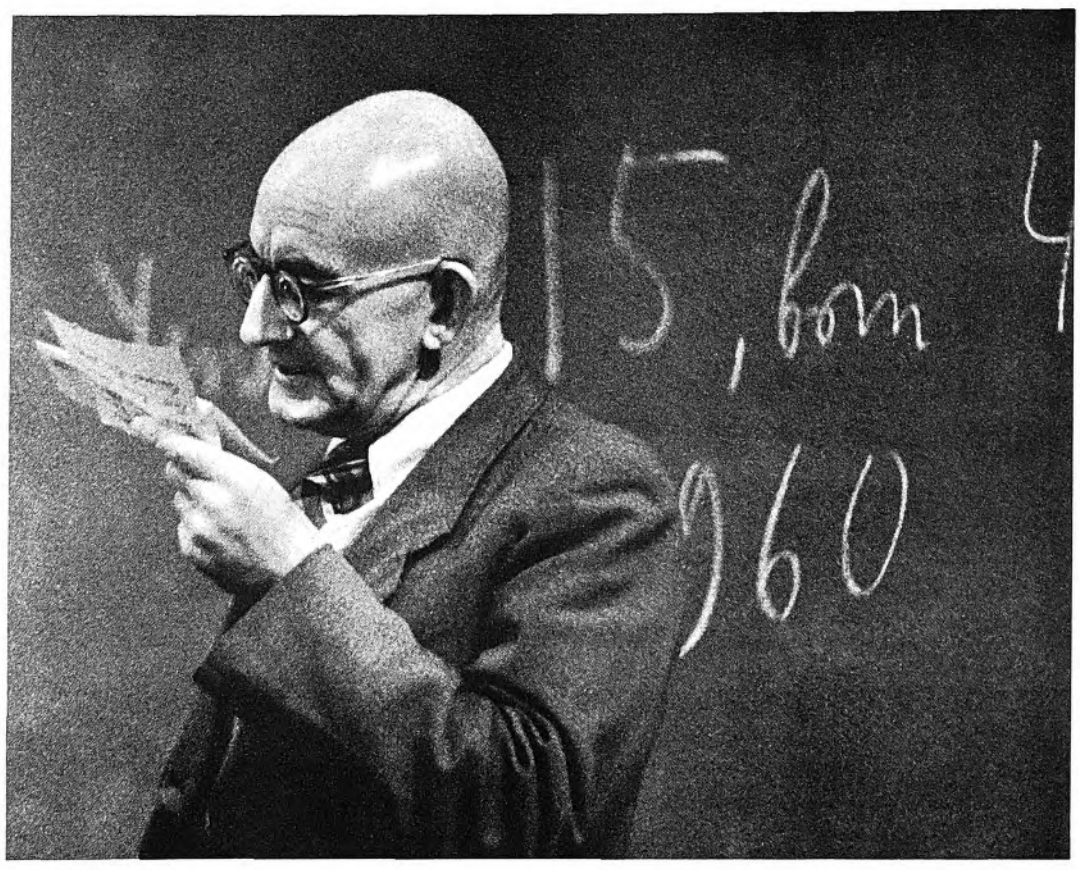


MIKHAIL LEONTOVICH
Physicist, Academician

The answer to the first question is obvious. The second question is more interesting, and a good deal can be said about it. Different people are endowed with different but very precious qualities. Those I think most important in a young scientist are the ability to think *his own ideas* (and that cannot be instilled by a teacher) and strict scientific objectivity, also something that cannot be taught to every student, if it can be taught at all.



PAVEL ALEXANDROV
Mathematician, Academician

I think that a teacher should work along two lines—first, training and teaching *all* his students, the *whole* class; and second, paying special attention to the few gifted young people who show promise of becoming independent researchers.

Accordingly, my major objective is to *stimulate the students' interest in science.* I try to use every contact to give students an appreciation of the infinite wealth and variety of culture the human race has accumulated. University years are the period of the mind's greatest development. The common task of all Moscow University teachers, in my opinion, is to help the student develop his own capacities in the most comprehensive way possible so that he is best prepared for productive, happy and self-fulfilling creative work.

Paraphrasing the famous words of Stanislavsky, I would say that what I value most in a young scientist is that he "love science for itself and not himself in science."

SERGEI BONDI
Literary Critic, Professor

I think that the objectives of a teacher of the history of literature should be these:

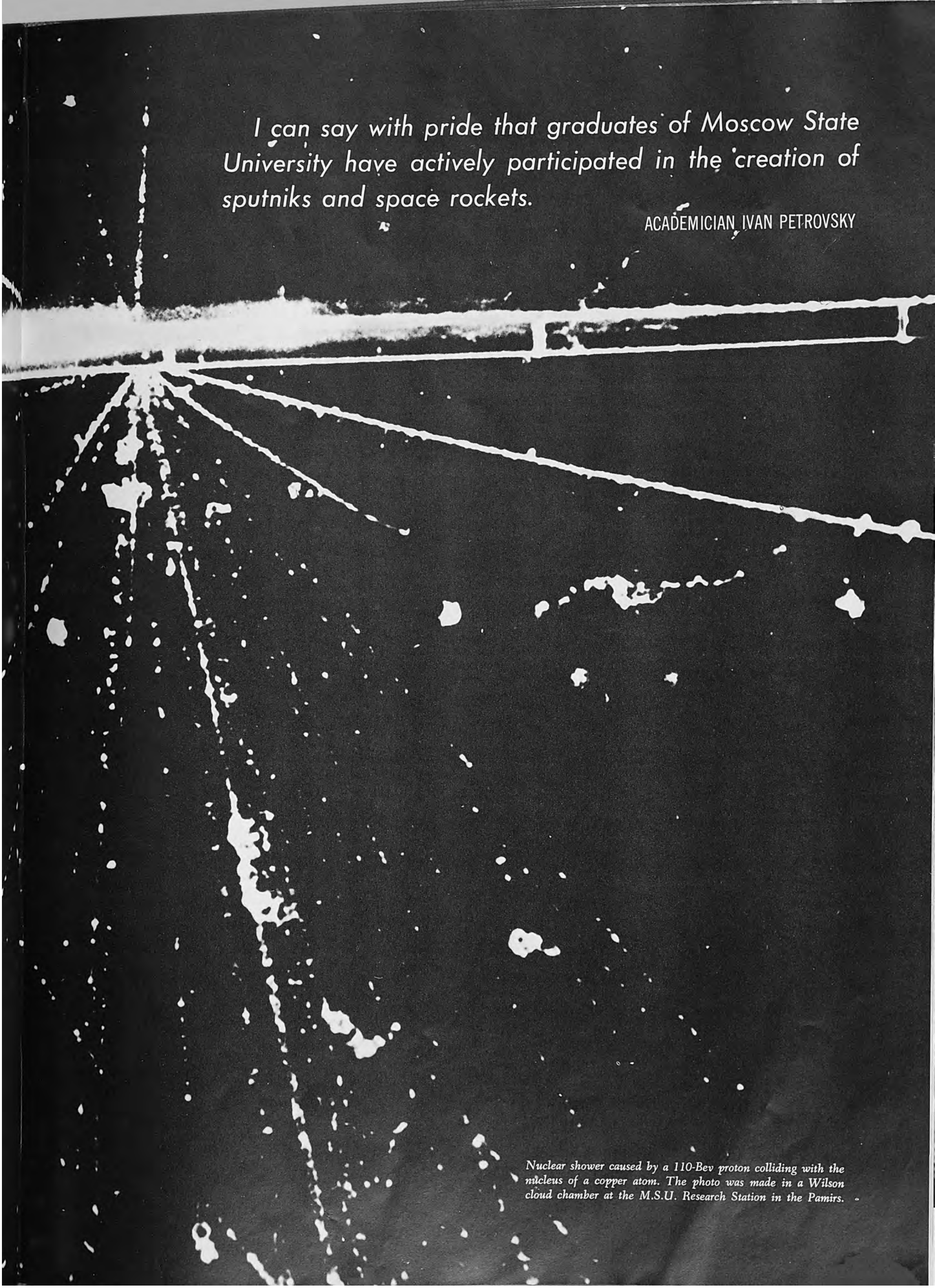
To teach students to appreciate and understand the artistic and ideological content of poetry;

To teach them to think scientifically, to draw conclusions objectively, not to distort or hide facts that do not support their particular bias;

To teach them how to apply Marxist-Leninist principles to the humanities and so further develop these principles in a new context.

These qualities, in combination, are what I value most in a young scholar.

A seminar in physicomathematics conducted by Corresponding Member of the USSR Academy of Sciences Dr. Rem Khokhlov.



Nuclear shower caused by a 110-Bev proton colliding with the nucleus of a copper atom. The photo was made in a Wilson cloud chamber at the M.S.U. Research Station in the Pamirs.

"EVERY STUDENT MUST ENGAGE IN RESEARCH"

FROM THE USSR UNIVERSITIES REGULATIONS

These words are included in the Regulations for Universities in the USSR. Student research is documented in term papers; in graduation theses, which are a more demanding test of the students' maturity in independent investigation; and finally in the graduate dissertations required for a master's degree.

Perhaps the best way to illustrate the intellectual curiosity of Soviet students is by their work. Below are abstracts of studies done by Moscow University students. Some are theoretical, others will be finding application in industry and agriculture. The studies were done in the university laboratories and in the shops and design bureaus of industrial plants.

MATHEMATICS

The Essential Conditions of Optimal Control in Banach's Spaces

Dissertation for a Master's Degree
By Yuri Yegorov

Optimal control is one of the most important problems of modern technology. Mathematical calculations make it possible to establish the optimal operating conditions of a smelting furnace, for example. It can then be stoked up to the prescribed temperature in the shortest possible time.

Yegorov's study is particularly valuable because he does not take the solution of purely practical problems as his point of departure, but makes important theoretical generalizations. He investigates a whole group of problems of optimal control which lead to the study of equations with partial derivatives. Considering individual problems, the study develops an approach to the solution of a whole class of such problems. The significance of Yegorov's work lies in the fact that he considers processes of optimal control that are described by functions with many variables. This expands the area of research and offers the promise of more generalized conclusions.

GEOLOGY

Geophysical Investigation of the Structure of the Earth's Crust in East Antarctica

Dissertation for a Master's Degree
By Sergei Ushakov

Sergei Ushakov is a veteran of three Antarctic expeditions. He made his first visit as an undergraduate and the other two as a graduate student, and spent more than a year in the region all told.

The budding scientist participated in the ferment of discussion at the time as to whether Antarctica was or was not a continent. The discussion was triggered by studies of American scientists in the Marie Byrd Land region, where they found the rock bed far below the ocean level. Similar observations were made by Soviet scientists in the area of Mirny. All this led to the assumption that Antarctica was not a continent but an archipelago.

The geophysical survey of East Antarctica carried out by Ushakov together with junior scientist Georgi Lazarev, demonstrated that the thickness of the earth's crust in the region was typically continental and confirmed the conclusion as to the continental character of East Antarctica.

In another important piece of research Ushakov investigated the capacity of the earth's crust to withstand the weight of Antarctic ice, whose mean thickness is as much as 1.5 miles. His conclusion was that Antarctica is in a state of isostatic equilibrium. This equilibrium results from the sagging of the earth's crust under the weight of the ice and the outflow of the subcrustal matter (substrata) from the area of the subsidence. Ushakov's work adds to our knowledge of the physical properties of the earth's crust and its upper mantle. Similar work has been done by an American, Professor J. P. Wallard.

The dissertation is to be published by the USSR Academy of Sciences Publishing House.

HISTORY OF ART

Revolutionary West European Graphic Art, 1918-1923

Graduation Thesis by Ivan Kuptsov

The years 1918-1923, to which this young scholar directs himself, were marked by great social upheavals in the West European countries. Kuptsov shows how they influenced the work of the leading artists of the period, many of whom abandoned the removed and subjective attitudes of "leftist expressionism" and shifted from a passive contemplation to an active participation in life. They dropped their "exultation in suffering" ideas for revolutionary realism.

Kuptsov analyzes the work of German graphic artists Georg Grosz and Otto Dix. He devotes a chapter to Kaethe Kollwitz, famous for her "War" series (1920-1922).

The entire second part of the study is a consideration of the style and method of the Belgian graphic artist Frans Masereel, known to lovers of graphic art everywhere for his *Human Passions*, *The Sun*, *Idea*, *My Breviary* and others.

BIOLOGY

Certain Specific Features of the Nucleic Composition of Desoxyribonucleic Acids of Animals and Higher Plants

Graduation Thesis by Olga Favorova

A Comparative Study of the Nucleic Composition of Soluble Ribonucleic Acids in Some Species of Bacteria and Animals

Graduation Thesis by Tatyana Dmitriyeva

The living cell is one of the least comprehended areas of research. Venerable world-famous scientists have been working for many years to unlock the secrets of living protein. In this field knowledge is gained virtually grain by grain.

For the past eight years a team of biochemists under Academician Anatoli Byelozersky have been working on the specificity of nucleic acids, a group of biologically active compounds that play an important role in vital cell activity. Nucleic acids are involved in the processes of transmission of hereditary traits and the synthesis of specific proteins.

Olga Favorova and Tatyana Dmitriyeva both derived new data on living matter. The studies of these young biologists, though done independently, are similar in subject matter.

Olga Favorova studied the specificity of the composition of desoxyribonucleic acids of different species of plants and animals. Earlier researches had established that the desoxyribonucleic acids of animals and plants are much the same in chemical composition. By using a more refined research technique she was able to establish the specific differences between these two types of biological compounds and to prove that desoxyribonucleic acids of animal and vegetable origin differ sharply in the content of a simpler chemical compound—pentamethylcytosine.

Tatyana Dmitriyeva investigated the specificity of the chemical composition of nucleic acids of a different type—the so-called adapter or soluble ribonucleic acid. She demonstrated that this nucleic acid also differs in composition, the differences being observed even in closely related organisms.

The graduation theses of students Olga Favorova and Tatyana Dmitriyeva have been published in the journal *Doklady Akademii Nauk* of the USSR Academy of Sciences.

LITERATURE

Eugene O'Neill—1930-1950

Graduation Thesis by Vyacheslav Molev

A notable feature of Vyacheslav Molev's graduation thesis on Eugene O'Neill is that he bol-

sters his analysis of the American playwright with such an abundance of critical material. He relies heavily on Van Wyck Brooks, Joseph Wood Krutch, John Gassner and other critics. The author's comprehensive and thorough analysis traces the development of American drama long before O'Neill.

Molev argues, interestingly and persuasively, that the upsurge of European drama—Ibsen, Chekhov, Shaw, Hauptmann—laid the groundwork for the emergence on the world stage of a playwright of O'Neill's stature.

After establishing the literary and historical background of O'Neill's plays, the author of the thesis proceeds with a concrete analysis of the works. He concentrates mainly on *The Iceman Cometh, Mourning Becomes Electra* and *Long Day's Journey into Night.*

The value of the analysis and of the thesis as a whole is that Molev considers the creative work of O'Neill in the context of contemporary American and world events, an approach that gives weight and substance to his conclusions.

PHILOSOPHY

The Marxist-Leninist Conception of Happiness

Graduation Thesis by Anatoli Zaitsev

Mankind's greatest minds have pondered on the content of this word happiness, eternally new and eternally changing—Epicurus, Helvetius, Spinoza, Hegel and many others. The classical philosophers of Marxism-Leninism have also given much thought to the concept. For his graduation thesis Anatoli Zaitsev studied scores of articles, notes and treatises of these various philosophers.

Zaitsev argues against the definition of happiness as the emotion that accompanies great personal satisfaction. This implies a purely psychological approach. Marxist-Leninist ethics considers happiness first of all a social phenomenon. Man is not an autonomous, self-contained being. He lives in a social community and relates his life to this community. Hence his personal happiness in any real sense requires the happiness of the whole collective. The society he is part of must be geared to give the individual not only the material things of life but also room for free spiritual development, comprehensive scope to apply his physical and mental capabilities. This is essential for his real happiness. Real happiness is not only the satisfaction of the prime necessities of life. "Man is higher than satiety," says one of Maxim Gorky's characters. Zaitsev makes it clear that he is not denying material comforts—they too are necessary for happiness. His point is that genuine happiness is inconceivable without intellectual fulfillment.

GEOGRAPHY

Economic-Geographic Characteristics of the Most Important Changes in the Composition of Urban-Type Settlements in the Eastern Regions of the USSR According to the 1926 and 1959 Censuses

Graduation Thesis by Natalia Khakimova

Changes in the geography of cities reflect the shifts and trends in the development of a country's productive forces. The work of student Khakimova is therefore an economic, rather than a geographic, study.

She analyzes the economic-geographic factors of the rapid eastward shift of productive forces. Between 1926 and 1959 there sprang up in Siberia, Central Asia and the Far East 199 new towns and 740 urban-type populated centers. The number of urban residents burgeoned from 5 million to 31 million. The number of cities with a population of 100,000 increased from six to twenty-nine. In 1926 there wasn't a single city with a population of more than 200,000 in the Eastern regions. Now there are 24, with Novosibirsk and Tashkent running close to the one million mark.

Some people think that statistics are dry as dust, but to the inquisitive researcher they speak more eloquently than words. The writer of the graduation thesis, with these seemingly dull figures, tells the reader a fascinating scientific story of how the new geography was shaped by industry and agriculture in the 32 years between the two censuses.

Khakimova also did the painstaking job of compiling maps showing the relative changes in the urban network of the Soviet Union over the past three decades. These maps, the first of their kind, have great practical value.

ECONOMICS

Linear Programing and Its Application to the Solution of Transport Problems

Graduation Thesis by Natalya Sernova

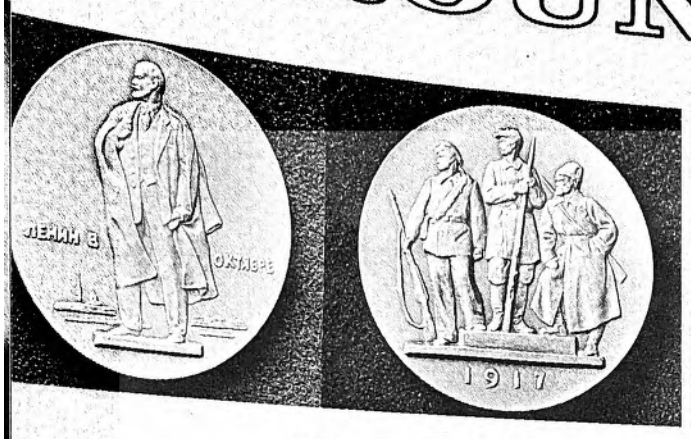
Linear programing, a new mathematical tool for economic planning, chooses the best of any number of possible variants.

In freight transport, for instance, if we have four points of departure and four points of destination, the total number of variants, from which the best must be chosen, is 6,256. If the number of points of departure is increased by only one and the points of destination by four, the number of variants will increase to the astronomical figure of nine to the tenth power. Only linear programing can cope with such figures.

Sernova's computations have been accepted for practical application by the transport agencies of Moscow and several other areas.

The economic importance of her work is evident from the fact that by applying linear programing to timber transport, Byelorussia saved two million rubles in a single year. ★

AROUND the COUNTRY



"THE LENIN SUITE"

The Leningrad Mint has struck a series of 12 commemorative bronze medals to be known as "The Lenin Suite." Each medal commemorates an event in the life and activities of Vladimir Lenin, founder of the Communist Party and the Soviet state. The designer of the medals is People's Artist of the USSR Matvei Manizer.

Photo shows the Lenin in October medal.

STAMPS FOR PEACE

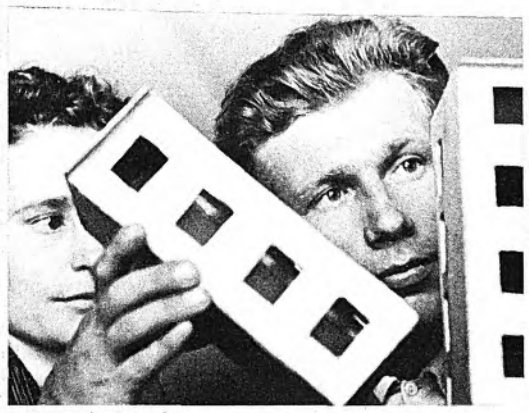
The USSR Ministry of Communications has issued a four-stamp color series dedicated to "A World Without Arms, A World Without War." The first carries the legend "Peace to the World" and pictures the globe and a flower symbolizing peace. The second and third stamps, inscribed "Peace to Space," are similar in design except that the former is perforated. The last in the series is inscribed "Atoms for Peace."

5,000 EARTHQUAKES CHARTED

Kirghiz scientists have compiled composite seismic maps of their republic. Some of the data on the almost 5,000 earth tremors that have occurred during the past 340 years have come from ancient manuscripts. The maps are of great practical interest since they show the regions where violent earthquakes are most likely to occur.

INSTITUTE FOR INNOVATORS

A new type of school for people working in the construction industry in Novosibirsk has been set up. A council of 30 construction workers and scientists comprises the steering body of this institute for innovators. Several hundred construction men are divided into specialized groups to study the most advanced work methods and become familiar with the latest techniques in Soviet and foreign engineering. These students are regularly sent to other cities to learn from innovators there.



PRIMITIVE SCULPTURE

A 20,000-year-old statuette of a woman carved from the tusk of a mammoth was found by Lev Tarasov of the USSR Academy of Sciences' Institute of Archeology. The figure, five inches tall, was unearthed during excavation of an ancient dwelling place of primitive man near the village of Gagarino (Lipetsk Region).

ART RESTORATION

Valuable works of art by such masters as Shishkin, Vrubel and Rubens are being worked on at the Central Restoration Workshop in Moscow. About 500 national and local museums regularly send pictures to the workshop.

Besides restoring the canvases, the specialists often can establish the identity of the artist of a painting. For example, it determined that the seventeenth century Spanish painter Zurbaran did *St. Just* and that the nineteenth century Russian artist Sorokin painted *Family Portrait*.

FITTER-ACTOR'S RECORD

Victor Loginov, leader of a team of fitters in the rolling mill of the Moscow Hammer and Sickle Plant, is one of its oldest and most respected workers and its most famous amateur actor.

A few weeks ago he played his thirty-third role—as Yegorov, a factory director, in Victor Rozov's *Before Supper*. This was a production by the plant's drama group.

His score of premières in 31 years on the stage is one many a professional actor would envy.

Loginov's coworkers at the plant recently gave him a party at which professional artists from Moscow's leading theaters toasted his record on the amateur stage.

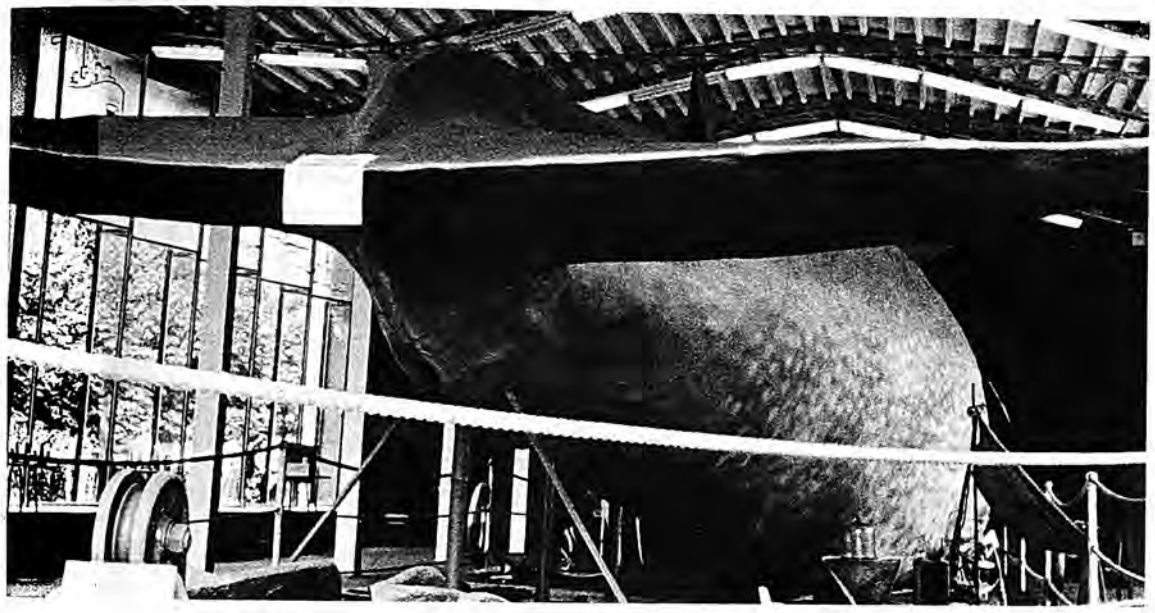
RETURN TO LIFE

The first conference on clinical death was held in Alma-Ata recently. A research laboratory of the USSR Academy of Medical Science has been working on the problem a quarter of a century. Professor Vladimir Negovsky, head of the laboratory, told the conference that Soviet scientists had developed a theory and practical method for reviving an organism in a state of clinical death. Thirty-five hundred people have already been brought back to life by artificial respiration, intra-arterial blood transfusions, internal and external massage of a heart that had stopped beating, and other methods.

HELPER BRUIN

Hunting in the Ussuri wilds last summer, Vasili Bakhlin of Moscow came face to face with a huge mother bear and her cub. Bakhlin was the victor in the encounter and took the cub home with him.

The bruin, named Dimka, is now grown and is Bakhlin's helper, hauling barrels at the food warehouse where Bakhlin is employed. The two go to work together daily.



WHALE IN KIEV

On display in Kiev at the Exhibition of Economic Achievements in the Ukraine is a giant whale harpooned in the Antarctic by members of the Sovetskaya Ukraina whaling fleet. Almost 92 feet long, the live weight of the whale was 140 metric tons. Accompanying exhibits show Soviet whalers at work in the Antarctic, where they have been hunting the giant mammals for the past 17 years.

VIOLIN MAKER

This is Martin Zemitis, noted Soviet violin maker. He fashioned his first violin more than 30 years ago. In his small two-story house and workshop in Riga he has been working ever since to rediscover the secrets of the old Italian violin makers, especially of the incomparable Stradivarius. Experts say that many of his instruments compare favorably in tonal quality to those made by the Italian master. Zemitis has built more than 300 violins in the postwar years alone. His instruments have been played at many national and international music competitions.

LAND RECLAMATION

An irrigation system under construction near Stavropol on the Volga will increase the water supply over a 28,500-acre area. The reclaimed land will grow potatoes and other vegetables, supplied by waste water from industry. In the winter the water will be stored in a reservoir having a capacity of more than 15.5 million cubic yards.

PORTRAIT FROM OUTER SPACE

The Lenin Museum in Moscow has received a touching gift from Cosmonaut Paval Popovich—a portrait of Lenin as a child embroidered an a square of silk.

"On my birthday," the spaceman explained, "Anastasia Mezentseva, a friend of the family's, gave me this fine piece of work into which she had put so much warmth and skill. Before my flight I visited your museum, walked around its halls in a reflective mood, and decided that I would take this portrait that I liked so much up with me."

TRAFFIC NEWCOMER

The Yunost (Youth) 18-seater bus is now being introduced to Moscow traffic. It was made by the Likhachov Auto Plant in the capital. An 150-horsepower engine gives the Yunost a top speed of 90 miles an hour. Now on a test run, it will soon be in service on short intercity passenger lines.

AROUND *the* COUNTRY

MOUNTAINS OLD AND YOUNG

PHOTOS BY
NIKOLAI KALININ

ONE ENRAPTURED TRAVELER wrote: "In the Gobi desert I saw hot rocks that were as black as tar, and on the South Sea islands I saw coral reefs and strange flowers. But when I came to the Altai, I found that there was no need to go to the ends of the world to see wondrous things."

The Altai is a mountainous area in the middle of Asia, far from any oceans. It has an area of 100,000 square miles, not much less than the total area of the Middle Atlantic States of the USA.

A canyon squeezed between ragged mountain slopes, a peak covered by a bluish haze, a huge glacier, a desert in the mountains—the Altai is all of these things. Tourists by the hordes come to see this "continent compressed into the size of a region." On the shore of Teletskoye Lake you will meet travelers from Moscow, Prague, Warsaw and a hundred other places. In winter the Altai is besieged by mountain climbers and skiers.

"An excavator working Altai land will dig up almost the whole Mendeleyev periodic table," was how an engineer put it. *Altan* is Mongolian for gold. The Altai is a land of golden mountains not only because gold is their fall color, but also because their bowels are filled with rare metals. Searching for sable, Siberian ferret and ermine, hunters used to come on deposits of gold and copper. Altai handicraft articles fashioned of silver and semiprecious stones made their way to China, Iran and Eastern Europe.

Because of its wealth from ancient times the Altai has been the most populated spot in Siberia. Far from the center of Russia, the Altai also became a refuge for the persecuted and homeless. Russian peasants fleeing from the oppression of landowners and soldiers escaping compulsory 25-year army service came there in the seventeenth century. The Cossacks built forts to protect the Siberian land from the incursions of the Jungar khans (Western Mongolians).

The mountains appear to be untouched and immutable, just as they have always been. But that is only at first sight, until you see the man-made Bukhtarma Sea, the Bukhtarma Hydroelectric Power Station now under construction, and the several aggregates that are already generating electricity for the Altai. Salt is being extracted from lakes at the foot of the mountains in the northwest. Wheat, sunflower and sugar beet are sown on the plains. Life in the Altai is young and dynamic, but from time to time, when archaeologists dig up stone statues with flat, obliterated faces from the burial mounds, the Altai soil reminds one of its hoary age.

To say that cascades of electric power plants are being built on the Altai's mountain rivers, that millions of acres of virgin land have been put under cultivation, that young people by the thousands are settling there, causes no surprise; these are typical of all of Siberia. It is in deer breeding that the Altai has a monopoly. Those fastidious taiga beauties—the marals (or Siberian stag)—thrive on the state farms, where they get skillful care and have excellent grazing grounds. The antlers of the marals and the spotted deer have medicinal value. The Altai deer breeders have a unique specimen antler that weighs 46 pounds.

The flat-roofed clay huts and log cabins, the glaciers and tumbling waterfalls of these blooming slopes attract writers and artists. But when they get to know the Altai deer breeders, tractor builders and electric power station workers, they all agree that the most interesting thing about the Altai is its people. ★

NEW STAMPS FOR 1963

BY ILYA ZBARSKY

THE FIRST postage stamp issued this year, a four-kopeck, commemorated the hundredth anniversary of the birth of the famous Soviet stage director and actor Konstantin Stanislavsky. His portrait is shown against an olive-green background, and below it is the silhouette of a seagull. This is the emblem of the Moscow Art Theater, where Stanislavsky was a director for many years.

The centenary of the birth of Soviet writer Alexander Serafimovich also falls in 1963, and a stamp with his picture was issued for the occasion. It is a four-kopeck colored gray, brown, beige and red. The USSR Ministry of Communications used a special cancellation cachet to commemorate these anniversaries.

Stamps honoring the handicraft arts, when first issued in 1957, were bought up in practically no time at all. This year a new multicolored series was issued. A four-kopeck pictures such folk toys of the Russian Federation as the wooden "Matryoshka," a set of dolls graduated in size to fit inside one another. A colorful tea pot, vase and animal figure—the work of Ukrainian potters—appear on a six-kopeck. A multicolored 10-kopeck stamp illustrates several items in tooled leather, for which Estonian handicraftsmen are best known. On a blue 12-kopeck are pictured some of Daghestan's famed metal engravers' creations: a footed receptacle, platter and wine vessel.

A new series of four multicolored stamps, all of four-kopeck denomination, has been added to the many portraying the activities of the Soviet younger generation. One, with a beige background, has a nursery scene; kindergarten children are shown on a blue stamp; and a green stamp bears youthful figures engaged in various vacationtime activities. Older students—in more serious activities, such as studying, working at a machine, and planting a tree in an orchard—appear on a yellowish-brown stamp.

The fortieth anniversary of the Civil Air Fleet was observed with the issuance of a series of air mail stamps of 10-, 12- and 16-kopeck denomination. A red stamp, the 10-kopeck, shows an airliner superimposed upon a map of the Soviet Union on which is indicated the 250,000-mile network of inland air routes. The emblem of Aeroflot (the commercial branch of the Civil Air Fleet) appears on the 12-kopeck blue stamp dedicated to international air service. And finally, on the 16-kopeck is a world map with red lines radiating from Moscow to the capitals of 29 countries, symbolizing the Soviet capital's international air links. ★

ECONOMICS: TEMPOS, PROPORTIONS, TIME

Letters from readers ask for more detailed information on how the Soviet Union implements its economic plans and how it views the prospects for continuing development. More specifically, Pittsburgh reader L. Jordan asks about the growth rate of the Soviet economy and comparative indices of industrial development.

Yuri Bobrakov, Master of Science (Economics) answers his question.

PARAPHRASED for use in economics, an old saying would run like this: "All roads lead to tempos."

Tempos are one of the most important indices of a country's economic efficiency, the yardsticks with which the "tone" of a society may be measured.

The pace of economic growth depends to a great extent on such factors as the sufficiency of natural resources and their accessibility, the level of the country's industrial development, and the supply of skilled workers, technical specialists and scientists.

All this is important, but it is not everything. One must reckon with the system of social relations. Just as the soil can stimulate or impede plant growth, so social relations can accelerate or retard economic development. Public ownership of the means of production and the socialist system of economy provide the fertile soil for the high-paced growth of the Soviet economy.

The annual rate of increase in industrial output during the Soviet years has averaged around ten per cent. Some years, depending on the concrete conditions and the tasks facing the national economy, it varies within a narrow range, but it invariably remains high. This is a distinguishing characteristic of socialist production—it keeps developing without crisis or recession.

Some Western economists are wedded to the "attenuating curve" notion. According to them, a fast pace can be sustained until the economy reaches a high level of development, a kind of "maturity," upon which follows "attenuation," *i.e.*, irreversible slowing down of the rate of economic growth. Thus, they claim, diminishing tempos are a characteristic of the economy of highly developed countries.

The experience of our socialist economy in no way supports this pessimistic conclusion. The Soviet Union today is the second largest industrial power in the world; its industrial production has increased to about 63 per cent of U.S. output. But, far from slowing down, its rate of economic development remains high.

There is nothing in the nature of our planned socialist economy to force a reduction in the growth rate when our output reaches the U.S. level or when it goes beyond that level. Our economy rules out crises of overproduction and contracted domestic markets, which have such calamitous effects on the economic life of nonsocialist countries.

It is quite possible, of course, that some "redistribution of growth rates" will occur as branches of the economy begin to produce a surplus. We can already see such "redistribution" in our country. In the fuel industry, for instance, oil and gas have been given preferential development in recent years, whereas coal mining has been developing more slowly. An even faster-paced growth can be observed in the chemical industry.

Slowing down tempos in some branches thus makes it possible, as the need arises, to accelerate growth in other branches, so that the over-all high rate of economic development is preserved.

The program of communist construction adopted by the Twenty-second Congress of the CPSU forecasts that by 1980 industrial production will have increased at least sixfold and agricultural production 3.5-fold, as compared with 1961. This is like saying that in 20 years another five industrial and more than two agricultural countries like the Soviet Union today will be added to present capacities. Twenty years hence the Soviet Union will be producing double the present industrial output of the whole nonsocialist world.

Another saying is apropos, "There can be no tomorrow without today." Today's rates of growth dictate tomorrow's economy. Here are the figures of our present growth:

In 1962 total industrial output was 9.5 per cent higher than in 1961. In some branches production increased by 20 per cent and more, while the output of some consumer goods (washing machines, for instance) increased by as much as 40 per cent. In the first four years of the seven-year plan industrial production was scheduled for a 39 per cent growth; the actual increase was 45 per cent.

The session of the USSR Supreme Soviet held at the end of 1962 discussed and approved the economic plan for 1963, the fifth year of the seven-year plan. It calls for an increase in the output of industrial goods by at least eight per cent over 1962.

In the past four years 3,700 new big industrial enterprises were put into operation, more industrial capacity than was created in all the prewar five-year plan periods. Capital investments in all branches of the national economy, which were to have totaled 101 billion rubles, actually came to 107 billion.

The rapid pace of development also denotes the colossal over-all increase in output. In 1980 a one per cent increase in industrial output will represent 9.7 to 10 billion rubles as compared with 1.55 billion rubles in 1960.

The high rate of growth is mostly accounted for by the steady rise in labor productivity resulting from the use of the latest technological achievements. Higher labor productivity will account for nine-tenths of the projected increase in industrial production and the entire increase in farm output. By 1980 labor productivity in industry will be 4 to 4.5 times that of 1960, and in agriculture, 5 to 6 times.

But the rapid pace of development is not an end in itself. The speedy growth of the whole economy is the basis for a steady rise in the well-being of the people, and it will eventually guarantee them the highest living standard in the world. This is an economic inevitability because planned development under socialism makes it possible to maintain a proper ratio between the industries producing the means of production and those producing consumer goods. The ratio will vary with the level of economic development, the requirements of the society and the need for balancing the economy.

For example, when socialism was only in the making, the primary need was to build a heavy industry as fast as possible. Accordingly, heavy industry grew much faster than the consumer industries. Today, when the country has a powerful heavy industry base and a modern technology, a different ratio is called for.

Priority development of heavy industry remains, since that is the backbone of the country's economic development. But the rate of growth of consumer-goods output is increasing, and the gap between the rates of increase in the manufacture of the means of production and consumer goods is diminishing. While in the period between 1929 and 1940 this gap was 70 per cent, in the 20 years between 1961 and 1980 it will be reduced to about 20 per cent.

The faster growth of consumer-goods output will change heavy industry output. There will be an increase in the production of machines and equipment for consumer-goods branches—light industry, food processing, agriculture, housing construction, and utlitarian and and cultural services. Accordingly, the 20-year-plan promises an approximate sixfold growth in the output of the means of production for heavy industry and a 18-fold growth in the output of the means of production for the consumer-goods industries.

Capital investments in consumer-goods manufacture will also increase. In 1963, for instance, investments in light industry alone will increase by about 22 per cent.

Also important is a proper correlation between industry and farm development. In view of the considerable population increase, the steady growth in individual income and the resulting greater demand for farm products, the CPSU Program set 9.6 per cent as the average annual rate of increase in total agricultural output over the 1961-1970 period. The returns for 1961 and 1962 show that this rate is being maintained.

The national income reflects rising living standards. For the past ten years (1953-62) the annual increment in the national income in the Soviet Union averaged 9.2 per cent as against 2.7 per cent for the United States. Figured in per capita terms, the real income of the Soviet working people increased 18 per cent during the first four years of the seven-year plan period.

One of the best gauges for measuring the rising living standards is the increase in the various free benefits and services to the population from the public consumption fund. During the past four years the volume of these services and benefits increased from 21.5 billion rubles in 1958 to 28.4 billions in 1962. In the same period the volume of retail trade grew by one third, with a rise of almost 40 per cent in meat products, almost 50 per cent in milk, and 40 per cent in sugar. The sale of clothing went up by 48 per cent and of leather footwear by 39 per cent. Four times as many washing machines were bought as compared with the preceding four-year period.

We have seen then that fast tempos of growth are not an accidental but a very natural phenomenon in our economy. Public ownership of the means of production, with its planned and balanced development, the absence of unemployment and crises, the personal stake of the workers in greater output, the rational utilization of resources, the steady rise in living standards—these are the factors that make for our high rate of economic development.

This is the reason we can so confidently predict that the economic plans we make will be carried through. But our progress will not stop there.

The objectives outlined in the Communist Party Program for the next 20 years are not the ultimate. When we reach them, we shall not just say, "Hold on, moment, for thou art beautiful!" Our society will continue moving ahead. Communism will be a powerful stimulus for even faster growth to meet every last requirement of every member of our society. ★

MAN IN SPACE

On April 12, 1961, Yuri Gagarin made the world's first space flight. Aboard the spaceship *Vostok*, he orbited the earth in an hour and a half.

Only two years have passed since then, and already the duration of the space flights is being reckoned in days and the number of revolutions around the earth in dozens, while the distance covered is measured in millions of miles.

Here are some figures illustrating the history of space flight.

LAUNCHING	SHIP	COSMONAUT	COUNTRY	REVOLUTIONS	DURATION	DISTANCE COVERED
April 12, 1961	*Vostok I*	Yuri Gagarin	USSR	1	1.8 hours	25,500 miles
August 6, 1961	*Vostok II*	Gherman Titov	USSR	17	25.3 hours	435,000 miles
February 20, 1962	*Friendship 7*	John Glenn	USA	3	4.9 hours	77,700 miles
May 24, 1962	*Aurora 7*	Scott Carpenter	USA	3	5 hours	77,700 miles
August 11, 1962	*Vostok III*	Andrian Nikolayev	USSR	64	95 hours	1.6 million miles
August 12, 1962	*Vostok IV*	Pavel Popovich	USSR	48	71 hours	1.2 million miles (in twin flight with *Vostok III*)
October 3, 1962	*Sigma 7*	Walter Schirra	USA	6	9.2 hours	155,300 miles
May 15, 1963	*Faith 7*	Gordon Cooper	USA	22	34 hours	590,300 miles
June 14, 1963	*Vostok V*	Valeri Bykovsky	USSR	81	119 hours	more than 2 million miles
June 16, 1963	*Vostok VI*	Valentina Tereshkova	USSR	48	71 hours	about 1.2 million miles

"SEAGULL CALLING . . ."

"SEAGULL CALLING . . ."

"SEAGULL CALLING . . ."

REPORT FROM COSMODROME
BY VASILI PESKOV

KOMSOMOLSKAYA PRAVDA CORRESPONDENT

THIS IS a report from the cosmodrome. Valya was on earth only a few minutes ago. We brought her flowers this morning, heard her talk, saw her smile. Then came the thunder of the lift-off. I want to tell you about Seagull and how the day at the cosmodrome began.

It needs infinite tenderness to describe the scene! Men stood at attention beside the rocket. The firm tread of men resounded on the concrete. These were the men rocketeers carrying flowers to her in their strong, sun-tanned arms. A man carrying flowers is hardly an extraordinary sight. But you can be sure that no men ever offered a woman flowers with such respect and gentle devotion. Valya Tereshkova is really two girls: one in orange coveralls, the other in a sky blue dress.

"Valya, we're turning the rocket over to you now. Everything has been checked. Everything is in tip-top shape. It's ready to go."

The girl and the rocket. There they stood, side by side. The girl wore white shoes and a trim blue dress. If this were not in the middle of the deserted steppes, if it were not for the concrete slabs of the launching pad, I would have said she was keeping a date. Valya Tereshkova is a pretty girl with a nice figure. The wind caressed her fair hair as she took charge of the rocket. There they stood again, a daisy and a tall poplar. That was what so deeply moved the rocketeers proferring their flowers, the State Committee chairman and the scientists looking on.

The steppes were still warm from the heat of the previous launching, and the excitement it had generated had not yet subsided. During the lift-off I had stood next to her at the observation barrier. She had worn a plain blue dress with a floral print and had her binoculars trained on Bykovsky's rocket. She was carrying a double weight of anticipation then, sharing the anxieties that should have been Valeri Bykovsky's alone. Fascinated, she watched the rocket's eruption of lightning. To me it seemed that it was the thunder and not the breeze that was stirring her hair. The lift-off was magnificent.

Later that day I met her at the Communications Center. She was sitting in front of a large TV screen, watching the face of the man who had just made his way into space. She reached for the microphone:

"Calling Hawk, calling Hawk!" she cried. "Recognize my voice? Greetings, best greetings!"

The face on the screen smiled.

"I'm waiting."

And now she was the mistress of a rocket in her own right. The deep red sunset colored the little window of the cottage beneath the poplars. We journalists were waiting, hoping Valya would come out. It had always been men cosmonauts who had stayed in this cottage the night before the launching. It was from here that they had set off in the morning to dress for flight. But the cottage was a girl's now. The Chief Designer turned up and waved to us:

"Time for sleep, boys," he said. "You mustn't bother her now!"

While waiting for the launching, we journalists lived in the same hotel as the cosmonauts. We played volleyball with them and went fishing together. We saw Valya do her daily dozen, watched as she pored over her ship's log, listened to music, looked at a film, packed Bykovsky's rations, his only baggage, with Gagarin. We also noticed that she had her hair done two days before the launching.

Everybody at the cosmodrome liked that girl in blue.

She had a lot of work to do in the days before her trip into space. She had to study the ship's charts and the flight program. Every day after her exercises she drove to the launching pad where her ship was being readied.

Valya is an omnivorous reader. At the launching pad yesterday I saw her with a book, one of Stefan Zweig's novels. Who was her favorite writer? She mentioned Leo Tolstoy, Makarenko and Sholokhov. "They write so honestly," she said. What was her favorite song? We often heard her hum "I'm in Love with Life!" It was not that she liked this song better than others. It just happened to be her song, the one best suited to her character, for she really is in love with life. She was a textile weaver, then a sky diver, labored over her YCL activities, and studied hard. Did she care for music? Everything she did was music to her. She took on extra work voluntarily, and conscientiously finished every job. She came through the tough road to the cosmos, the road that had stopped so many candidates, no worse than the men. But she is no less feminine for all that. Her favorite perfume is Red Moscow. Her favorite flowers are daisies and white gladiolas.

A clear, pleasant day dawned on earth. Transparent clouds like fairyland birds drifted over the cosmodrome from the east. We received our report on Valya: She had risen at 8 o'clock, done her exercises, and was now putting on her space suit.

The girl we saw now was not simply a girl, she was a woman cosmonaut in warm, blue togs. The emblem on her chest was a burst of sunrays against a blue background and a dove's silhouette embroidered in silk with the letters USSR below it in red. She was putting on her helmet, and the indicators were being fastened.

The rocketeers and scientists were doing a final checkup of the ship and rocket carrier on the launching pad. Voices rang out from various parts of the site: "The system is ready! Ready!"

A blue bus pulled up some 40 paces from the rocket exactly on time. All eyes fixed on the door.

As Valya came out, everybody began to applaud—including the people on the platforms, who stopped working for a moment.

All cosmonauts seem to have the same gait as they walk to their ships. The orange coveralls make them look very much alike. But the face and the smile of this cosmonaut belonged to a girl. All the world would know that smile before the day was over. We were the first to see it in the oval helmet.

Her final report took a quarter of a minute: "Cosmonaut Tereshkova ready for flight!"

There were kisses of farewell. Some of those seeing her off were old enough to be her father or even her grandfather. Then came the kisses of her contemporaries—Gagarin, Titov, Nikolayev.

Valya went up the stairs to the lift. The same thing had happened the day before yesterday, but it had been Bykovsky who had stood there. Like him, she clasped her hands and shook them over her head. The wind carried her words of farewell off into the steppes. The door of the lift clicked. It was the same sort of click you might hear at home. One of the designers of the ship went up in the lift with Valya. He helped

her get set in the cabin and gave her some final advice. That was all. The hatch closed. Now Valya could hear only through the radio. The earth called her with the voice of Gagarin:

"Calling Seagull! How do you feel? We're checking the instruments. Switch on the globe."

"Seagull calling, Seagull calling! Am switching on the instruments."

Another loudspeaker called out, "Leave the launching pad, everybody! We rode to the observation station. I stood at the same spot where I had watched the previous lift-off. There was a mark on the painted barrier. Valya had scratched it with her fingernail the day before yesterday when she heard the command: "Blast off!" Her voice came from her ship now.

"Seagull calling! All's well here. The instruments are in order. So are the pressure, the humidity, and the temperature in the cabin. All's well!"

Then we heard the voice of the Chief Designer:

"We envy you, Valya. It's 95 degrees out here, and we're broiling."

The web of clouds continued to spread across the cosmodrome, and the wind was still driving a mist of dust past the rocket to the yellow steppes. The rocket stood tall, open to the wind. I very much wanted to touch that rocket, to wish it a happy journey. There were some who were doing just that. Gagarin chanted a message to the ship: "Seagull! Seagull!" Chalked inscriptions appeared on the rocket: "Happy journey, Valya!" "Valya, all the rocketeers send you one big kiss!" "Good girl, Seagull!"

A 15-minute countdown was announced.

"Seagull calling! I've shut the glass of my helmet and am putting on my gloves."

Fifteen minutes to the blast-off. How many poets had written about those tense 15 minutes. They were right. Those were 15 anxious minutes.

"Seagull calling! Seagull calling! I'm ready for the blast-off!"

The 15 minutes ticked away. With my eyes on my watch, I phoned the main control station:

"We would like to know where Valeri is these 15 minutes."

A half minute of silence followed, evidently calculations were being made.

"He's heading toward India from the equator."

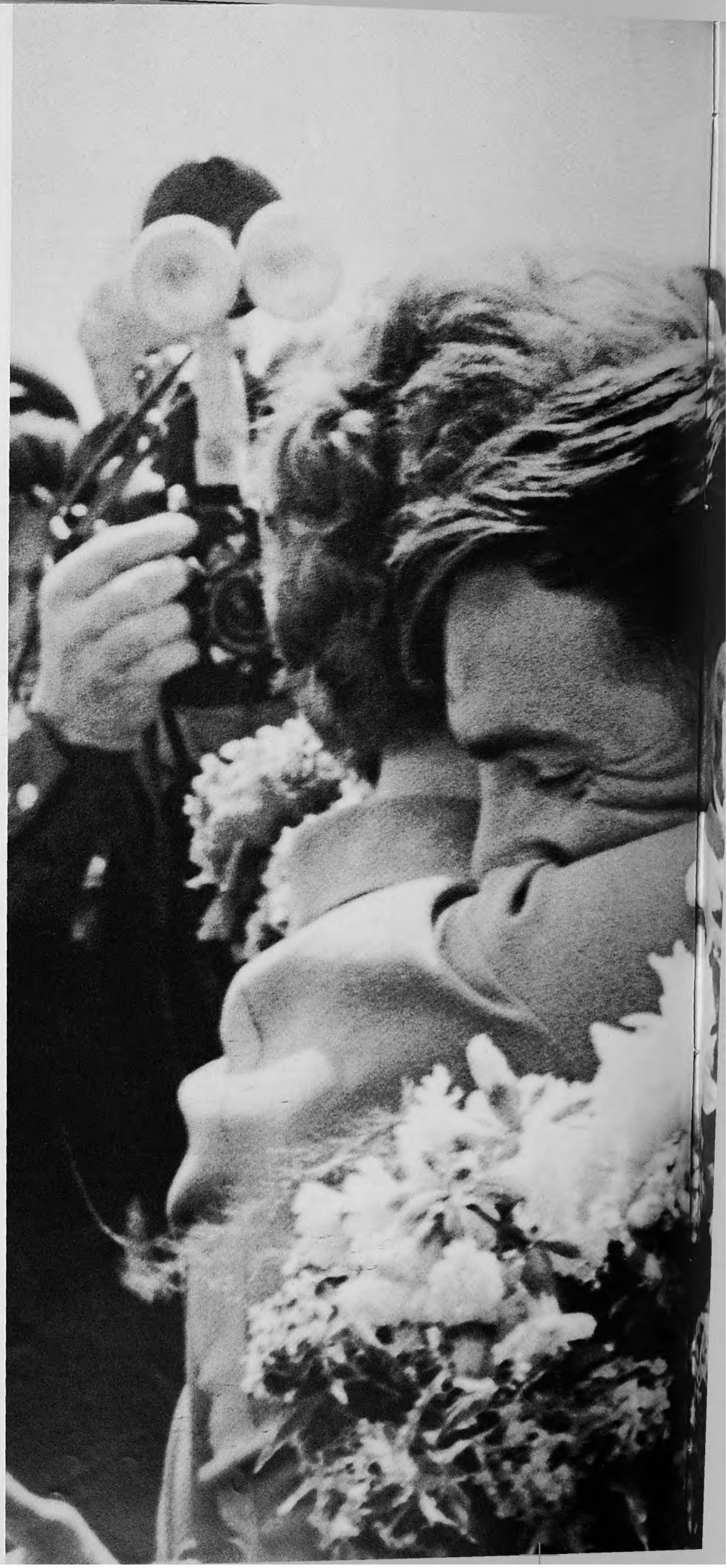
It is not only minutes, nor even seconds, but the tiniest fractions of seconds that count at launching. We listened in sweltering silence. A huge glass bowl of blue seemed to have capped the whole of the steppes. There was not a sound under those hot vaults. The wind had even stopped whirling dust over the expanses. We could hear only the fledgling sparrows twittering for food. I looked at my watch again. How curiously uninvolved the second hand seemed to be. But it would be touching off the signal when it reached the figure four. Tick-tick-tick. . . .

"Blast off!"

First came a brief flash, as though the ray of a beacon had struck the rocket. Then a huge cloud of smoke and dust rose to enormous heights, as if a volcano slumbering for centuries had suddenly erupted, turning the sky black. Then came the rumble, the growing rumble. That welling roar made our fingers twitch and seemed to stir the pages of our notebooks. Then the flame. At first it was a round, glowing ball, but it soon stretched into dazzling pillars. The rocket was in the air, and kept going and going. "It's going, going!" were the words that broke from all of us under the screen. "It's going, going!" Our applause mingled with the thunder. "Going!" The rocket trailed long tongues of flame. For an instant it seemed to have left a trail of snow in the sky. That was the white inversion trail. Within two or three seconds we could see only a little lick of flame, then only a dot, and then nothing at all. There was more applause. We felt like shouting our exultation.

"Seagull calling! Seagull calling! All's well

(Continued on page 40)



"On this festive, joyful day when we are honoring the latest Soviet cosmonauts, heroes and conquerors of space, we repeat again: The second half of the twentieth century can bring mankind tremendous achievements in the sphere of scientific, technical and social progress. Let us strengthen friendship among the peoples of the world. May people of good will fight for peace on earth, for the happiness of all peoples."

From N. S. Khrushchev's speech
in Red Square on June 22, 1963

MOSCOW WELCOMES COSMONAUTS

(Upper left) Valentina Tereshkova, the first woman to travel in space, and Valeri Bykovsky, the first man admitted to Party membership while in space, on their arrival at Vnukovo Airport.

(Left) The people sent millions of flowers to the two cosmonauts, who were met by heads of the Soviet Government and the Communist Party, foreign diplomats and thousands of Muscovites.

(Upper right) The six cosmonauts, shown with N. S. Khrushchev at the Lenin Mausoleum, have spent 384 hours in space, circling the earth 260 times and covering a distance of 7,279,000 miles.

(Right) All the space pioneers have traveled the Route of Triumphs from Vnukovo to Red Square. An equally warm reception awaits the first cosmonauts returning from the moon.

WHAT IS HAPPINESS?

MAN IS a social being and can be happy only when he lives socially. But social living has its obligations and restrictions. It is impossible to live in a society, Lenin pointed out, and be free from society. Given these conditions, can society ensure the happiness of all its members and how must each person conduct himself to achieve that happiness—these are the questions asked by anyone who reflects on the meaning of life.

The rift between duty and happiness is bridged, we believe, only in a classless society, where the personal welfare of the individual depends on the welfare of everyone else in the society. Under socialism the satisfaction of personal needs and the development of individual abilities is contingent on the growth of public wealth, on the quantity and quality of labor contributed by each worker. Socialism is a societal structure whose objective is the happiness of every one of its members.

It is not by coincidence, then, that under socialism a man's happiness merges with his social duty. When he answers the call of duty, he directly or indirectly contributes to his own happiness, since the old individualistic alternative, "Either my happiness or the other fellow's," no longer holds. It is pushed out by a new principle based on collective living, "If you want to be happy, work for everybody's happiness." In time this awareness of the needs of others, this sense of public duty, becomes an integral part of the very being of the most advanced people. The striving to bring happiness to people becomes a compelling personal urge. Duties to society then are assumed willingly and voluntarily because they are basic to personal happiness. Our best people today think the way Nikolai Chebotaryov, a lathe operator and university student from Rostov, does. He put it aptly, "One person drags a soft couch into his apartment: his aim is to make his home more comfortable; another looks for minerals in the frozen taiga mountains: his aim is to make the whole world more comfortable."

However, in closing the breach between happiness and duty, socialism obviously does not, as yet, rule out the possibility of conflict between public and personal interests. Our level of production is still not high enough to meet all the demands of the people. Economic difficulties unquestionably do affect a man's happiness. There are still families and individuals who do not have the wherewithal for all their needs. Not everyone by far is able to choose the kind of work he is best and most happily suited for. We still come on instances of bureaucracy.

All these leftovers of social injustice are being eradicated as we build communism. The living standards of the various strata of the population are beginning to level off, the pattern of consumption is steadily improving, the housing problem is rapidly being solved, the working day reduced, social security benefits are increasing. The volume and variety of free services to the population financed from public consumption funds are growing. People are becoming emancipated from the private property mentality and from religious and nationalistic prejudices. Education, science and the arts are, in fact, becoming available to everyone. Active interest in the arts and sciences opens new intellectual perspectives and makes life richer and happier. People are becoming more community-minded, taking on public responsibilities, participating in self-government. As for bureaucracy, red-tape and other such antisocial remnants, they will disappear in the transition to communism, never again to humiliate, degrade and hurt man.

It does not follow, however, that once we do away with social and moral evils all suffering and disappointment will vanish from man's personal life. But not all distress and disappointment necessarily makes for catastrophe. Moreover, distress, and even suffering, may be caused by certain phenomena in social life even in a communist society. Struggle between the new and the old, between the progressive and the backward, is an eternal law of life. The two sides of this dialectical whole do not represent a clash of abstract ideas but are the actual positions that people take, living people who feel the joy of victory and the bitterness of defeat. It would be foolish to assume that in a communist society we would have no struggle of opinions on science, ethics, and the arts. We can see, for instance, how a man's plans for a career might go up in smoke because he is proved wrong in a scientific dispute. But the higher man's moral consciousness and the more closely his personal happiness is intertwined with the general happiness, the less likely are adversity and suffering in communist society to attain the proportions of a catastrophe.

Our public and private life is not idyllic; there is a continuous struggle waging between the old and the new in every field of thought and endeavor. This same struggle is constantly going on between the two ideals of happiness—the communist and the philistine. The people that have chosen the philistine ideal of happiness are one of the major causes for unhappiness in our society. The self-seekers, parasites, bribe-takers and speculators reject our ethical standards and think personal material well-being the only sign and source of happiness. The more money and comforts of life a man has, they believe, the happier he is, even if it is at other people's or at society's expense. They keep searching for ways and means to implement their ideals, sometimes timidly and sometimes arrogantly crossing the borderline of ethics and the law. However, in our society material security dishonestly obtained usually proves to be transient. There is always serious trouble in store for people who resort to antisocial activities—from a guilty conscience and condemnation by his associates up to a prison sentence.

The number of people of this stamp in our society is insignificant. But it is not a matter of numbers so much as the amount of moral damage they do, the influence they exert on other unstable characters.

Very often this philistine ideal of happiness dresses up in the garb of the "little man" satisfied with his personal honesty, and a family and work life that excludes anything the least bit unpleasant. Happiness for such people is a "modest material security" and an uninvolvement that reduces itself to complete indifference to other people's problems. Their simple code of ethics is: Be servile to those on whom your material welfare and job promotion depend, make the minimum demands on yourself, get as much out of others as you can and give them as little as you can get away with in return. Characteristic of these people is their covert encouragement of evil in the form of "nonresistence to evil," so long as it does not touch them personally. At times they even encourage evil openly if it holds out enough promise in the way of personal material advantage or if it forwards their career climbing. Aware of the fact that their philistine ideal of happiness is in conflict with the morals of our society, they try to hide the real motives for their behavior, or argue the press of circumstances or even the "indifference" of society to their personal interests.

It is worth noting that the so-called happiness of the "little man" is a destructive illusion. Instead of the security he expects, he is haunted by fears (what if something happens?); instead of confidence and sincerity, what he begins to feel is secrecy and suspicion; instead of the peace and serenity he is looking for, he is eaten by envy.

In our times happiness in any real sense is given only to those who reject the smug and threadbare philistine concept of happiness. "The revolution is continuing," wrote the Volgograd concrete pourer Nikolai Artamonov in reply to a questionnaire of the newspaper *Komsomolskaya Pravda's* Institute of Public Opinion. "A great character change is going on everywhere—in work and in life. Being swept away—for good—is everything false and old in people—in the million-strong people—and the beautiful is taking its place. . . . In my childhood I wanted to be an artist, in my youth—a poet, and now—to be useful to my country. . . . It sometimes is very difficult for me, especially when I see people building their happiness on the purse. At times I think: Why is it that I, who would like to enjoy the benefits of life as much as anybody else, work as hard as I do? And I answer myself: Because I measure life not by petty pleasures but by how useful I am. . . . I cannot behave any other way. That is the way I live. That is the only way I know to be happy."

If we were to define happiness, however, it would not be simply in the subjective terms worker Artamonov uses. It is not only a matter of a man feeling happy or of others thinking him happy. There are objective criteria for happiness. To be happy an individual must feel free; he must have everything he needs for the development of his physical and spiritual powers, and he must make full use of these powers. "The criterion of real freedom and happiness," said Nikita Khrushchev, "is a social system which frees man from the oppression of exploitation, grants him broad democratic rights, ensures him the possibility of living in decent circumstances, makes him confident of the morrow, develops his personal abilities and talents, and gives him the consciousness that his labor is useful to society as a whole. Socialism is precisely such a social system."

It takes both objective and subjective evaluation to determine whether a man is happy or not. Although the objective criterion is the more important, it is obvious that without subjective consciousness there can be no real happiness. And this awareness, by the way, is not only a feeling of satisfaction, although that is the strongest element in the emotion. Satisfaction comes with the achievement of an aim, but the sense of happiness is there even when the aim is being chosen. To think that happiness goes once the desired goal is reached is to impoverish, narrow down the definition. Frequently enough it is dissatisfaction that serves as a stimulus for activities that bring happiness.

We should emphasize here that a person's satisfaction or dissatisfaction is determined by his convictions, his general outlook on life. Therefore a definition of happiness would be incomplete if it were confined to the emotions—joy in love, maternity, friendship, creative inspiration, etc. Consciousness and conviction are very much involved.

Marxist ethics rejects the view of happiness as an incidental gift of fortune outside the bounds of ethics, knowledge and beliefs. "Only the man that sets himself great aims and fights for them with all his strength can be happy," said Mikhail Kalinin.* A life without ideals, even if a man is "well to do and financially secure, is dead. It has no value at all, it has no continuous heartbeat, it has no impetus to forge ahead. This is not living but a closed chain of unpredictable accidents and senseless caprices of fate."

Happiness is not compatible with indifference. Moreover, indifference dries up feeling, easily degenerates into hypocrisy and a lack of concern for either human suffering or joy.

What then is happiness? The definition the writer Alexei Tolstoy arrived at seems to us to meet all the conditions—a "feeling that results from the full social use of one's intellectual and physical powers. Primarily it is

*Mikhail Ivanovich Kalinin (1875-1946), a follower and coworker of Lenin and President of the Presidium of the USSR Supreme Soviet from 1922 to 1946, was an outstanding exponent of Soviet ethics.

BY PYOTR LANDESMAN AND YURI SOGOMONOV

a matter of social morality. Individual happiness outside of society is impossible, just as impossible as keeping a plant alive that has been uprooted from the soil and thrown on sterile sand. A social system either does or does not provide the means for the individual to develop all his capacities; a social system either enhances the individual's powers or robs him of his natural reserves of strength."

We believe that socialism, and even more so communism, assures the comprehensive and harmonious development of man's physical, mental, moral and esthetic powers.

Labor free of exploitation, which under socialism transforms ethical relations, is the primary condition for and component of real happiness.

"Voluntary productive activities," Frederick Engles wrote, "is the greatest pleasure we know."

Labor for the social good is an inexhaustible well of inspiration, the source of personal happiness for millions of builders of communism. Twice Hero of Socialist Labor Alexei Ulesov, an electric welder from the city of Stavropol, Kuibyshev Region, puts it in personal terms: "It may sound egotistical, but it often seems to me that I'm the happiest of people. Sometimes it is hard for me to know where my personal happiness ends and where the public, our collective, happiness begins. In any case. I've never sought my own, some kind of special, private little path to happiness. As far back as I can remember, I have always been with the people, forging my happiness together with them in labor and struggle. Yes, indeed, I'm very happy! And not only because I was fortunate in my family life, met a real friend in my wife, have a good relationship with my children and am proud of the work they are doing. . . . My happiness has many aspects. . . . Good music gives me pleasure and stirs my emotions. My heart beats faster when I read the works of our young, sincere, Soviet writers. Indeed, how rich I am in joys! But I can say very honestly that my biggest joy is my work. And if we, the working people of the land of socialism, have become the creators of a new life, if we have reached a point where we can experience the full measure of human happiness, we owe it to our state, to our Leninist party. It was they that so generously gave me, a plain Soviet worker, all this happiness." Only labor creates the material basis for social well-being, for satisfying the basic needs of all people, and lays the foundation for personal happiness, Any other way to happiness sets up road blocks for others who are striving to reach that universal goal.

We should point out that our irreconcilable attitude toward individualism does not at all mean that we deny individual differences. Our very concept of happiness presumes that its expression will take a diversity of forms, though these two ideas may sometimes appear to be incompatible. The literature of the past held to that concept to a degree. The world from which great writers and poets borrowed their themes did not pamper many of them with happy lives. No wonder the individual characterizations they sought for to dramatize human fate they found only in grief, suffering and misfortune. Leo Tolstoy opens *Anna Karenina* with the assertion that "Happy families are all alike; every unhappy family is unhappy in its own way."

Socialism, which has freed man from all forms of social inequality and oppression, does not set people in completely similar circumstances, in fully congruent life situations. There are so many factors (field of work, place in the community, life experience, temperament, inclination, etc.) that determine the compass, intensity and permanence of happiness as well as its individual coloration, that we should talk not about the standardization of happiness but about its kaleidoscopic diversity. As communist relations develop, happiness is more universally realized and, at the same time, becomes infinite in its diversity.

However, though the morals of our society have long since rejected the philistine ideal of happiness, historical inertia still preserves some of its forms. Ethical progress is closely bound up with the ideals of happiness, which change as man himself changes. In our times that process of change is taking place with unusual speed. As the man of the future is shaped, so is his moral code, the ethics required to be able to comprehend and perceive the happiness we have defined. Once that definition is understood and accepted, it becomes a motivating force for people's political, social and intellectual activities, and these activities in turn bring happiness closer. That is the reason our socialist society is so interested in establishing the correct concept of happiness in all its members.

Marxist ethics is optimistic about the possibilities for mankind as a whole and each man in particular to achieve happiness. It repudiates the fiction that misery is the natural human state. It calls on men to fight for a lasting peace, for peaceful coexistence among nations, and rejects the defeatism of those who fearfully accept the inevitability of thermonuclear war. It believes in the technological, social and ethical progress of mankind.

"Communism accomplishes the historic mission of delivering all men from social inequality, from every form of oppression and exploitation, from the horrors of war, and proclaims *Peace, Labor, Freedom, Equality, Fraternity* and *Happiness* for all peoples of the earth."

In these concluding words of the introduction to the Program of the Communist Party of the Soviet Union, the happiness of all peoples is declared to be a social and ethical necessity. That happiness, as the communist system of values defines it, is inconceivable without peace, labor, freedom, equality and fraternity.

Courtesy of the magazine Voprosy Philosophii

our Calendar

August 5, 1895. Frederick Engels, a founder of scientific communism, friend and comrade in arms of Karl Marx, died on this day. He was the first to express the idea that political activity inevitably leads workers to the realization that they have no other alternative than socialism. Together with Karl Marx, Engels wrote the *Manifesto of the Communist Party*, in which the Marxist program was first enunciated. It declares that Communists have no interests different from those of the only consistently revolutionary class expressing the interests of all the people, the proletariat.

In his philosophical works *Dialectics of Nature* and *Anti-Dühring* Engels demonstrated, through generalizing the achievements of contemporary science, that just as all natural phenomena are based on material causes, so is the development of human society conditioned by the development of material productive forces. Private property, classes and the state appear at definite stages of economic development and are historically transient.

August 6, 1961. The Soviet spaceship *Vostok II*, piloted by Gherman Titov, took off from the Baikonur cosmodrome. This was the second manned flight into outer space. The ship's equipment functioned normally, the temperature in the capsule not exceeding 65 degrees Fahrenheit; its humidity was 70 per cent. From time to time the cosmonaut switched over to manual control. The ship made 17 orbits of the earth in 25 hours 18 minutes, and landed on August 7.

After the results of these first two manned flights had been studied, the first group space flight in history was launched in August 1962. Cosmonauts Andrian Nikolayev and Pavel Popovich flew their ships simultaneously in outer space for 71 hours.

August 8, 1917. The Sixth Congress of the Russian Communist Party was convened. The February Revolution of 1917 overthrew czarism but did not solve most of the problems facing the country. The Provisional Government, representing the counter-revolutionary bourgeoisie, continued the war so unpopular with the people. The land was not turned over to those who worked it. Through mass lockouts the big industrialists tried to abort the Revolution by starving the population. In July 1917, the Provisional Government ordered the Cossacks and military cadets to fire at a mass demonstration of workers gathered around the slogan "All power to the Soviets!"

The Bolsheviks maintained that since the counter-revolutionary forces had seized complete power, the peaceful development of the Revolution (the gradual transition from a bourgeois-democratic to a socialist revolution—which they had recognized as a possibility for Russia by reason of specific social and economic factors) was now out of the question. That is why all the decisions of the Sixth Congress of the Party were aimed at preparing for an armed uprising. On the eve of November 7, 1917, the people rose and took power into their own hands.

August 20, 1918. Vladimir Lenin wrote a "Letter to American Workers." At the time, the Soviet Republic was encircled by a ring of fire—the Civil War and foreign military intervention.

Lenin voiced the conviction that American workers would not take sides with the forces of international reaction. "The American people have a revolutionary tradition," Lenin wrote, "that has been adopted by the best representatives of the American proletariat, who have repeatedly expressed their complete sympathy with us, the Bolsheviks. This tradition is the war of liberation against the British in the eighteenth century and the Civil War in the nineteenth century."

In 1920 the young Soviet Republic defeated the internal counterrevolutionaries and drove out the interventionist armies. One of the reasons the intervention failed was the solidarity of the workers all over the world with the working class of Russia. In many countries they formed "Hands Off Russia!" committees, refused to ship munitions, obstructed military operations, and thus helped the people of Russia defend the world's first socialist republic.

★

ILYA REPIN

BY TAMARA YUROVA
MASTER OF FINE ARTS

THE PAINTINGS of Ilya Repin (1844-1930) grip the heart and imagination of the viewer today no less than in the artist's own time. One can be enthralled for hours studying the details of his *Volga Boatmen, Zaporozhye Cossacks Composing a Letter to the Turkish Sultan, A Religious Procession in Kursk Gubernia* and his many portraits.

This paragraph from a letter to a friend does much to explain the timeless quality of his paintings: "I refuse to make my pictures decorative wall hangings pleasing to the eye; I will not cater to the new tastes of the time. With whatever ability I have, I am trying to incarnate my ideas in the truth. The life around me stirs me too deeply, gives me no peace of mind; it forces its way onto my canvases."

Repin's love for that world around him and his profound understanding of its phenomena enabled him to create pictures that were magnificently moving comments on the social problems of the day. His work represents the highest achievements of the *Peredvizhniki.**

Ilya Repin was born in the Ukraine. As a child he loved to cut out paper horses and paste them on the window panes of his house, to the delight of passers-by. After receiving a box of paints as a gift, he had neither time for nor interest in anything else but painting. In his teens he studied drawing at a school for military topographers and also took painting lessons from a local artist. Before long he was decorating church interiors, painting icons and religious frescoes.

When he was 19, he decided to get more training and went to St. Petersburg, where he attended the Academy of Fine Arts. While still a student at the academy he painted his famous *Volga Boatmen*, which not only made him famous but became a milestone in the development of the Russian school of painting. Thus it was not at all surprising when he received a gold medal upon graduation.

In the *Volga Boatmen* Repin revealed his penchant for painting the burning issues of the time. Condemning the common practice of having river boats pulled by manpower, the artist looked deeply into the suffering hearts of those human beasts of burden. He depicted them as enslaved but indomitable, unbroken, great in their suffering.

Repin saw the czarist absolutism of his time with the eye of a democrat, and painted what he saw. He was a master of both social characterization (*A Religious Procession in Kursk Gubernia* has been called "an encyclopedia of Russian life" because of its representation of the various social classes during the post-reform period) and psychological delineation *(Arrest of a Propagandist, Rejection of a Confession* and *The Unexpected Return)*.

The last-named, done in 1884, is considered to be among his best paintings having psychological content. In the gripping tableau of the exact moment when eye met eye lies the drama of the situation—the revolutionary returned from exile, haggard and emaciated, haltingly approaching the stooped figure of his aging mother. In her stance is perfectly reflected her mixed emotions of that instant, uncertainty and relief. Repin is said to have worked especially hard on the man's face, redoing it three times.

Important also is his work in the historical genre, where his interest in the psychological attracted him to strong personalities and violent passions, as in *Czarevna Sofia* (1879) *Ivan the Terrible and His Son Ivan* (1881-1885) and the previously mentioned *Zaporozhye Cossacks* etc. (1878-1891).

Repin attempted to put on canvas the many facets of life, but the focus of his attention was always man. His understanding of character and his technical versatility made him one of the nineteenth century's most eminent portraitists. He did people in all walks of life—peasants as well as celebrities.

His portrait of Modest Moussorgsky is particularly fine. He painted the composer of *Boris Godunov* and *Khovanshchina* shortly before his death, in a hospital. Although not concealing the ravishing effects of the illness, he painted him not as a feeble, dying man but rather as one of unbending spiritual strength.

That Repin was an extraordinary draftsman is evident in the sketches he made for his group paintings, among the most brilliant of his graphic works. Other fine drawings are "Gorky in Penati Reading his Play *Children of the Sun*," "Symphony Concert Conducted by Rimsky-Korsakov," and his portraits of Eleonora Duse, Leo Tolstoy, the artist Valentin Serov, and of E. D. Batasheva. Still another aspect of life he depicted won him tangible international recognition—street scenes, including *Nevsky Prospect* in St. Petersburg, done for an 1892 issue of *Scribner's Magazine.*

Repin lived a long and creative life. When at the age of 60 his right hand began to trouble him, he learned to paint with his left. This man of inexhaustible energy could not live without working, was always planning new projects. In his declining years he once again turned to the subject of the courageous, freedom-loving Zaporozhye Cossacks in his highly spirited *Black Sea Freemen.*

Most of the great heritage left to us by Repin can be seen at the Tretyakov Gallery in Moscow and the Russian Museum in Leningrad. Still others are in private collections.

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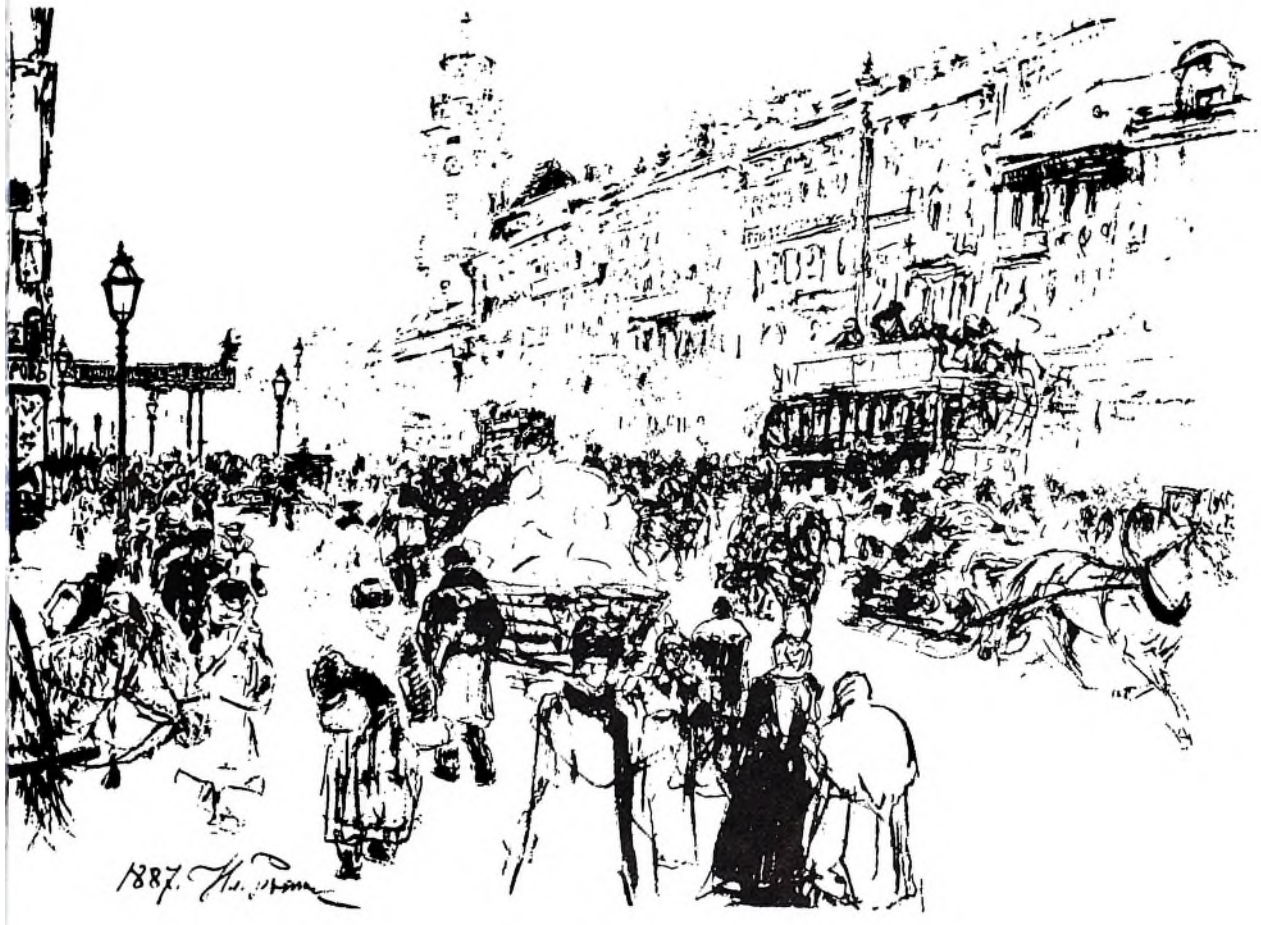
* An illustrated article on the *Peredvizhniki* appeared in the April issue of *USSR* magazine.

Volga Boatmen *(1870-1873)*

Russian Museum



Nevsky Prospect *(1887)*

Russian Museum

E. D. Batasheva *(1891)*

Abramtsevo Museum

Zaporozhye Cossacks Composing a Letter to the Turkish Sultan *(Sketch)*

The Unexpected Return (1884)

Tretyakov Gallery

Milusha Mamontova (1884)

Russian Museum

A Religious Procession in Kursk Gubernia (1878-1883)

Tretyakov Gallery

QUERIES FROM READERS

QUESTION: I have heard that 1962 was a lean year in the Soviet Union because of bad weather. It it true?
ANSWER: The weather was really bad in a number of regions last year. However, the grain yields exceeded 147 million metric tons, which is a record figure in the history of our country.

QUESTION: Into what languages have Lenin's works been translated?
ANSWER: Lenin's works have been translated into 240 languages, including English of course.

QUESTION: One of our correspondents heard that Soviet trade unions provide accommodations for workers at rest homes and sanatoriums free of charge or at one-third the cost. Do other trade unionists who pay membership dues agree to this expenditure?
ANSWER: Membership dues constitute a negligible part of the trade union funds. Every trade union has at its disposal a vast sum from the state social insurance fund. The workers and employees do not contribute a cent to it. Money to provide accommodations at rest homes and sanatoriums gratis or at a reduced cost is taken from this fund. By the way, it is the trade union committee that decides which worker is to receive such accommodations. This year 4.5 million people will rest at health resorts free of charge or at one-third the cost.

QUESTION: Will you kindly explain the Russian tradition to meet guests with bread and salt?
ANSWER: This is not a Russian tradition only. The ancient Greeks and Romans believed that a man who comes a long distance should be given bread and salt, which they considered sacred, according to Homer. Like all people engaged in farming, the people of ancient Rus worshipped bread. Salt was very expensive and was used to welcome only the most honored guests.

It is from this ancient tradition that the modern ritual originates, especially in villages and on the most solemn occasions. For instance, Cosmonaut IV, Pavel Popovich, was met in Kiev with bread and salt. The loaf of bread was presented to him on a towel embroidered in folk designs.

QUESTION: If I lived in the Soviet Union and was not a Communist Party member, could I be elected to a town municipal council?
ANSWER: Of course. To become a member of the municipal council (we call it the Soviet of Working People's Deputies) one need not necessarily be a member of the Communist Party. It is, of course, important that you be known to and respected by the electorate in order for them to vote for you during the election. This year about two million deputies have been elected to the rural, district and town Soviets. More than half of them—54.9 per cent—are non-Party people.

QUESTION: What is done when in the opinion of the electors a deputy does not carry out his duties?
ANSWER: Such a deputy is recalled. A deputy of the USSR Supreme Soviet can be recalled at any time by the decision of the majority of the electorate if he fails to justify their confidence or commits actions not worthy of the honorable title of deputy.

The question of recalling the deputy can be raised by public organizations and societies, namely: Party, trade union, cooperative and youth organizations; cultural societies; and also by general meetings of workers at factories and offices, peasants in villages, and servicemen in their units.

QUESTION: In the thirties I emigrated from Lithuania in search of work. Are there many unemployed there now and, if there are, what help do they get?
ANSWER: There are no unemployed in Soviet Lithuania, just as there are none any place in the Soviet Union. In Soviet years Lithuania has become an industrial sovereign republic. While in the thirties it imported the most primitive instruments, today it exports turbines, metal-cutting lathes and precision instruments to 40 countries. Industry is expanding. People do not look for jobs in Lithuania; the jobs look for people.

QUESTION: Please answer several questions about Moscow. How many people and schools are there in the capital?
ANSWER: Moscow has a population of 6,200,000. There are 932 schools with a total enrollment of 771,000 pupils.

QUESTION: How many college students are there in Moscow?
ANSWER: The student body of 72 institutions of higher learning totals 475,900.

QUESTION: Are there other theaters in Moscow besides the Bolshoi?
ANSWER: There are 28 theaters with permanent companies in Moscow. Most popular among them are the Art Theater, the Maly Theater, the Vakhtangov Theater, the youth theater called Sovremennik (Contemporary) and the puppet theater directed by Sergei Obraztsov. Incidentally, Obraztsov will take his puppets to the United States this fall.

QUESTION: Did Lenin have any children?
ANSWER: No, Lenin had no children.

QUESTION: Can you tell me if there are scientific institutions in Armenia?
ANSWER: Armenia has about 90 research institutions. The Armenian Academy of Sciences alone unites 35 large institutes. The President of the Academy is Victor Ambartsumyan, an outstanding scientist. He is an honorary member of many foreign academies of sciences, including the American, and president of the International Astronomical Union. His discovery that there were young stars, that is, that the process of formation of stars is still continuing, brought about a revolution in cosmogony.

QUESTION: What is the cost per day for a tourist to stay in the Soviet Union?
ANSWER: Intourist offers various kinds of tours—deluxe, boarding house, business, rest and first class. The daily cost depends on the class and ranges from 6 to 31 dollars a day.

QUESTION: What are property relations between husband and wife in the Soviet Union?
ANSWER: Under Soviet law the property which belonged to husband and wife before marriage remains the private property of the individual. The common property is what has been accumulated by them during the years of married life. In the event of divorce, the common property is divided equally between husband and wife. The wife is entitled to half the property even if she did not work and did not earn money.

QUESTION: I have heard that many factories are being built in the Soviet Union. Is it so?
ANSWER: On the average two or three large mills or factories are put into operation daily in the Soviet Union. In the past four years more than 3,700 big industrial enterprises have been completed in the country. This year 628 large plants, factories and power stations are under construction.

QUESTION: Will you kindly tell me how patents are granted in the Soviet Union?
ANSWER: A patent or an inventor's certificate is granted by the Committee for Inventions and Discoveries. Its staff of experts must examine and evaluate the invention within four months after the application for a patent is filed. In the Soviet Union the inventor prefers an inventor's certificate to a patent because as a patentee, he has to see to it himself that his invention finds application in the economy. If he turns his invention over to the state and receives an inventor's certificate, he no longer has to worry about it. The state pays the inventor at a rate commensurate with the economic usefulness of his invention. ★

TWO INTERVIEWS

American Geochemists in Moscow

BY YURI VASILYEV

PHOTOS BY GEORGI PETRUSOV

Vernadsky Prospect, a thoroughfare in Moscow's new Southwest District, begins a short distance away from the nearly 800-foot-tall building that is Moscow State University. It is symbolic that this street bears the name of the celebrated Russian scientist whose investigations paved the way for several of the new earth sciences.

The centenary of the birth of Academician Vladimir Vernadsky, father of geochemistry, fell on March 12. To mark the occasion the Geochemical Conference on the Chemistry of the Earth's Crust was held in Moscow on March 14-19. The conference was attended by more than 1000 Soviet scientists and by other scientists from 10 foreign countries. Five well-known American scholars were present: Professor Elburt Franklin Osborn (Pennsylvania State University), Professor John Lawrence Kulp (Columbia University), Dr. Thomas Seward Lovering (U.S. Geological Survey), Professor William S. Fyfe (University of California) and Dr. Jack Green (North American Aviation, Inc.). Vernadsky was a founder of the Soviet Radium Institute, where the first Soviet cyclotron was built. Half a century ago he foresaw vast opportunities opened up by subatomic energy. "Man," he said, "is entering a new age of atomic energy. We are approaching a great turning point. There has been nothing like it in man's history. The time is not far off when man will have a source of energy that will permit him to order his life as he chooses. . . . Scientists must accept the responsibility for the consequences of their discoveries and focus their work on projects for the betterment of all mankind."

Your correspondent interviewed Professor Osborn and Dr. Green at the geochemical conference.

Elburt Franklin Osborn

Q. Had you met any of your Soviet counterparts before?

A. I had met several—Academician Korzhinsky, for one—but our contacts have really been very limited. The main reason actually for my coming to this congress was to get acquainted with some of the other well-known Soviet scientists. I hope these contacts will be kept up and that some of the people I met here will have the chance to come to the United States to look over similar work we are doing there.

Q. What else can be done to improve cooperation between Soviet and American scientists?

A. International meetings like this one are the best way. The big problem really, I think, is the language barrier. Anything that can be done to lower this barrier would be a big step forward. For instance, we do not get English abstracts of many of the Soviet papers. I assume that Soviet scientists would also find it very helpful if we had abstracts in Russian of our papers. That would be a fair exchange.

Q. How well is the work of Soviet scientists known in the United States? How would you evaluate it?

A. The achievements of our Soviet colleagues are great, of course, and are fairly well known in the United States. But not nearly as well known as they ought to be, and would be, if maximum use were made of the data they derive and the work they do. This situation has been improving, I think, particularly in the past four or five years. We are becoming better acquainted with Soviet scientific literature.

Q. A few words, if you don't mind, about the way scientists in our two countries are cooperating in international scientific organizations.

A. International scientific organizations are broadening out and doing more meaningful work all the time. For example, in the field of geology. At the Copenhagen International Geological Congress three years ago we organized the International Union of Geological Sciences. Both the Soviet Union and the United States are members of this union. There is also the International Mineralogical Association, which had its third meeting in Washington, D. C. last summer. It will hold its next meeting in India, with a field trip prior to the geological session. I think the Mineralogical Association is a very robust and healthy supplement to the Geological Union. We also have the International Union of Geodesy and Geophysics, which held its last meeting, I believe, in Helsinki in 1960. These organizations bring people together and give them the chance to exchange ideas.

Dr. Jack Green of North American Aviation and Victor Gorshkov, Soviet volcanologist, exchange ideas at the Moscow Geochemical Conference.

American professors Elburt Osborn and Thomas Lovering, and Soviet Academician Dmitri Korzhinsky (right) chat during an intermission.

Jack Green

Q. How do you estimate Academician Vernadsky's contribution to science?

A. Prodigious, everything considered, and remarkable. I have in mind his research in radioactivity, his hopes for the peaceful uses of radioactivity, his studies of the dispersal of elements, and his various concepts.

Q. Which Soviet scientists had you met previously?

A. I had the good fortune on this trip to see Academician Vinogradov again; I was here in 1960 and first met him then. I also had the pleasure to reacquaint myself with Doctor Runov of the Vernadsky Institute and with Doctor Vlodovets and Doctor Pip, whom I met at the Volcanological Institute in Japan last year. It was very rewarding meeting these people. Soviet scientists have also been to the United States; I am thinking of Academician Korzhinsky, who visited America and made a lecture tour.

Q. What would you suggest for strengthening Soviet-American scientific cooperation?

A. I think the exchange program is an excellent means of strengthening cooperation between Soviet and American scientists. Conferences of the kind we had here in Moscow during the past few days are particularly valuable, and it would be well to have them often and regularly.

Q. How much is the work of Soviet geologists known in the United States? Do American scientists find it helpful in their research?

A. I can only speak from very limited experience and a very limited point of view. I cannot evaluate all the work of Soviet scientists. Their papers are read in the United States, both in translation and in the original. Many journals, like *Geohimia*, are translated from cover to cover now. They are helpful in our research just as we assume our papers are helpful in the research of Soviet scientists.

Q. I understand you were in the Soviet Union in 1960. Have you found any changes?

A. After only a few days in 1960 and a few days in 1963, I don't think I can offer any profound observations. Superficially, I noted that there is more color in the streets. People were wearing more gaily colored clothing, more of the brighter shades.

Q. And what is your strongest impression of your Soviet visit?

A. I would say it is the rate of scientific progress. I find that there is as much activity at Moscow State University as I suppose there is at any large college elsewhere in the Soviet Union or in the United States or Canada. ★

Professor John L. Kulp of Columbia University (right), one of five American scholars at the meeting, served on the presiding committee of one of the panels.

The conference commemorated the centenary of the birth of Academician Vladimir Vernadsky, founder of the science of geochemistry. At the jubilee session.

OUR VOCABULARY

Job placement. The Regulations for the Placement of Young Specialists govern the job appointments of all college and university graduates. The first clause reads: "Every graduate of a school of higher education is to be provided with a job in his specialty." Every college has a Job Distribution Committee, consisting of the head of the department and his assistants; representatives of the Communist Party, the Young Communist League and the trade union organizations of the institution of higher learning; and representatives of research institutes, industrial enterprises, etc. From the committee the young specialist learns about the working conditions, the salary and other details of the jobs being offered for his consideration. He then makes his choice.

The enterprise by which he is employed is required to provide him with living quarters and proper working conditions. For his part, the young specialist is required to remain in this, his first job, for at least three years, after which he is free to go elsewhere if—for whatever reason—he is not satisfied.

Diploma project. Independent research required of every graduating student at institutions of higher learning to determine whether he has mastered the theory and practice of his specialty, and to judge his ability. The student works with a faculty adviser of the rank of professor or assistant professor. The completed project must be defended publicly—the adviser and the official opponent are heard first, followed by anyone who wishes to support or object to a particular point or the entire thesis. Finally, the student takes the floor to defend his thesis.

Correspondence study. For people who hold full-time jobs the correspondence division at higher educational establishments offers special courses. Textbooks can be borrowed for the year from the local public library or the one at the college in which the student is enrolled. Correspondence students have examinations twice a year and do their laboratory work at their respective educational institutions.

To prepare for and take examinations, first and second-year students are granted 30 days' additional paid leave from their jobs, and senior students 40 days. A four-month paid leave is granted for work on a diploma thesis. In the final year of study correspondence students are entitled to an additional free day a week at half pay.

If a student is not working at the specialty for which he is being trained, his factory or office grants him a month's leave, at the request of the college, to get his practical training elsewhere. During that time he continues to receive his usual student stipend. Moscow State University has offered correspondence study since 1931.

Evening division students take four hours of lectures, seminars and laboratory classes four evenings a week. They have the same privileges as correspondence students.

Practical training. Training on actual job situations. The type of practical training depends on the student's specialty. Students in the natural sciences and technical fields do their training in research institutes, factories and laboratories. Geologists, for instance, get their job training on expeditions, and biologists at state and collective farm experimental stations. Students of the humanities do their practical training at schools, publishing houses, newspaper offices, museums, in the archives, the courts, etc.

During the practical training period, of from three to six months in the fourth year, students take their courses in the evening division.

The state covers all the expense involved. As a rule the student will receive a regular salary for the work he does instead of his stipend. Practical training is required for graduation. Its basic aim is to link study with life; its more immediate aim is to give the student a firsthand acquaintance with the work he will be doing after graduation.

Student theater. The Amateur Student Theater of Moscow State University has evolved from the university's drama group established two years ago. Open to the general public, it is one of the many people's theaters in the Soviet Union. Noted film director People's Artist of the Russian Federation Sergei Yutkevich contributes his services as director.

The theater has a repertory of four plays: *The Diary of Anne Frank* by Frances Goodrich and Albert Hackett, *The Dragon* by Yevgeni Shwarts, *Two For the Seesaw* by William Gibson and *Only One Heart Have I* by young playwright and law student Georgi Polonsky.

Tickets are cheaper than in the professional theaters, with all money going into the costumes and props. The theater pays no rental expenses since performances are given at the university clubhouse.

Although the company is an amateur one, the acting is surprisingly good. Iya Savvina, who was seen by American filmgoers in the Chekhov story *The Lady with the Dog*, is a product of the Moscow University drama group. ★

NEW MAN IN THE MAKING

We are publishing a resumé of the report "Present-day Tasks of the Ideological Work of the Party," delivered by Leonid F. Ilyichev, Secretary of the Central Committee of the Communist Party of the Soviet Union at the June Plenary Meeting of the Central Committee.

THE YEARS that have passed in the life of the Soviet Union were marked by victories in the Party's foreign and domestic policy, in the development of the economy, science and culture, in the improvement of the well-being of the people, in the implementation of Lenin's policy of peace and friendship among nations.

In the economic sphere this was a period of unprecedentedly rapid development of all branches of the national economy. The gross increase in output in industry was almost threefold in the past ten years, and in agriculture it was 67 per cent. Major successes have been achieved in raising the material and cultural standards of the people.

Our public consumption funds increased from 12.9 billion rubles in 1952 to 28.4 billion in 1962. The trade turnover grew by 160 per cent. The Soviet Union now holds first place in the world in the rate and scope of housing construction. In the past ten years new schools for more than nine million children, kindergartens and nurseries for approximately three million, and thousands of clubs, libraries, theaters and houses of culture were built.

In the political sphere this decade was characterized by the real blossoming of socialist democracy. The Party has done an important job in restoring and developing the Leninist norms of Party, state and public life. It has strengthened still more its unity and its ties with the masses.

In the sphere of foreign policy this period has demonstrated with special force the power and vitality of the Leninist principle of peaceful coexistence of states with different social systems.

The Party remembered Vladimir Lenin's behest that a Marxist must control events, not be controlled by them, that revolutionary theory and sluggish thinking are incompatible. The Party organizes all its activities along the lines mapped out by Lenin, and develops revolutionary concepts in the Leninist way. The documents of the Twenty-second Congress and the Party Program provide a fuller idea of the contribution made by our Party to the development of revolutionary theory.

Our Party has elaborated the problems of the construction of communism. The ways of creating the material and technical basis of communism, guiding the economy, developing communist forms of work and making the transition from socialist to communist production relations have been defined. The process of transforming a state of the dictatorship of the proletariat into a socialist state of all the people has been generalized, and the way it will develop into communist public self-government has been mapped out.

The practical work of the Soviet state has corroborated the correctness of the Marxist-Leninist theory. The ideas of communism are being supported by millions of people. That is why the ideologists of the Western world try to refute Marxism-Leninism. This being the case, the Communists, our Party, are defending with still greater persistence their ideology, the correctness of which has been confirmed by life itself.

The principle of peaceful coexistence does not mean the peaceful coexistence of ideas. But regardless of how sharp the battle of ideas becomes, and today the situation is acute, its outcome cannot and must not be settled by force of arms.

At the present stage of the development of Soviet society and the Soviet state, when the economy is advancing successfully and the living standards of the people are rising steadily, it is necessary that the consciousness of the people, too, correspond to the social and economic changes which have taken place in all spheres of Soviet life.

It is common knowledge that base ideas are rooted in the age-old traditions and habits that have evolved under an exploiting society. And they, these ideas and habits, hamper us in building communism, poison the life of the people, contradict Soviet laws and Soviet morality. The Party declares a merciless struggle against them.

The Party clearly states: "You won't build communism lying on your back; you have to fight for communism." Our people have waged and will continue to wage a struggle against those who would like to produce nothing but consume plenty, against people who have learned by heart and fully enjoy the great rights and advantages of the Soviet people, but suffer a loss of memory as soon as it comes to fulfilling their civic duties. And the primary duty is to work. In our conditions it is not a matter of choice—of working or loafing, as one likes. Our life, our laws don't recognize such a choice. Work is an obligation set down in the Constitution; it is a civic duty. Those who fail in it need not expect to enjoy the rights and privileges of Soviet citizens.

Soviet people fully support the proposal to make the granting of social benefits to people contingent on how they fulfill their obligations to society. Why not establish a system whereby those who work well should have priority in taking a vacation, getting accommodations at health resorts and receiving apartments, and vice versa—on this question there were also quite a number of valuable suggestions—to reduce or entirely deprive of benefits people who flit from job to job, shirkers and idlers.

In instilling in the people a new labor discipline, the communist attitude toward work, the Party also develops to the utmost both moral and material incentives. It does not set one against the other, nor replace one with the other. Only the combination of these incentives leads to the victory of communist labor. Today we already see that there is no barrier between educational work and the creative activities of the Soviet people. The following is a graphic illustration of the connection between them: In the past ten years 18 million inventions and rationalization proposals have been introduced, and they have netted the national economy approximately 10 billion rubles.

The important question of educating the younger generation was raised in the report. In disclosing the substance of this problem, Leonid Ilyichev stated that there is no contradiction in the fact that on the one hand we talk about the spiritual purity of the Soviet youth and, on the other, about the need for intensifying educational work among them. This is caused not by some extraordinary circumstances but "by the greater demands our society makes on the morality, consciousness and behavior of each Soviet citizen, and in the first place the young people, the future of our country."

Our youth has been and remains a splendid and active section of socialist society, devoted to the great ideals of communism. Life, however, produces not only people who perform their duties honestly; it also at times brings to the surface young people who, because of their unwholesome attitude toward life, their contempt for work, their philistine manners and tastes, come into conflict with the behavior and attitudes acceptable in our country. Some of the young people take for granted the benefits gained by our people at the cost of great effort and think that they were born only to have a good time. There are still some idlers, moral cripples, whiners—a species of "beardless skeptics"—among the youth.

We must improve the methods of educating the youth ideologically. Our young people are bright and inquisitive; they try to fathom the meaning of the phenomena around them and to develop their own views on things. There is nothing wrong in that. But they are too fervent and hasty, so that at times they are in need of wise and kindly advice. The revolutionary and labor traditions of the Soviet people are the basis for rearing the younger generation. "The best school for educating the new man is the school of life, the labor and struggle of the people," Ilyichev stressed.

The Communist Party understands that the future generation is being brought up now, and therefore it has to be educated daily and solicitously at all stages of its development. We know what material values we shall have in 20 years' time. They have been estimated and expressed in figures. But even figures and plans have to be changed, pinpointed. Life suggests good amendments.

But what will people become, what ethical principles will they have? What about those who are now playing in kindergartens, sitting at school desks, attending college, serving in the army, working in youth brigades at factories and construction sites, in fields and offices? What will their moral code be? Their characters are being formed now, and the molding of their ethical principles depends on schoolteachers, families, college and the workers' collectives.

Education and rearing make a single stream creating both a highly qualified specialist and a man of great ethical principles. And it is important that the knowledge the Soviet citizen acquires in school, college, at courses, studying concrete economics and advanced methods of labor should not only help him understand the meaning of the phenomena in the life of our society but should also be closely connected with life and the everyday practical work of our state. Only then can it awaken in him the need for intervening in life and for actually influencing the affairs of his plant, collective farm, state farm or office. Here is where the freedom of the individual manifests itself, and not in ignoring the social rules of life.

There are 220,000 schools of general education and more than 4,000 secondary and higher specialized institutions of learning functioning in the Soviet Union. We have more than 380,000 libraries, 120,000 movie projector installations, 130,000 clubs and houses of culture, many museums, people's theaters, philharmonic orchestras, and amateur studios. One-fifth of the total number of books and pamphlets published in the world are put out in the Soviet Union. In the past ten years more than 11 billion copies of books have been put out, or 50 copies per capita. Every second person in the Soviet Union is a subscriber to newspapers and magazines. The state spends about 15 billion rubles annually on education, science and culture.

The Communist Party is steadily improving the system of educational work. Socially useful labor has been and remains the most important factor in the education of school children and students. The educational effect of combining study with job training is unquestionable. But so far vocational training is not everywhere handled properly. Frequently it is too formal and organized on a low level. Sometimes the hours allocated for job training are wasted. There are times when the schoolboy stands behind a worker and watches him work. This has even given rise to a new and unpleasant word, "backwatcher." It depends on us, on our work, to see that today's "backwatcher" does not tomorrow become a sponger on his parents, and in the future a parasite of society. It is our vital task to ensure that vocational training of school children is handled properly.

What then is the substance of the Party's ideological activities? Ideological work is painstaking labor in which the object is the complex human mechanism which must be handled carefully and gently. The high level of the Soviet people's culture and consciousness also presents greater demands on the mass media of ideological influence—the press, radio, motion pictures and television. Soviet people are fond of good books and always distinguish good works from bad ones. It is necessary to rally the public around magazines and publishing houses and give it an opportunity to exert its influence so that the best works are chosen for publication in magazines and in book form.

In appraising the state of creative art in our country, Ilyichev stressed that we should not indulge in self-disparagement. We have something to be proud of, we have a great socialist art and a great socialist literature. After the meetings of the leaders of the Party and the Government with eminent figures in literature and art, some of our adversaries were announcing "the crisis of Soviet literature," "the crisis of Soviet art." Actually our Party subjected to criticism only individual works of art and individual writers who had succumbed to the influence of alien ideas and had retreated from the principles of Soviet art gained in struggle and tested in life, thus taking the road of reconciliation with an ideology alien to us. Our life is complex and greatly diversified; there is much that is good in it, just as there are many good works of art and literature, but there is also bad in our life. To seek out insignificant facts reflecting minor shortcomings and to forget the major achievements that constitute the essence of our life means to move away from the truth of life. The Party could not ignore that. It is not opposed to the quest for new forms of art but to the formalistic chicanery of individuals in literature and art. The task is not to "excommunicate" them but to help them realize their ideological and artistic errors and convince them that they should place their talents in full measure at the service of the people, of communism. To categorize as hopeless and incorrigible those creative workers who have made mistakes would be contrary to the policy of our Party. "We have to avoid any kind of prejudice," Ilyichev said, "and to remember that the fight is not against people but for people, against bad ideas."

The highest criterion, the core of socialist realism, is the truth of life expressed in artistic images from the communist viewpoint. And the truth of life for the builders of communism is represented in the establishment of the most humane society on earth. Some manifestations of this truth may appear severe and "bitter." But this is the courageous truth of fighters; it strengthens the minds and hearts of people and does not sow unfounded panic and confusion in the face of life's difficulties.

Since the question of the communist education of Soviet people is of great and vital importance for the development of our society, Ilyichev criticized some scientific institutions, secondary and higher schools, the press and radio, literature and art which as yet do not always conduct this work energetically, with the necessary persistence and in the required forms.

Ilyichev emphasized the important role of the Soviets and public organizations in educating the people. Working in the Soviets, people learn to run the state. In addition to the two million deputies, there are another 20 million people working in the Soviets on a voluntary basis. They can do a great deal to raise the cultural level of the people and strengthen communist morality. The trade unions unite in their ranks 66 million people. They enjoy extensive rights, and they have the means and opportunities for educating the new man. Success in molding the man of communist society depends to a great extent also on the Young Communist League, which has more than 20 million members.

Millions of Soviet people have been drawn into active public life, which is the best school for training and education, and the Party does its utmost to develop and support this course leading finally to communist self-government.

We are living, Ilyichev stated, in a unique age. What the best minds of humanity have been dreaming of for centuries is now being successfully carried out in our country, where the most reasonable and just, as well as the most humane, society on earth—communism—is being built. Through the dedicated labor and devoted struggle of the Soviet people it has now been proved in fact, as had been predicted by Vladimir Lenin, that mankind has actually entered "a new stage of development which opens up unusually brilliant vistas."

★

"SEAGULL CALLING . . ."

"SEAGULL CALLING . . ."

(Continued from page 24)

aboard. Can feel the overload but am well. Can see the horizon! A line between the light and deeper blues. That's the earth, the earth!"

"Congratulations, congratulations, Valya!" That was the voice of the Chief Designer.

"Calling Seagull, calling Seagull! Everything is fine! Your orbit is excellent!"

"Seagull calling, Seagull calling!" This was the voice of the former weaver, the voice of a Soviet girl, the voice of a Communist!

. . . Three days passed, and the radio at last sounded the long awaited words: "She's landed." The first woman cosmonaut in the world had finished her unprecedented flight.

"He's landed! Valeri has landed!" yelled an excited cosmonaut, rushing into our room two hours later.

In the evening Valya arrived in Karaganda by plane. Thousands had been waiting for her since morning.

"Valya! Valya! Valya!" shouted the crowd. "Valya! Valya! Valya!"

Her car moved through a sea of flowers, through a corridor of exultant humanity. Someone handed her a bunch of daisies. Where could they have found them, flowers from her native region, in Kazakhstan?

We met Valya in a little cottage. She was resting there. Although she was being cared for by the doctors, she was caught up in the embraces of her fellow cosmonauts. Still, she had a thought for us too, the journalists who had seen her off at the cosmodrome.

"You fellow workers here already?" She shook hands all around, smiling just as she had at the blast-off. "What about that song?" she demanded.

She was referring to a limerick the reporters had written about the cosmonauts. She said she had taken the words with her into space.

"I suppose you've got some new lines by now?"

"We certainly have."

Hugging one another like a bunch of boys dizzy with joy, we recited the new lines in chorus. Valya's laughter was so catching that we had to laugh too. She was wearing a blue sports blouse with a white collar; she had not really had time to change since her flight. She was happy and ready to do anything for anybody. We took some pictures as more people came in with daisies and gladiolas. Someone bounced in with a load of souvenirs.

But the doctors were eyeing us with more and more annoyance.

"Time to break it up," they growled.

More flowers. A girl reached through the door with a sheaf of them.

"Till we meet again! Till we . . ."

A river of telegrams kept pouring in from all ends of the country: from Yaroslavl, Moscow, Kiev, Voronezh and Donetsk. The addresses were all the same and very simple: "Valya Tereshkova"!

Midnight came, and we phoned the cottage where Valya was staying. We heard the quiet answer of one of her girl friends:

"She's had supper and gone to sleep."

Midnight over the steppes of Kazakhstan means silence and a lot of big stars overhead.

It was as though someone were whispering: "Quiet, you earth! Quiet, you people. The cosmonauts are asleep, sleeping after their very long journey."

Courtesy of the newspaper
Komsomolskaya Pravda

The Moon Ahead

CHIEF DESIGNER OF SPACESHIPS SPEAKS

NEWSMEN had asked the Chief Designer for an interview.

He was understandably in excellent spirits. With a twinkle in his eyes he said to the journalists, whose pencils were poised for action:

"Well, shall we start?

"This group flight of the orbital ships *Vostok V* and *Vostok VI* was planned as a longtime one. We need such flights; the information they give us is necessary for establishing orbital stations and for sending spaceships to the nearest planets later on.

"These will be very long trips. For instance, a trip around the moon, the cosmic body nearest us, will take from eight to twelve days. Experience shows that the human organism can adapt itself to weightlessness. However, it is important for us to know not only the physical but also the psychological condition of the cosmonaut. In this respect it is interesting to have a female cosmonaut participate in a space flight. Until now space journeys were made by jet pilots, a tough breed accustomed to overload and high speed. Valentina Tereshkova, commander of *Vostok VI*, had encountered overload only in training for her space flight.

"And the flight of Valentina Tereshkova and Valeri Bykovsky is another step forward, both as regards the duration of the flight and the research tasks carried out. I have in mind the astronomical and geophysical observations made.

"Also essential are actual measurements of the radiation background of the ionization emission at the altitudes of the two spaceships' orbits. Optical observations of land, sea, the colors of the earth's surface and of the shadows on it are also very valuable.

"I am a great optimist," the Chief Designer said. "I believe that the time is not far off when man will make interplanetary flights of very long duration. And knowledge of such orientation points will be necessary for returning from such flights.

"The participation of a woman in flight is of fundamental significance. It is perhaps one of the vivid proofs of the equality enjoyed by Soviet women, and of their great courage.

"At the same time it testifies to the high level of our technology. Our spaceship equipment responds not only to an experienced pilot but also to a person with no piloting experience. It is now clear that so far as we're concerned the problem of training cosmonauts can be regarded as solved."

"What in your opinion would be the importance of spaceships joining in flight?"

"The problem of spaceships meeting and joining in flight is now on the agenda in cosmonautics. Its solution will mean a great deal—the establishment of large orbital stations, which can serve for both research purposes and as landing platforms for spaceships. Space travel is like ocean navigation: spaceships leave the mainland for a long period of time. In order to replenish their stocks of equipment and supplies or to get aid, spaceships, like ocean vessels, have to return to earth or seek a rendezvous in flight. Consequently, joint flights bring us closer to the solution of this problem.

"So far, our spaceships have been flying along so-called self-braking orbits. This means that in all circumstances, even when the braking devices refuse to work, the spaceship's movement will be slowed down by the resistance of the atmosphere and it will descend to earth after a comparatively short period of time. In this case the question is only of the time and place of landing. The existence of space landing platforms, the possibility for spaceships to join in space, will enable us to use higher orbits, to extend the boundaries of navigation in space."

"In speaking about extending the boundaries of space flight, do you have in mind man's flight to the moon?"

"I certainly do. But it must be pointed out that a moon flight, though a very fascinating endeavor, is also a very difficult one. It is a complicated matter to fly to the moon, and even more so to return from it. But I am sure that the time is not distant when man's flight to the moon will become a reality, though apparently more than one year will be necessary for the solution of this problem."

Psychology and Cosmonautics

BY YUVENALI VOLYNKIN
LIEUTENANT GENERAL, MEDICAL CORPS

AND VICTOR DENISOV
MASTER OF SCIENCE

HOW DOES space travel affect man psychologically? How will he feel after he lands on our closest cosmic neighbor, the moon, or Mars? These questions and many others challenge the space psychologist.

A spaceship is an intricate mechanism, and we have still to find out whether man is able to control its numerous systems under flight conditions. A new branch of space biology—engineering psychology of space travel—is working on two related problems: spaceship systems best adjusted to

SURRENDERS TO MAN!

the cosmonaut's psychophysiological requirements and potentialties, and a training program for meeting the psychological rigors of space travel.

The cosmonaut must learn to put up with the monotony of such travel for days, and later on for months and even years. He will have to accustom himself to the idea that his ship is moving farther and farther away from earth. Since on prolonged flights there will be no change from day to night—to which he is accustomed on his own planet—and no seasonal changes, he will have to adjust himself to a different time schedule, probably to more frequent alternating shifts of sleep and work.

On earth we have a habitual background of ever-present irritants in a multitude of visual and aural forms that give life color and keep the central nervous system "charged," so to speak. If a man wants to rest his nerves, he takes refuge from tiring noises in a quiet hideaway.

But space quiet is not in the least like the restful terrestrial kind. Instead of reducing nervous tension, space quiet increases it. And it takes a great deal of mettle to endure a prolonged stay in the silent world of the cosmos. Thus provision must be made to protect the cosmonaut from such silence.

This "sensory hunger"—the psychological term for a deficiency of sensory impressions—makes a man sleepy and lethargic. For this reason a change of impressions must be provided for in the spaceship capsule—through radio and TV links with earth, arhythmic color changes in the lighting, and probably even different odors.

Prolonged isolation aboard a spaceship may give rise to nervous tensions resulting in such psychological disorders as a fear of being alone in a closed space, a neurosis brought on by the monotony and the sense of remoteness from earth, a hypnotic state induced by the continuous watching of instrument dials.

In short, a spaceship cabin must attempt to simulate all the details of the cosmonaut's familiar earthly environment: the cabin in which he works and rests must contain, in stylized form, the everyday things he is accustomed to on earth. In addition engineer-psychologists must give thought to changes in the shape of the cabin, its decoration, and perhaps background music.

Future space flights are likely to take months, even years. What principles should we follow in determining the selection of space crews? We know from terrestrial living that men in groups of two or three do not always get along well, that they quarrel—sometimes seriously. An understanding of the psychology of teamwork will help us select our future spaceship crews.

The primary task of engineering psychology is to study the psychophysical potentialities of man, the main link in the spaceship control system. It must find out how well the cosmonaut is able to receive and process the information coming to him through various analyzers, determine how quickly and efficiently he reacts, check on his ability to memorize, see how well he handles the controls. It must make optimum use of the cosmonaut by turning over some of his functions to automatic devices; finding the best methods of coding the information he receives on the operation of his spaceship systems; making provision for hand, foot or even voice control; and reducing to a minimum the effort required for control operations.

The second task—a logical extension of the first—is to develop information systems that speed up the intake and processing of the complete flow of information that comes in to the cosmonaut. This may be done through a rational design and arrangement of the indicators, panels and dials, and especially through a higher level of control system automation.

The third task is the rationalization of manual spaceship controls—to develop conveniently shaped and sized control knobs and handles, to ascertain the strength and direction of effort in manual control for providing the most functional arrangement of the controls. Among the more promising ideas suggested are those for using keyboard and voice control, and, at a later stage, bioelectric impulse control.

The fourth task is that of selecting and outfitting the cosmonaut's work area—determining its size in spaceships of various types, the rational layout and color decoration of the spaceship cabin, the choice of illumination systems, and the most convenient arrangement of instrument and control panels.

Finally, the fifth task: to work out training methods in spaceship simulators on earth.

We have been discussing the psychological factors of space flight on a somewhat abstract plane. We have talked about man in general without reference to a particular kind of man. Perhaps we should add that Soviet man will fly to other planets, not for wealth and glory, not to seize new territories and new rocket bases, but to unfold the mysteries of the cosmos for the benefit of all mankind.

At Home in Space

BY VASILI PARIN
MEMBER, USSR ACADEMY OF MEDICAL SCIENCES

WHEN DANGER threatens, it is the men who come forward to fight it—as they should. The women, although only a step behind, inevitably catch up with them.

Soviet women have a long list of remarkable achievements to their credit. They make up a large portion of our scientific researchers, they are among our best jet pilots. And now we have that glorious Russian woman Valentina Tereshkova, following her male predecessors into the stellar void.

The question arises: Is a woman physically able to cope with the complicated and physically taxing work of the cosmonaut?

We know that the cosmonaut does not stay in his seat throughout the whole flight, that he takes an active part in controlling his ship. To adjust to space the cosmonaut must have the combined qualities of an explorer and a pilot. As an explorer he encounters new mysteries at every turn that require of him strong powers of concentration, physical strength and the required knowledge for solving those mysteries. As a pilot he blazes a new trail and must be prepared for any emergency.

With every spaceship launching the job of the cosmonaut becomes more complicated. As time goes on he will not only be moving around in the spaceship cabin, but he will be getting out of the capsule to work in space. Then the process of adapting himself to space will be followed by the process of making space habitable—as we have done in the frozen North, the deep taiga and the Central Asian deserts by building cities and villages. Will the effort prove too much for women?

We know from athletics that physically women have great potential capacities that can be developed by training; women make excellent sprinters as well as long-distance runners and superb marathon skiers. Tamara Press throws the discus further than do most men. Experiments in high-speed flying to create a short regimen of weightlessness have shown that under these conditions women have better physical coordination than men.

Space flight has not affected the health of our male cosmonauts and will not be harmful for their female counterparts. It will not impair any of woman's basic functions, including those related to childbearing. This has been confirmed by numerous experiments with animals.

Although Soviet science has achieved man's safety in outer space, it is not the final goal of our researches. We must look ahead to the next step. For instance, thus far we have used automatic devices for creating a normal physical environment in the spaceship cabin, devices that absorb the carbon dioxide exhaled by man and provide him with fresh oxygen.

However, prolonged space flights and landings on other planets pose new problems. It is impossible to carry a sufficient quantity of oxygen or of substances that consume carbon dioxide. Prolonged flights will be possible only by using a completely different approach—transforming the spaceship into a miniature replica of our earthly environment. On earth the carbon dioxide exhaled by animals and man is continuously being absorbed by plants. At the same time plants give off free oxygen. On a spaceship we can, in principle, create the same kind of balanced ecological system.

We should be able to make not only Chlorella—with which scientists are now doing a good deal of experimenting—part of our spaceship's ecological system but also various kinds of fast-ripening vegetables such as radishes, cucumbers, turnips, lettuce, etc. Chlorella can be used as food not only by man but also by such fast-growing animals as rabbits. Thus will be provided a source of fresh meat in space.

Another problem is to supply the light necessary for normal living. This can be done by means of large transparent "windows" or by electric lights powered by solar batteries attached to the outer surface of the ship. Sooner or later these problems will be solved and we will have a properly functioning ecological system. Then flight will not be limited by the stores a spaceship can carry, and journeys of unlimited duration will be possible.

Changing radiation hazards must be taken into account in plotting every new flight route. All space flights to date (both Soviet and American) were made at practically the same altitude, where the radiation danger is not great. We know that there are belts of intense radiation around the earth. Our physicists have given these zones considerable study. We must, and eventually will, break through these radiation belts. It will require, however, much more knowledge than we now have about the effect of cosmic rays on all links of the ecological system, including plants. Radiation can do great violence to crop yields and thus derange our whole ecology, in which each link depends on the next. We will have to create substantial safeguards against cosmic radiation.

Our cosmonauts, with confidence derived from the knowledge that their ships are absolutely trustworthy and with the heartening voices of their friends and countrymen reaching them across space, come back to earth as high-spirited as when they left it. This is a notable achievement for man, to be able to maintain his psychological equilibrium on a lengthy space flight during which he is cut off from all his accustomed surroundings. Physicians make psychophysiological examinations of the cosmonauts during their flights and periodically thereafter.

All this has bearing on future flights by crews of several people over long periods of time. The choice of a psychologically compatible crew will be a very important factor in the success of these flights. Good humor, sociability, sensitivity to others are all important psychological assets in such circumstances.

The time will certainly come when our spaceship crews will include both men and women. Their capacities, skills, habits and psychological characteristics are different, but they complement each other; we know that from many centuries of terrestrial experience.

Our adaption to space will be a long process. Its ultimate goal is to make space as much the home of man as in his cradle, the earth.

Courtesy of the newspaper Izvestia

WE OF M.S.U.

(Continued from page 3)

fore the exams rarely fool their examiners. For too many lecture cuts the dean may deprive a student of his maintenance stipend or even request his dismissal. Problems of that kind are settled jointly with the student committee, our representative body.

By the second year of study it usually is clear which students are likely to finish their university course and which will drop out.

Whatever a student may feel about his real calling, his inclinations and propensities, when he has to choose his own "narrow" field at the end of his sophomore year, he cannot help feeling a little like a gambler who is uncertain of whether he is going to win or lose with the next move. These, for example, are only a few of the special fields that students in the physiology section of the biology and soil department must choose from—plant physiology, animal and human physiology, biochemistry of plants, biochemistry of animals, microbiology.

Students of the physics department have an even harder choice to make—one of no fewer than 32 specialties. The fields particularly popular at the moment get the largest number of applicants. Fifteen or seventeen years ago it was nuclear physics, eight years ago semiconductors; today most students want to go in for radiophysics and electronics.

"The rise or drop in prestige of a particular field," says Professor Vasili Fursov, department dean, "is not due to any change in student inclination but to the processes taking placé in science itself, in industry and in life. For instance, before the sputniks were launched, geophysics was not a particularly popular field. Today far too many students choose this specialty."

"What happens when a department gets more applicants than it can handle?" we asked.

"We interview the applicants, talk to their teachers and pick out the most capable students."

Worth recalling here is the story about Academician Isaac Kikoyin. As a rule, diploma projects are assigned the year before graduation. When word got around that Professor Kikoyin was assigning diploma projects to his students as early as the second year, about 30 rushed to get into his class. Those who came to work under his guidance included some very capable young people. But there were others who were interested only because the subject, the physics of conductors, was popular at the time. The results was that no more than seven of the group completed their diploma projects. The less capable ones and those who found the strain too great dropped out of the class in short order. It is also worthy of note that three of the "glorious seven" who finally defended their projects were young women. And two of them, Tamara Igosheva and Natasha Babushkina, were so good that they were not required to take the customary postgraduate course before defending their master's theses.

All this, so to speak, is the poetry of student life, but what about its prose?

This joke has been making the rounds a long time. A student says to his sweetheart, "Darling, you mean almost as much to me as my stipend!" Jesting aside, the maintenance stipend we get from the state each month really means a great deal to us. As a matter of fact, many of us could not go on studying without it. It is not only a student's grades but also the financial position of his parents that determines whether he is eligible for a stipend. If the family income is less than 50 rubles a month per person, the student is eligible for a stipend even though his grades are only fair.

Actually the majority of university students receive stipends. They range from 29 rubles in the first year to 40 in the fifth. The stipend of a student with a grade of Excellent is 25 per cent larger than the average. Students with outstanding abilities may be recommended for title scholarships named after eminent scientists or public figures. This year 55 students in the various university departments were awarded such scholarships. As a rule they are two or two and a half times as much as the ordinary stipend.

We conducted a sort of budget questionnaire among law students and found that most of them spend approximately a ruble 30 kopecks a day for their meals. A breakfast of a meat chop or stew and vegetables, butter and a cup of coffee comes to 39-43 kopecks. Lunch—as a rule, borshch or some other soup, a meat course, salad and stewed fruit—costs 55 to 60 kopecks. Supper of buckwheat gruel with milk, pancakes with sour cream and coffee costs about 35 kopecks.

Since law and the humanities are taught in the old buildings in the center of the city, the students in these departments have to spend three rubles a month on bus and subway fares.

We pay no tuition fees. Our textbooks cost us nothing, we borrow them from the library. But we do have the problem of clothes and entertainment. Many students get an allowance from their parents. Yevgeni Bodrov, for example, a junior, gets a monthly allowance of 25 or 30 rubles from his parents in Pyatigorsk, in the Caucasus, to supplement his 35.5-ruble stipend. Sasha Merkulov, on the other hand, lost his people in the war and has to depend on his own resources. In his freshman year Sasha went around in a rather shabby suit, the only one he owned, and in shoes that were very much down-at-the-heels. He dresses better now, since the trade union committee voted him a 20-ruble grant in addition to his regular stipend. He has also been able to earn some money. There are various jobs a student can get. Some of us work an hour or two a day at the post office. This brings in as much as 25 and 30 rubles a month. Others work in the libraries.

But no matter what extra money we make, the stipend is our mainstay. During the five years of study the state spends nearly 10,000 rubles for each of the 15,500 day students at Moscow University. This sum covers maintenance stipends, teachers' salaries, laboratory expenses and a good deal more.

Students' rooms in the university dorms are furnished with two tables, two chairs, a sofa and a closet. The rent, including linen service, is three rubles a month.

In the evening the dorms are generally alive with discussion.

"What would happen if we accepted the idea of a fourth dimension?"

"We'd simply adjust ourselves to it!"

"But suppose you were the only one who accepted it, everybody else would think you were crazy, no one would understand you."

"That's different, but society as a whole could make the adjustment without any trouble."

"You're wrong there. . . ."

Since we believe that we live in three-dimensional Euclidean space, the room in which Sasha Kovtun, Yura Shershnev and Volodya Golotvin, three fellow philosophy students, live is subject to Euclid's laws.

The three roommates had just returned from a stimulating seminar in theoretical mechanics, and the argument started in the lecture hall had carried over to the dorm.

"It may very well be that those who accept the fourth dimension today are the true geniuses," put in Volodya Golotvin. "Maybe that explains why geniuses seem to be out of this world."

"You could be a genius, you sound pretty out yourself right now," Kovtun chuckled.

"You don't deny that great minds move society ahead," Shershnev insisted heatedly, wandering somewhat from the subject. "People follow them, try to keep up with them. For example if there were no Lobachevsky. . . ."

". . . We would not be arguing about the fourth dimension. Is that what you are trying to say? And where do you get off expounding such idealistic stuff?" Golotvin asked.

The argument went on and on, way into the wee hours of the morning.

Such impromptu debates will often draw the professors to our dorms. We have been visited by the world-famous academicians Nikolai Semenov, Lev Landau and Isaac Kikoyin. Students often get as much from these heated arguments over a cup of strong tea as from their regular lectures.

The aim of our university is to turn out graduates who will bring inspiration and enthusiasm to their chosen fields. The many students engaged in research read their papers at meetings and conferences. Annual contests judged by eminent academicians are held for the best papers, the prizes ranging from 50 to 100 rubles. A paper on the effects of the antibiotic crucine on various types of malignant tumors in humans, read by student Nina Smirnova at a conference of young biologists, was received with great interest by authorities in the field.

For several years now chemistry department students have been putting out a sizable wall newspaper called *Nauka i Student* (Science and the Student.) It keeps readers posted on the investigation done by students and tries to draw freshmen into research. It also reprints papers written by students for the professional journals. This past year alone more than 300 student research papers, many of them in chemistry, were published in the university's scientific journals.

The wall newspaper is put out by the university's Students Research Society, whose members are the best seniors. Only a hundred of the 2,850 students in the physics department make the society. Every member does independent research under a faculty advisor. Attendance at lectures is optional for these students. They are the most likely nominees for title scholarships.

Besides the wall newspapers of the various departments, the university's regular newspaper, *Moscow University*, which appears three times a week, gives considerable space to student research.

One winter morning we found a sign posted in our corridor that read: "Hurrah! Hurrah, Men! We've won the fencing championship again! Three cheers for Zhenya Sitnikov, the university fencing champion. Now watch our water polo kids get to the top!"

For several years now fencing and water polo have been the leading sports in the journalism department, with our students carrying off one prize after another. And posters of this kind pop up after every victory.

There is hardly a freshman at the university who does not go in for some sport. Physical training is obligatory for them and for sophomores. With 32 sports sections at the university, ranging from horseback riding, skin diving and gymnastics to chess and camping, a student has no problem choosing a favorite activity. The university campus on Lenin Hills, with two large soccer fields and many basketball and volleyball courts, is a veritable sports townlet. There are also several gymnasiums and an indoor swimming pool.

Every sportsman or sportswoman, famous or not, carries in his pocket the little blue membership folder of the student sports association of the USSR with the Burevestnik (stormy petrel) engraved on its cover.

This society holds annual nationwide tournaments in which all colleges take part. Our university has many a time competed with Leningrad University, Lvov University in the Ukraine, and Tartu University in Estonia. And, sad to say, fortune has not always smiled upon us. In the current year, for example, we lost the heavyweight championships to Lvov students. We looked at our losers with mingled feelings of pity and anger—these Herculean fellows had let the championship be carried off right under their noses.

Some of our university students have participated in world meets. Anna Dmitrieva, of the philology department, won the USSR tennis championship and took part in the Wimbledon Tournament in England, although without any notable success. Gennadi Averin of the geography department holds the country's table tennis championship, ranking ninth in the world; he has played in the United States also. The university's water polo team carried off the silver medal at the Third World Student Games.

We students of the journalism department have ample opportunity to travel and see the country. Our practical training includes work on the staffs of various local newspapers. And wherever we go—to Chita in Siberia or to Kazan, to Murmansk in the North or Novosibirsk in the East, we meet men and women proudly wearing the rhombus-shaped blue badge of the Moscow University graduate. Our graduates are glad to go to any part of the country where their services are needed to work on newspapers, in industry, in research institutes. ★

MOLDING THE NEW CITIZEN

AND WHAT WE THINK ABOUT IT

MIKHAIL SOLODKOV

Secretary, Communist Party Committee
Moscow State University

The Communist Party organization at Moscow State University plays a very important if not decisive part in the character education of the student body. We do not duplicate the work done by the university's trade union, the Young Communist League or the Friendship Committee. Nor do we direct the activities of these organizations, but we certainly do guide them in one way or another—by virtue of the Party's prestige, maturity and experience.

By experience I mean not only organizational experience. Many of the noted scientists at the university make a double contribution to the community—as scholars and as Party members. Academician Sergei Vernov, the physicist, and Professor Alexei Leontyev, the philosopher, are two of the many members of the faculty who are esteemed by the student body for both their scholarship and Party work.

Our aim as Party members, as I said, is to educate the younger generation for intellectual maturity. I should like to add that we find our work immensely rewarding and that the university people are most sympathetic and responsive to our undertakings and efforts.

ALEXANDER RUD

Young Communist League Secretary
Moscow State University

A visitor to one of our university buildings, whether on Lenin Hills or on Marx Prospect in the center of the city, is sure to be amazed at the number of notices tacked up on hall bulletin boards. One calls for students to do volunteer community work on Sunday, another is an invitation to a conference on some philosophical problem, and a third announces a get-together with a noted writer or scientist, etc. Whatever the message, it was probably put up by the university's Young Communist League.

So when we say that the YCL is involved in every aspect of university life, we mean it literally. The YCL is concerned not only with the student's academic progress but also with his recreational activities, even his personal life. Ninety-five per cent of the total student enrollment, or 15,215, are members of the YCL.

We are indebted to the YCL for the record of service our students have achieved. It was the YCL that initiated student trips to the virgin lands to help with the harvesting, sent its members to construction sites where strong young hands were badly needed, and sent performers and lecturers to such distant places as Bratsk, Murmansk and Komsomolsk-on-Amur. Only last January six of these groups spent their winter vacation on a lecture and concert tour around the country.

The YCL also is in close touch with things scholastic. The university YCL Committee and its department committees take a lively interest in creative activity, as in the work of the student scientific societies. But more than that, since every scientist is a citizen first, it is our vital responsibility to foster a sense of civic duty in our students. That is the objective of our day-to-day activities, our departmental YCL meetings, debates, conferences and get-togethers.

The following is typical. A few months ago there was a rather heated discussion at the university's Institute of Oriental Languages on the role of the YCL in the training of orientalists. The debate quickly moved from consideration of the professional aspects of the question to the ethical values involved for the person who is preparing to live under communism.

The university YCL is a force to be reckoned with. Each department's YCL secretary is also a member of its Learned Council, and the secretary of the 41-member university YCL Committee is a member of the university's Learned Council. Generally speaking, every aspect of student life—stipends and scholarships, discipline, student facilities, job appointments after graduation, etc.—is taken up with YCL representatives.

However, university affairs are not our only interest: we do electioneering; we lecture to adult education classes in factories and on farms. As I mentioned earlier, we work on the virgin lands and make concert and lecture tours, which benefit not only our farmer and worker audiences but us students as well. By these activities the prime objective of the YCL is achieved — development of a sense of civic responsibility.

Another important YCL aim is to instill in the students the feeling of international brotherhood. At the university we have more than 2,500 students from 72 different countries. In this regard we work closely with the university's Friendship Committee.

I would like to say in closing that I am glad to have the opportunity of telling you about our university life, and on behalf of all of us I want to send our best wishes to the university students in the United States.

LEONID SMYSHLYAYEV

Deputy Chairman
Trade Union Committee
Moscow State University

We have any number of societies and organizations at Moscow State University. The Trade Union of Workers in Schools of Higher Education, with 30,000 members, is the largest. More than half of these are students (both undergraduate and graduate), and the rest are lecturers and professors, research workers, laboratory assistants, office and service personnel.

The range of problems handled by the union is very wide, from those pertaining to the students' general welfare, recreation, sports and cultural activities to individual students' academic progress. Understandably, it is most concerned with the first one.

Many of our activities, needles to say, require funds. The membership dues amount to 200,000 rubles annually. For the most part this money is spent on improving dormitories; providing free concerts, lectures on science and the arts; holding dances; and maintaining tourist centers. Grants in the amount of about 5,000 rubles are given to members in need. Finally, about 7,000 rubles is spent for sports.

But the income from dues is hardly sufficient to cover all our expenses. We get generous state assistance: we are entitled to 1.4 million rubles from the State Budget for social maintenance expenditures. This money is spent for sick benefits, special diets, and cut-rate or free accommodations at sanatoriums and rest homes. The trade union sees to it that these resort accommodations go to needy students.

About 1,500 of our young men and women stay at the university's three sanatoriums yearly. Three hundred are accommodated free; the rest pay only 15 rubles, or a third of the regular 26-day rate. The university also has its own rest homes—near Moscow, in the southern part of the country, and in the Baltic Republics. Every summer some 2,000 students, professors and other staff members avail themselves of these facilities.

The union's work is divided among committees having such specific responsibilities as labor protection, wages, grievances, study and research, and so on. Each committee sees to it that the rights of the trade union members in its particular sphere of activity are protected. Students constitute a large majority of the membership of these committees. Two-thirds of the union's executive committee members are students. Makar Karasev, assistant professor in the physics department, is chairman. I, a senior research worker at the law school, serve as deputy chairman.

While working on these various committees, the students learn to manage, organize and administer within the university community. They decide how the budget is to be spent, introduce changes in university procedures, supervise the progress of students in their studies—in a word, they are learning to become active citizens of their country.

VLADIMIR POLYAKOV

Chairman, Friendship Committee
Moscow State University

The Friendship Committee is the university's youngest organization, less than ten years old. It was formed when students from Europe, Africa, Asia and Latin America began to appear in ever-growing numbers in our classrooms.

It is difficult for a person studying abroad, even if he has no money problems. He is in a strange country, with a strange climate, strange people and strange customs. It is the task of the Friendship Committee to help these people make an easier adjustment, to help them make friends, and to make them feel that the country to which they have come is a friendly one.

Neither language, race nor religion is a barrier to friendship between these foreign students and Soviet citizens. In the 45 years of Soviet power we have done away with chauvinism and racism.

However, we have a great many people coming to us from countries which have only recently won their independence. These are people in whose countries the oppressive barriers have only recently been broken down. One can understand why they are suspicious, on guard. Our committe does everything it can to melt the ice.

We try to acquaint our foreign students with more than the outward aspects of our country; we want them to understand its goals and problems, to like its people. We arrange excursions for them to industrial plants and collective farms. We help them meet people in all kinds of occupations. They are frequent guests in the homes of many Muscovites. As a rule, in summer most of the foreign students take a trip through the Soviet Union.

Although there are only 50 students on our Friendship Committee, which has subcommittees in each department, many hundreds of students participate in its program. They arrange joint forums, parties and tourist trips.

The highest compliment our committee received was the request from a large group of foreign students at the university asking for permission to join a student group going to the virgin lands territory.

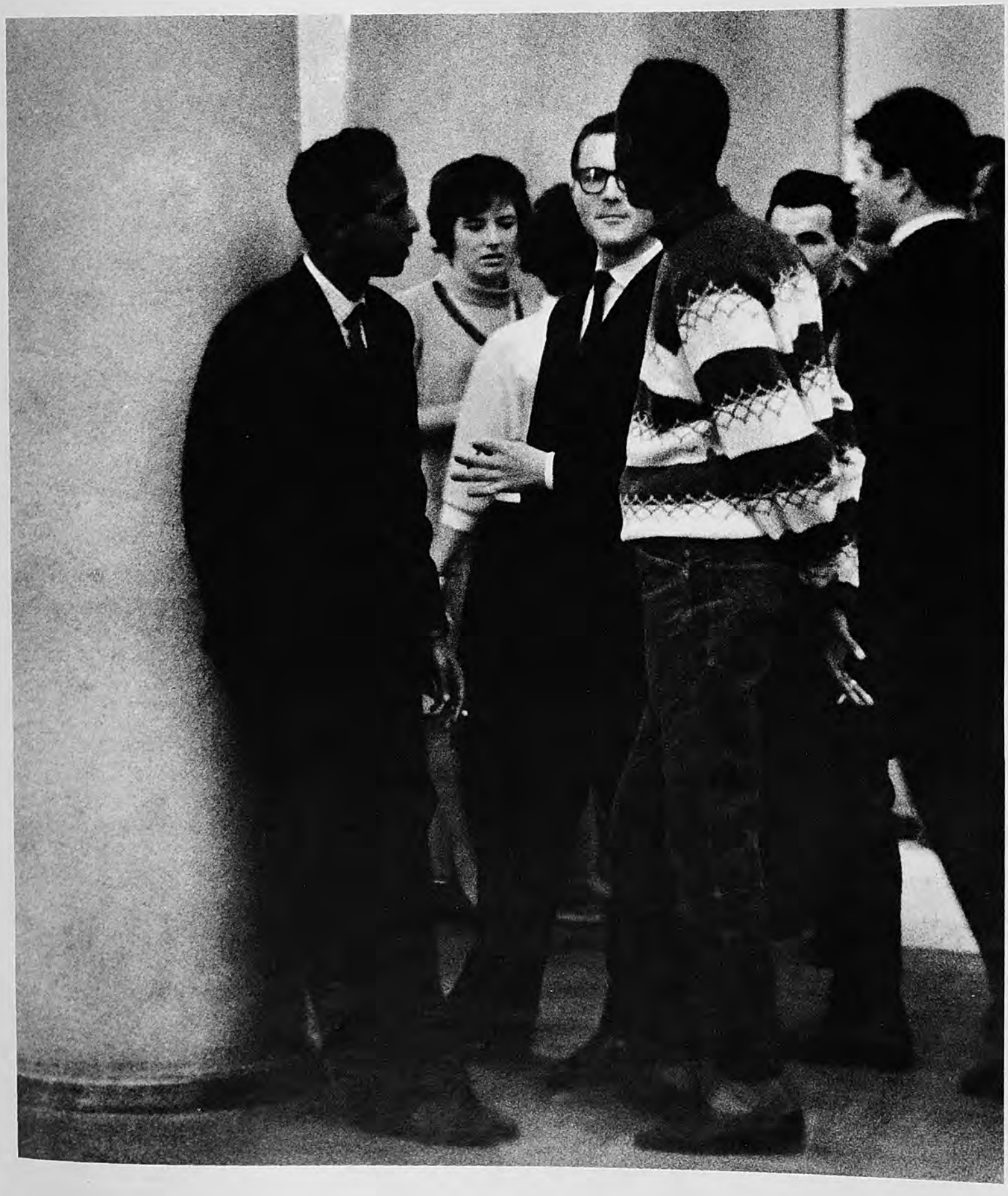
This friendship between Soviet and foreign students, which is growing as they study, attend lectures and do laboratory work together, is now being strengthened by their joint labor on the virgin lands. ★

All the photos on life at Moscow State University were prepared by Vsevolod Tarasevich, a prominent Soviet journalist who started his career as a TASS photo-correspondent at the Leningrad Front during the Second World War. After the war Tarasevich worked for many Soviet periodicals, including the magazines Ogonyok *and* Soviet Union. *At present he is a photo-correspondent for USSR.*

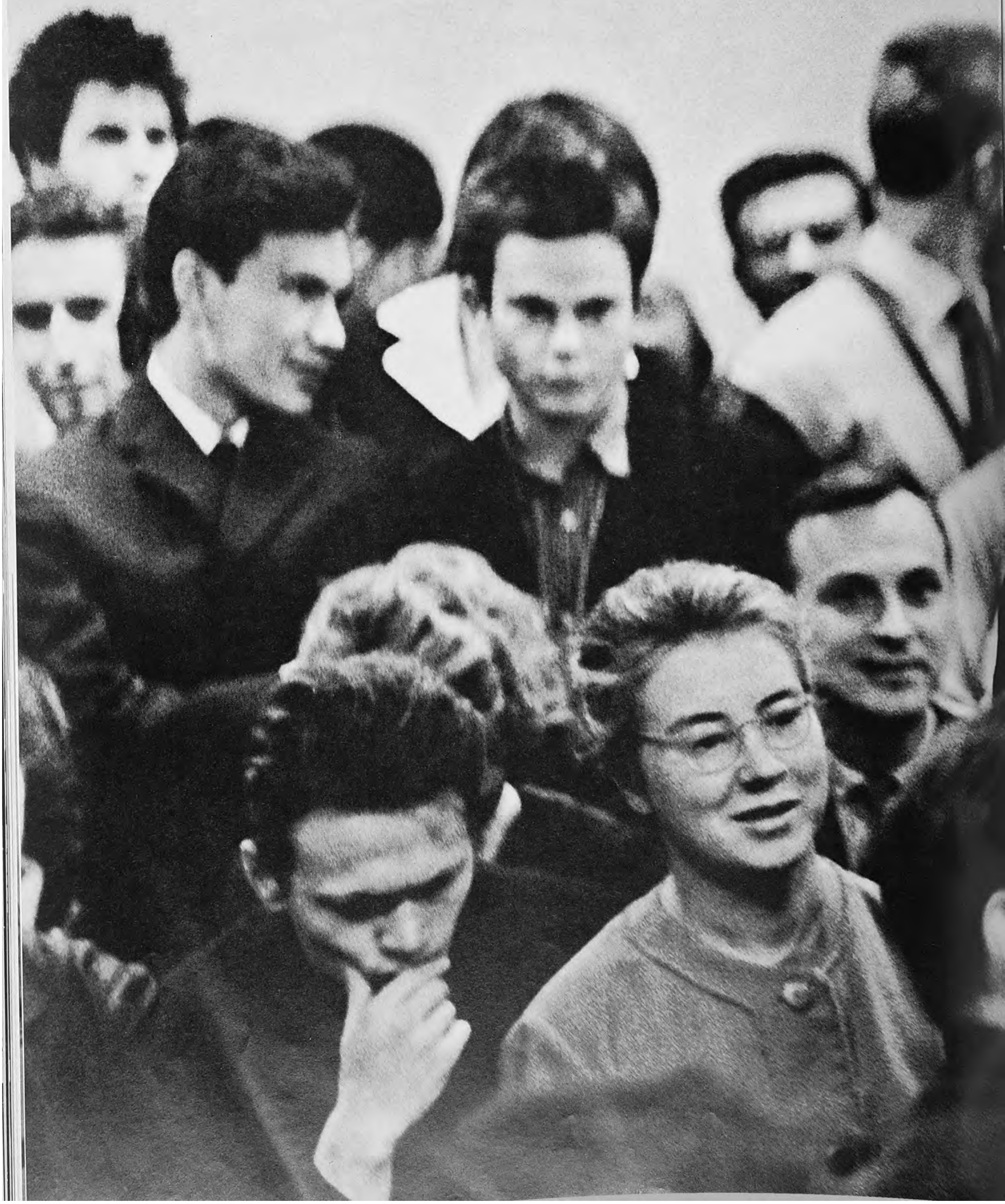
Tarasevich has been awarded prizes for his work on a number of occasions. At the 1958 USSR Photo Exhibition and the Seven-Year Plan in Action Exhibition he received highest honorable mention, and a number of his photos displayed at international exhibitions have also won gold medals, prizes or honorable mention.

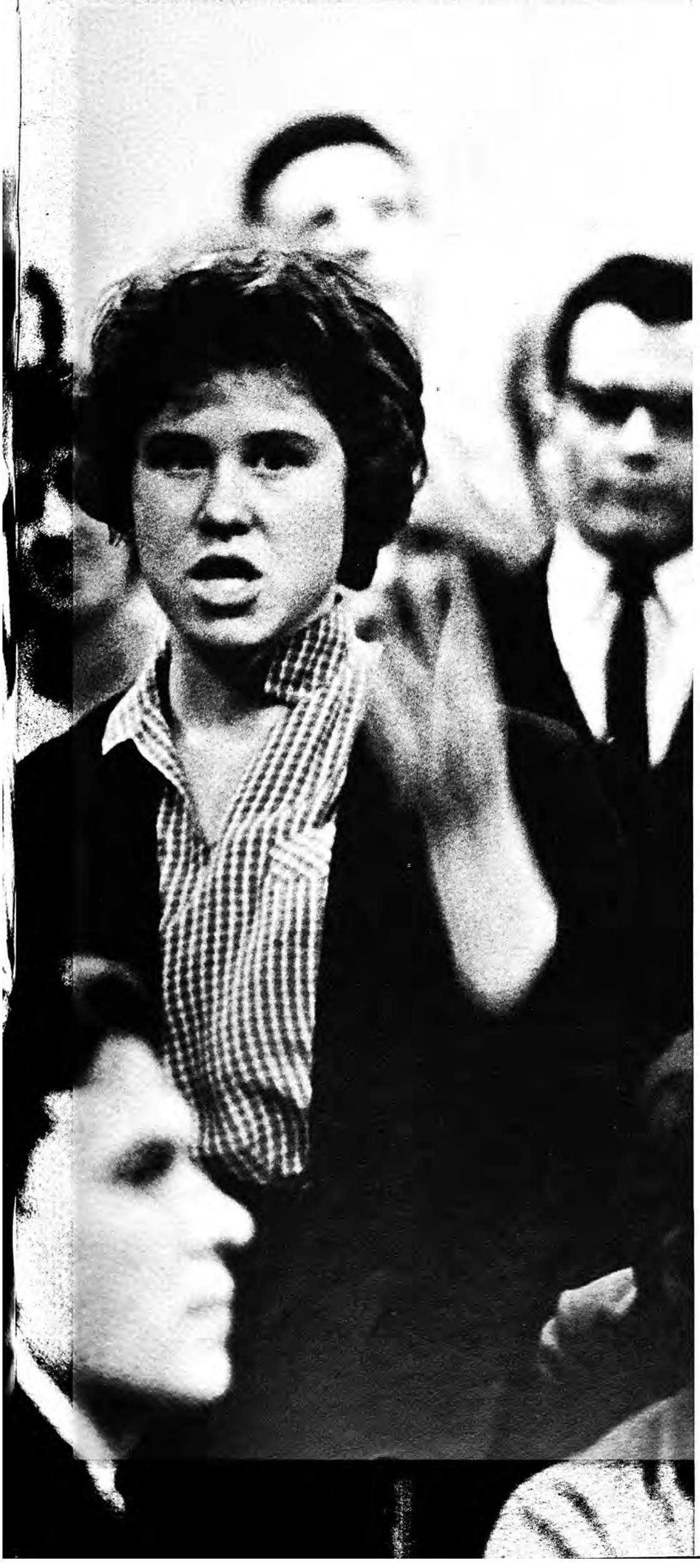
Photo stories are Vsevolod Tarasevich's favorite genre. His photos need no captions; they speak for themselves, conveying the internal dynamism of the situation, the nature of events and the diversity of man's inner world.

The captions for the pictures on Moscow University were prepared by Vladimir Shmiganovsky, Yuri Yusha, Valeri Kaner, Yevgeni Ageyev, Yuri Trofimov and Oleg Torchinsky, undergraduate and graduate students of Moscow State University.



A chemistry department YCL meeting. 95% of the students at M.S.U. are YCL members.





Man's dearest possession is life, and it is given to him to live but once. He must live so as to feel no torturous regrets for years spent without purpose, so as never to know the burning shame of a mean and petty past, so live that, dying, he can say: All my life, all my strength were devoted to the greatest cause in all the world—the fight for the liberation of mankind.

NIKOLAI OSTROVSKY, WRITER

THE PLANET CALLED VIRGIN LAND

PHOTOS BY ALEXANDER GERINAS
DRAWINGS BY VITALI MIKHAILIN

I am going to make history. Until now it has been passing me by. Now I know that some day I shall say: "We, too, did our bit." Plowing up virgin soil, I mean. I shall go down in history, if not in the history of the whole country, then at least in the history of the Furmanovsky State Farm on the virgin lands.

ALEXEI YERMAKOV

Student of Physics Department, Moscow State University
(from the *Moskovski Universitet* newspaper)

(Extracts from a Diary)

BY VALERI KANER
STUDENT IN THE PHYSICS DEPARTMENT
MOSCOW STATE UNIVERSITY

July 2. The last few hours before train time. I am no novice—this is my third trip to Kazakhstan—but each time I find the spectacle enthralling. The ubiquitous decorators are hanging a poster right under the roof of the railway car announcing, "You'll envy us—we're builders!"

The flatcars are loaded to the strong rhythms of the old song: "Eh-h-eh, pull, boys, eh-eh, heave ho!" Now an automobile is going on. What do they want that for? Oh, but things are done on a different scale in the virgin lands, not the way they're done in the Moscow suburbs. The distance from the state farm to the district center is a good 60 miles and maybe a bit more. Our bunch of students are going to work on 11 state farms. That is why the driver Vitya Philippov, a sophomore who has taken the driver's course at the university, is so excited. "Look out—you're going to damage the headlights!" Eventually, one of them does get smashed. "Never mind," someone says to console him. "The skies are clear where we are going; you'll find your way by moonlight."

What a crowd! Students in colorful sports shirts—all carrying knapsacks, of course. Mothers and fathers thrusting farewell gifts of sweets and jars of jam into the pockets of their tall, sturdy offspring. The whistle shrills. "Good-by, Mamma, I'll come back fat as a sausage!"

At the turns the train looks like a great arch. There are more than 20 red freight cars carrying 1,200 cheerful-looking boys and girls. We are on our way to the virgin plains of Kazakhstan to build farms and houses. This is quite a tradition now with Young Communist League members of Moscow State University. It first started in 1959, when there no longer was a burning need to ship out big student teams for the harvesting. But the unfading romance of the virgin lands still has its powerful attraction. This time the physicists have gotten permission from the YCL Central Committee to go out there. True, their generous impulses had to be fortified by certificates testifying to the completion of the building construction course they had taken evenings. When the typist in their department wrote in the report, "Students were sent . . . ," she was asked to correct it to, "The students sent a detachment. . . ."

And so today we are on our way to the boundless plains of Kazakhstan. The wintry snowstorms will have a little less room to rage in the steppes, and people will have more new houses; our men are going to build them.

Meanwhile, we bring order into the chaos created by the luggage on boarding the train and compose the first songs on local themes. The train rushes onward, and at the long awaited stop we get out and climb into the staff car. Here our extremely businesslike chiefs—my colleagues—are discussing the jobs to be tackled on our first days in the steppes.

Half the car is filled with books. This, too, is in keeping with tradition. We collect them every year from the students and professors, but this time there are more than ever before—70,000, enough for more than one state farm library in the Bulayevo District of Kazakhstan, our destination.

Another stop. Impromptu dancing starts on the platform. We dance in our quilted work jackets. A swarthy young fellow with a mustache, evidently from the Caucasus, gives a fiery interpretation of the Lezgin folk dance. Students from the Automechanical Institute sing a song they have just composed.

The train starts. Once more—the clatter of wheels, the Ural Mountains, then plains, plains, plains. . . . Ahead of us—the planet called Virgin Land.

July 16. We are not going to do any work this first Sunday. The state farm has promised us cars, and we are going out to the woods. In the meantime, nobody is doing much of anything—just waiting for the cars.

We fixed up our living quarters properly. First we put up plank beds in the fine spacious granary, and then we built a big kitchen and cellar-pantry. High under the ceiling a white banner exhorted us: "No belly-aching!" But the slogan proved superfluous; all we had was an occasional muscle ache.

We are building a pigsty, a solid affair with accommodations for "800 heads," as the official papers put it. The "we" in this case are ten boys and seven girls.

There was a terrific downpour the first day, and we all got soaked. "Well, we aren't made of sugar, we won't melt," we said to keep up each other's spirits. The foundation got dug.

One afternoon three girls who felt drowsy after lunch were late for work. The rest of the 17 lined up in front of the building and greeted the latecomers with: "Welcome, dawdlers, who think nothing of holding up the brigade's work." That was the last time they came late.

Yesterday, well on in the evening, a car drove through the big gate of the barn, blinding us all with its headlights. It brought the indefatigable Seryozha Litvinenko, leader of the whole Moscow University detachment. The odometer showed he had already done 3,700 miles, equal to the distance from Moscow to Bulayevo and back. While Litvinenko sat in on the meeting of the state farm staff, Vitya Philippov, the detachment's "man of iron," organized joy rides across the plains. So many of us clamored to go that he made ten round trips that one night.

Later on we took a long walk across the fields, reciting poetry, learning new songs, practicing for the concert we were to give for the settlers. A poster on the bulletin board called for "More Satirical Couplets!" Amateur poets took up their pencils and prowled zealously about the farm on the lookout for likely subjects—imperfections.

The rhythm of living quickened fantastically. Early rising, daily dozen, work, lectures, concerts. Living at this pace, you really feel alive. It's great here. The people are fine, too; we've learned a lot about each other. Only occasionally, of an evening, in rare moments of leisure, a feeling of sadness drifts down with the dusk.

But in the morning sweat and heat,
Doubts vanish. We repeat
Our effort and the strain,
Day and night, and day again.

August 1. Tolya Perevoznov, the chief of our group, has been gone for three days. He is at the district center plugging the cement question. I'm doing his job in the meantime. I have to get the timber, a power saw, and the trucks for our section. Carrying on without Tolya makes me feel a little helpless. He's an amazing person—rarely lets himself get irritated and just as rarely expresses a hastily formed opinion. He seemed phlegmatic at first, but his calmness is not a sign of indifference, it comes from thoughtfulness and the inner alertness of a man who is accustomed to going into every detail of the job he is doing. Tolya's very appearance makes you feel confident that whatever he decides to do will be done well and thoroughly.

Tolya heads the Moscow University student detachment in Bulayevo. He is the best chief of the best group. Last year he was the best team leader and has his name in the honor book of the Bulayevo State Farm. It was his party of 40 men that built the thoroughfare here they call University Street, and it was his men who plastered so many walls that the quantity of mix they used would have sufficed to cover 10 miles of highway.

His timetable for the day is planned so that every minute is accounted for. First thing in the morning, the distribution of cars, inspection of each work section—particularly those that are behind, a short meeting with the student team leaders, another with the foremen of the farm, a third with the director—so it goes on day after day. His army service, his previous work in these parts, and his year on the executive of the YCL of the physics department have obviously yielded results. But this year, his second at the university, has been a pretty tough one for him. The course of study covers a lot of ground, and it took a lot of personal discipline to find the time in that torrent of lectures, seminars, and laboratory work to organize a detachment of students for work in Kazakhstan. But he found it. There is a legend making the rounds of the department that someone once saw a note pinned up in the YCL executive committee office: "Out on business. If the minister phones, ask him to call again in 15 minutes. Anatoli Perevoznov."

The months in the steppes rush by at express speed. Tolya's tough year continues; there are ten groups in our detachment, and each one has its own peculiar problems to deal with. No matter where the 23-year-old chief shows up, obstacles that seemed insurmountable are quickly overcome. Our water carrier is forever breaking down and forever delivering water to the wrong places. Imperturbable Tolya takes a seat beside the driver, and the building sections get their long awaited water.

His fellow students respect him and are also very much attached to him. They respect him for the high standards he insists on and his consideration for others, and they love him for his modesty and his wonderful songs. In

the evening, when nothing breaks the stillness but the rhythmic hum of the motor at the field power station and the firelight plays over the tired faces of our people, Tolya half-reluctantly plucks at the strings of his guitar and sings quietly in something of a gypsy style.

At five in the morning, while we are all fast asleep, Tolya is making notes in his neat hand about all the things to be taken care of that day.

August 10. No, a day like this can never come again. It cannot, because at midnight you will be 20. It cannot, because the sky above is the starry vault of the Kazakh plains, and the sole reminder of your native Moscow are the opening bars on the radio of *Wide Is My Native Land*. You have seen so much and learned so much these two months, you who are entering on your third decade this very day. You have learned that there is so much still to be done, and that you yourself, with your own hands, can help do it. You have learned to forget aching muscles. You have sensed that you are a living part of a purposeful collective, building a new life on a new planet. Tonight beside the crackling campfire your collective will celebrate your twentieth birthday and congratulate you on your growing maturity.

You are a physicist. Two months ago you were watching the indicators of laboratory instruments and taking examinations in theoretical mechanics. Today you were handling the tool of the builder—a trowel. You came to these parts, not because you had to nor in pursuit of the exotic. You know that people need the houses you are helping to build, and this knowledge lightens the very bricks of which the houses are made. You come back from work late and sit for a long time at the campfire. Tonight, in honor of your twentieth birthday, the fireside singing will continue into the small hours.

What is given to us, men of 20?
A crowded car in a train,
Rumble of wheels, azure of summer,
Songs of haunting refrain.

You are in love with the inimitably gentle Kazakh sunsets, unfamiliar to Muscovites. Your biography can boast few striking experiences as yet, and this work in the virgin lands, arranged by the YCL, is the first exciting page in your life. And, as the train for Moscow rumbles back over the long, long track, in your mind's eye you will see shacks scattered over the steppe, the framework of houses going up, the frequent drives to Bulayevo for cement, the good talks that went on till well after midnight. You will feel a nostalgic touch of sadness that it all passed so swiftly. You will be manlier, yet remain young in a different way, when you travel home. Today you are 20.

August 25. A telegram was phoned in late yesterday evening; it said:

BE AT UZUNKUL STATE FARM AT 4 P.M. STOP STARTING TO SUM UP SOCIALIST EMULATION RESULTS BETWEEN DETACHMENTS STOP SIGNED CENTRAL STAFF

All right, we'll sum up. Five of us went—Tolya Perevoznov, three team leaders, and the YCL organizer. Bumping and jolting over the rough road, we started joking; only Kolya Samylin, one of the team leaders, seemed a bit depressed. Time was running short, and three houses on Physics Street, for which he and his group were responsible, still had no roofs. Yesterday the state farm workers who are to live in these houses had visited and looked them over carefully. Apparently they had been pleased with what they saw, but they had pressured Samylin's men to hurry with the roofing.

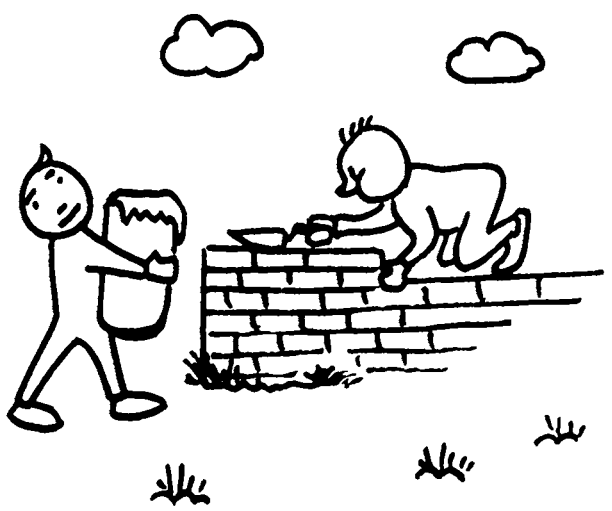
Outside the Uzunkul club we saw a vortex of cars and met classmates who had driven in from other farms. As we clapped each other on shoulders that had grown more solid, we traded the latest news and anecdotes. It was understandable—we hadn't seen each other for a month.

Then came the reports of the state farm detachments, sprinkled with such familiar words as calf sheds, hen houses, pigsties, granaries, hostels, schools, hospitals. One of the principal indexes of the emulation was how much a student had earned during the two months in Kazakhstan. The fellows from Perevoznov's detachment, for example, made 200 rubles each. For many of them these were first wages and a very welcome addition to the summer stipend from the university.

Following this, the university's virgin land staff evaluated the cultural work we had done for the settlers. Brief reports were given by the leaders of detachments. From these it turned out that as regards the number of concerts given, we had done as well as the All-Russian Touring Concert Association; as regards our popular science lectures for workers on the state and collective farms, we had done better than the All-Union Society for the Dissemination of Political and Scientific Knowledge.

Good for our university people!

What did we gain from this summing up? A great deal. We were carrying back with us in our truck the challenge pennant awarded for top place on the list of Moscow University student groups that had gone out to work in the virgin lands. Back in Moscow, the pennant would hang for a whole year in the quiet little room of the YCL executive office of our physics department.

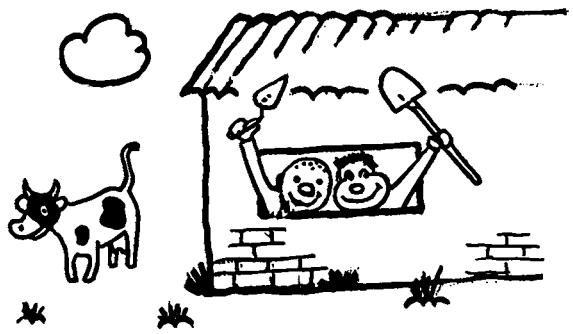


September 2. The airplane was climbing steadily. Tselinograd, the capital of the new region, was far behind us. There, three of us had put the finishing touches on the last issue of our own newspaper, called *The Young Worker of the New Lands*. The issue carried a letter from the secretary of the Regional Committee of the Party. "Special acknowledgement is due students of Moscow State University. It is at this university's initiative that volunteer student detachments come here yearly. These students, in a short time, have built 40 large stock farms, scores of granaries and hundreds of houses."

Leaning back in my plane seat, I try to figure out what was the most important thing we were carrying away from these virgin lands. Everything, it seems to me. Everything, beginning with the delightfully clever puppet show for little children on the Young Guard State Farm. Everything, down to the songs we made up on the way to Kazakhstan that we sang later in the buses taking us home from the railway station. But above all—it was pride we were bringing back, the pride of working people who had gathered the harvest of the fields with their own hands, winnowed and hauled to the elevators enough grain to feed the whole student brotherhood of Moscow State University for 20 years.

Three days ago we saw a trainload of students off to Moscow. They have probably just arrived at the Kazan Railway Station there. I can almost see them, the mass of brightly colored shirts and padded jackets, pouring out through the doors of the train. Great bunches of autumn flowers pass from hand to hand. Shabby, battered valises change hands, all save one—in which Tolya Perevoznov carries the certificates of honor and the medals awarded to us physicists for our virgin land work.

We are flying over the plains of Kazakhstan, and below us are lakes, round as saucers, great stretches of plowland, neat state farm settlements with streets straight as rods. At this height there is not much to be seen, but we make accurate enough guesses about the location of "our cowsheds," "our schools," and those houses "of ours" into which new tenants have already moved. As we gaze down lovingly from a height of 30,0000 feet at the fruits of our labor, we realize what a wonderful thing it is to build a planet of "our own"—the one called Virgin Land. ★



OUR DEAR FRIENDS, STUDENTS OF THE BUILDERS' TEAMS OF MOSCOW, LENINGRAD AND KIEV

Two and a half months ago you saw for the first time the boundless expanses of the steppe, the land on which you were going to build. Your teams have done much in this brief period of time. Hundreds of pupils have already filled the classrooms of schools you have built or repaired. Many collective farmers have moved to new flats. Millions of pounds of grain have been loaded into new grain elevators. Everything you have built has been built excellently.

We not only rejoice over the tangible contribution you are making in the cultivation of virgin lands. We take pride in the militant spirit of daring, of patriotism displayed by you, who represent the best of our Soviet students. The time to resume your studies is approaching. You will exchange the spade and the trowel for the textbook, and the noise of construction sites for the quiet of classrooms; you will get down to persistent study. We wish you good progress.

You have worked well. Thank you very much for this. You came here as students, but you are leaving as virgin land workers, and we say in parting: Good luck, dear Muscovites, Leningraders and Kievites. Come back to us, we shall be looking forward to seeing you again.

Till we meet again!

Tselinny Territorial Committee
of the Communist Party of Kazakhstan
Tselinny Territorial Executive Committee
Tselinny Territorial YCL Committee

"HOW DO YOU DO, Yuri Pavlovich, take a seat," says the dean nodding toward a leather armchair.

Yuri Pavlovich sinks into the chair and pretends to be studying a geological map of the Soviet Union on the opposite wall. He is somewhat embarrassed at having been addressed as Yuri Pavlovich. As a rule, very staid people, strangers or those well on in years are addressed that way in our country. Until quite recently he was just Yuri or Molodtsov, or on formal occasions Comrade Molodtsov.

He stole a glance at the people in the dean's office. Apparently they were not aware that he had been suddenly transformed into Yuri Pavlovich. They took it for granted that he was Yuri Pavlovich Molodtsov, graduate geological engineer, as they listened to the dean read his academic biography. Judging by what it said, he could be trusted with independent work at geological prospecting or planning. These people in the office were representatives of industry interviewing graduates.

They beamed their approval. Molodtsov was good enough for them. The fact that after his third and fourth years of study he had spent considerable time with expeditions in Yakutia spoke for itself. Nor was it a small consideration that throughout his five years of study his brilliant showing in his examinations made him eligible for a larger stipend. It was his high academic standing that now entitled Molodtsov to first choice of the many jobs offered to graduates of his department. No less than 20 people from various geological agencies were in the dean's office. They had 200 jobs to offer graduates, and Molodtsov had the pick of them. He could choose the place and the type of work that best suited him. And the job was guaranteed for a period of three years. He could not be dismissed without good reason. But who would want to dismiss a fellow like him!

"We'll be only too happy to have him."

"Sorry, but Yevgeni Mikhailovich (a gesture toward the dean) promised. . . ."

"Look here, you're down for six graduates as it is!"

"We need ten, and in different lines of work, and the Ministry of Education won't allow us more than six."

"But putting pressure on the dean isn't fair. It's up to Yuri Pavlovich himself to decide."

"Quite right," put in the dean, motioning the others to silence.

"Yuri Pavlovich," he began without a trace of humor in his voice. "A month ago at a preliminary interview with our Job Distribution Committee you said you would like to work for the Aerological Trust. You haven't changed your mind, have you?"

Yuri said he hadn't, it was an interesting job. The representatives reluctantly struck Yuri's name off their lists.

As he stepped out of the dean's office Yuri was surrounded by a group of his fellow graduates.

"Well, is it the Trust?" asked one of the young men with affected gruffness.

Yuri nodded.

"I thought so," the young man went on. "Why do we realize too late that it pays to be a good boy?"

The remark embarrassed Yuri. They walked down the corridor where mineral specimens from the department museum were displayed, but in a few minutes he was his old self again.

"Well, are you pleased?"

"Not altogether," he replied absently but then checked himself. "That is, I am, of course, but. . . ."

"The conditions no good?"

"Not at all, they couldn't be better. The salary is 130 rubles a month, and on expeditions I'll be getting more. It's not the money that bothers me."

"What about living quarters?"

"My family has a small house in Kolomenskoye. That's within the Moscow city limits. It's going to be pulled down and we'll be getting an apartment in a new house."

Gradually the reason for his not being entirely satisfied was pulled out of Molodtsov. It appeared that before enrolling at the geology department he was keen on mathematics and had matriculated in the university's mechanicomathetics department. The exact sciences, mechanics, scientific analysis, new discoveries had all gripped his imagination. But after the grind of the first year of study he knew he had made the wrong choice. He dropped out of the university and got himself a job. A year later his uncle, a geologist, took him along on a prospecting party. The party was out to find gravel for a new road from Noginsk to Gorky. It was not too exciting at first. He did drilling, then collecting, but after a while he began to work up a real interest in geology.

By then Yuri knew exactly what he wanted, and that fall he enrolled in the geology department. He put everything into his studies. He liked the field work most of all. In Yakutia, beyond the Arctic Circle, the party he was with struck diamonds.

"In my fourth year I realized that what I really wanted was research," Yuri said. "I was training to become a geological engineer, a man who follows a prepared chart, and what I wanted to do was to make the charts. The diploma thesis I did was on the geological structure and tectonics of the right bank of the Aldan River. Geologically speaking, the bank of the river had been a blank spot before then. The research and charting I did, the conclusions I arrived at, thrilled me to the marrow.

"Do you see my point now?" he continued. "The Trust I've taken a job with does aerial survey, uses the very latest devices. Of course, I'll be learning a great deal, but my heart is really in research."

"Did your professors know how you felt?"

"Of course, they recommended me for the graduate course, but while I was busy with my diploma thesis, all the openings were filled. There were dozens wanting to take the course. And then the Trust's representatives came and talked me into working for them; they promised to send me on distant expeditions as often as I wanted to go, and so I accepted their offer."

"Well, you'll probably be coming back to do graduate work and research."

"That's what I plan to do after my three years on that job. I'll take the evening graduate course at the university or go to the Institute of Physics of the Earth."

"Ask Shirokov and Sergeyeva in, please," said the dean.

"You want them in together?"

"Yes, we've settled that, if you remember."

Hastily the people in the office began going through their job lists.

The dean greeted the young people formally, addressed them as Elena Kuzminichna and Valeri Ivanovich, and motioned them to sit down.

Valeri and Elena paid no attention to the geological map on the wall. They looked at each other and then at the dean.

"At our preliminary interview," the dean said, "one of you agreed to take a job with the Moscow Hydrogeological Board, and the other with the Moscow Water Regimen Expedition. Have you changed your minds?"

Somewhat perplexed, they said they had not.

"Well, the point is," continued the dean hesitantly, "it has been brought to the attention of our committee that May 15 is the day you propose to get married. Is that right?"

"Er . . . yes," replied young Elena Kuzminichna, "but does that change matters?"

"It does. Allow me, on behalf of the committee to tender to you both first our congratulations and, second, two openings for jobs at the Central Geological Board that have turned up unexpectedly. We thought it might not be a bad idea for the two of you to work at the same place, if you want to, that is."

There and then, since no objections were forthcoming, they signed their contracts. Their signatures were placed side by side as they would be three weeks later on their marriage contract at the Wedding Palace. The atmosphere there, of course, would be more romantic, and the terms discussed would be less matter of fact than "living quarters provided, salary as fixed for this job classification," and so on.

Graduate Dmitri Moslakov wanted a job in Novosibirsk. That city, however, had not appeared on the preliminary list of jobs, and he agreed to go to Rostov-on-Don. A few days later an individual request came from Novosibirsk. But the person asked for was not Moslakov but Boris Stepanovich.

"I've no intention of going back on my word," said Moslakov, "but supposing Boris does not care whether he goes to Novosibirsk or not."

"Well, let's talk it over with him," decided the dean.

Boris Stepanovich was called in. He was a tall, hefty young man with the build of a professional boxer. He made himself comfortable in a chair and listened somewhat glumly to the dean's brief summary of the matter.

"I don't mind if Moslakov goes," was his comment. "I wanted to go as far East as possible; Novosibirsk is not far enough to make all that difference."

Boris sat silent in his chair eyeing his brand-new trousers, while Moslakov signed for the job and took his leave. After a short pause he asked: "Anything left?"

Plenty of jobs left. Two hundred jobs for 150 graduates, besides the offers not listed at the Ministry of Higher Education that come directly to the department.

* * * * *

The day that began at ten in the morning for the Job Distribution Committee ended at 6 P.M. when its work was done. Very soon newly qualified Soviet geologists would be starting on their first jobs. And on some railway platform in Siberia, Kazakhstan, the Baltic Republics, or the Don area a young man would be putting down his suitcase, lighting a cigarette, and waiting for someone to ask, "Yuri Pavlovich? We've been expecting you!" ★

(Left) The campus of Moscow University. Each graduating class adds several thousand highly trained young men and women to the country's work force. (Right) Alexander Kuzmin is interviewed by the geology department Job Distribution Committee with representatives of industry present. A very good student, he had his choice of a long list of jobs.

GRADUATES! CHOOSE YOUR JOB!

BY OLEG TORCHINSKY AND YURI TROFIMOV
MOSCOW UNIVERSITY STUDENTS, JOURNALISM DEPARTMENT

Mikhail Bogomolov has two homes, one with the comforts of city living. . . .

I'LL RETURN

BY VALERI GORKIN

PHOTO BY IGOR VINOGRADOV

WHEREAS SOME PEOPLE believe that the horse is the most hard-working creature, Mikhail is convinced that it is the mosquito, which works three shifts in a row and knows no rest, just like the human on whose back it is working.

And there was the pain in his shoulder. It was as though his skin had suddenly been gripped by a pair of red-hot pincers. He smiled ruefully as he recalled all the things that had happened to him those past three days, a compilation of omens for the superstitious. Early on the morning of Friday, July 13, his radio had gone dead—wet batteries. Then, he left the campsite without taking his geological hammer. Next he slipped on the ice, smashing his camera and skinning his hands badly. He had just managed to stop from going over the edge of a precipice into which he was now staring, horrified, his mouth full of snow.

What would the Old Man have said about such absent-mindedness and ineptness? Mikhail shrank from the thought. No one could ever say of the Old Man that he was forgetful, about anything. For instance, there is the story about him that some 25 years ago he had run the Aldan Divide along the seething Timpton River, shooting the rapids. It was only when he was safely past them that it was discovered he couldn't swim.

Mikhail thought himself very lucky to have such a chief. The Old Man was a wonder (Old Man was the name the institute students had affectionately given Professor Dmitri Korzhinsky). Another wonder was the fact that he, young graduate student Mikhail Bogomolov, of the most recent crop of geologists, was doing his thesis on a theory of the Old Man's when there were students and followers of Korzhinsky everywhere—in the United States, Japan, China.

...the other in the taiga, with the gnats and fly-bitten reindeer for company and only the endless tap of his geologist's hammer to break the quiet.

The Old Man's theory explained the process by which heated magma crystallizes rock, a process that could have a bearing on rare metal deposits. Applying physical chemistry and thermodynamics to the problem, the professor had evolved a method for studying the rock formations of the earth's crust. Like most brilliant scientific ideas, it was simple and ingenious, and required none of the twentieth century's technical miracles. An ordinary microscope, a slide rule and a geologist's hammer were all that Mikhail needed for his research project.

"That damned hammer!" he threw up a hand in disgust, and suddenly there were multicolored spots before his eyes. He was seized with nausea and broke out into a cold sweat. Evidently his injury was more serious than he had thought. Exhausted, he leaned back against the trunk of a large pine and looked at his watch. It was a quarter past three.

Primeval Siberian taiga all around him. The day before yesterday his Evenki guide had set off upstream toward the nearest settlement, some 95 miles away. They had a hospital there. Yakutsk, where Mikhail had begun his trek, was even farther away.

A whirring of wings over his head, and a flock of birds darted by with anguished, piercing cries. He was sad and miserable on this bald patch of taiga clearing veiled in the blue smoke of his campfire.

But even in that mood, he suddenly realized that he had two homes. One was in Moscow: old crystal on the buffet, his skis in the hallway, his tape recorder and favorite South American dance music, his friends at school, the Academy of Sciences sports club.

His other home was here: the taiga, the mosquitoes, the bags loaded with specimens, the heavy sleep, the string of gadfly-bitten reindeer, the endless banging of his hammer—tests, tests and more tests. This time he had been sent by the institute to study masses of eruptive rock.

He had long ago decided that the right to a life of comfort, the right to be respected by other people had to be won. He was a geologist, and his place was here. His aqualung, his TV set and handsome clothes could be no source of pride to him.

The taiga had taught him courage, given him experience. He was no longer a novice. He had first come here with an expedition, a second-year geology student from Moscow State University. His duties had been typically those of a student—mainly carrying a large knapsack stuffed with mineral samples. He was proud of his title, "collector," but it made the bag on his back no lighter.

Before he learned how to choose a good campsite and be able to cook a meal when it was raining cats and dogs, he had acquired this piece of wisdom—that the taiga was no place for the lone wolf. Beautiful and romantic for three or four, it fairly bristled with danger for the man alone.

The lone wolf, he had come to the conclusion, could hardly expect to achieve much. It had struck him sharply, way back in the eighth grade, when he was one of some 70 students who stood over their test tubes in

A hammer, slide rule and books are his tools. He took a job in Yakutia for a while, then came back to Moscow to work on his master's degree.

He works hard and plays hard, and enjoys them both. He is one of those lucky people who cannot imagine himself doing any other kind of work.

the laboratory during the chemistry competition and helped each other obtain essence of pear. They weren't thinking of who would win or anything like that.

Something similar had happened on his second trip to the taiga, when the group lost its way in a swamp and had to make one day's rations last for three. Roman, a senior student, had given him, the youngest, half his meager rations.

His fire had gone out, and he would have to light it again with his one good hand. He experienced a sportsman's thrill watching the ribbon of blue smoke snake up above the pines. In spite of his unpleasant though romantic situation—the wounded,lone geologist in the wilderness—he didn't feel desperate about it in the least.

His romantic period started back in his early years at the university. He had thought of the taiga then as a movie set, expecting to see, at any moment, a ragged prospector with at least a seven days' growth of beard come tottering out of the forest with his precious bagful of gold dust.

But nowadays the gold in this region is obtained by dredging, and the state agencies send out prospectors in teams.

He had hoped to find the Evenki in their *yourtas*, as of old, but instead he had been welcomed into clean, comfortable houses. He did meet people who had never seen an automobile, but after five minutes of conversation with them he could see that they were completely at home with helicopters and the latest films.

For him romance appeared in a different guise these days—discovering nature's secrets; justifying the expectations of those who sent him to the taiga, his coming back with something new; prowling the forests, going hungry, sleepless, even risking his life.

This was what the taiga had given him. And he was repaying it with his loyalty. That was why he had not stayed on to take graduate work in Moscow, although he had been invited to, but had taken a job as an ordinary laboratory assistant in the Yakut branch of the USSR Academy of Sciences. Afterward he had done graduate work at the Geology Institute of the USSR Academy of Sciences in Moscow. Graduate work made sense to him then; he came to the institute with his own project—to search out new applications of Korzhinsky's theory.

Somehow, even with the fire going, the evening seemed most dreary. What would brighten it up? A tall, icy glass of lemonade? Or better still—a long letter from home? Mikhail, like most young people, preferred getting letters to writing them.

In their apartment, in one of Moscow's older sections, his folks got used to the long intervals between his letters. His mother often felt that she was fated to be alone periodically. Mikhail's father, a construction engineer, was also often away from home on long assignments.

She had never dreamed the boy would be a geologist. From the time he was a tot, their home had been full of puppies, fish and pigeons. Mikhail had been a very zealous member of the children's biology class at the Moscow Zoo.

Then came his radio and soldering-iron period, when he was an enthusiastic ham. But already on the horizon was a new passion—organic chemistry. So he joined a chemistry club set up at the university for high school students.

He had been drawn to geology by two people of whom his mother had heard a great deal—one Russian, the other American—Vladimir Obruchev and Jack London. The first, an academician and science fiction writer, captivated his young readers with tales of the huge reptiles and gigantic ants of the Jurassic period; the second, with gripping stories of gold prospectors and hunters.

But his mother couldn't blame those two, since their books were on the same shelf—Mikhail's—with stories by Anton Chekhov, Karel Capek, Mark Twain and the historical fiction of Alexei Tolstoi. . . . His kettle was boiling at last. Too bad he couldn't use his rifle with just one hand; he was fed up with canned food.

The glowing edge of the evening sun was dropping behind the pines, and he did not catch sight at first of the helicopter making for the blue smoke of his campfire.

Mikhail placed his cigarette carefully in the ash tray and went over to the window. Down there was Sadovaya Street, one of Moscow's central belt thoroughfares, with its unending rumble of traffic.

"It must have been rough going for you in the taiga," I said sympathetically.

"There were times," he said quietly, "but I'll return." ★

He's off again to the wilderness. His mother says good-by with the usual admonitions to take care of himself and write often.

IN THE NEXT ISSUE

The cover is a photograph of an ordinary worker whose name is Valentin Lyubimov. It was the efforts of millions of workers like Lyubimov that transformed the Soviet Union from a country of bast sandals, samovars and poverty into one of sputniks and atomic ships, into a mighty industrial power.

More than 30 years ago the poet Vladimir Mayakovsky wrote about the first Soviet construction projects, the first Soviet workers, about the future of the first socialist country: "I know—a city here will stand, a garden bloom—I know, when in our Soviet Motherland such people grow." What the poet dreamed of has come true. "Such people" work in plants all over the country. They built Magnitogorsk, the first-ling of Soviet industrialization. An article on the giant iron and steel mill describes the life of its workers and tells how they run their plant and how its profitable operation raises their standard of living.

This is Valentin Serov's portrait of the actress Maria Yermolova, called a "symbol of creative volition and artistic inspiration" by the critics. Serov belonged to the art union Mir Iskusstva, founded in 1898, whose members—Alexander Benois, Konstantin Somov and other outstanding prerevolutionary artists—exerted a decided influence on the history of Russian art. Art historian Dmitri Sarabyanov discusses this in his article **World of Art.**

A color enlargement of this picture of a whaler is our Photo of the Month. The September issue will take our readers aboard a whaling ship, tell them about the life, work and leisure of its crew, and about the products man gets from the sperm whale, which inhabits the waters of the Far East and is the basis of the profitable whaling industry.

Some of the other articles in the September issue are:
Iowa Farmer on Soviet Agriculture—Roswell Garst gives his impressions of his recent trip to the Ukraine; **Nekhama Lifshitz Sings,** about the popular Jewish artist; **Basis and Superstructure of Society,** analysis of the relationship between society's economic foundation and its political and legal institutions.

NOVOSTI PRESS AGENCY

USSR

SOVIET LIFE TODAY

Education Organization of the system of public education; how Soviet teachers achieve its main objective: education of the individual; self-administration; ethical relations.

Columbus Scientist Davis Tsukernik proposes a new hypothesis; documents about Columbus' voyage reveal unexpected data; the explorer did know about the lands he was sailing to.

Coexistence About the competition between the two social systems for a higher standard of living and the fuller satisfaction of man's cultural needs, about the struggle for lasting peace.

COMING SOON

A CHILD IS BORN

BY GALINA BASHKIROVA

THE TINY, helpless creature screws up its face and wails a loud protest at being thrust into a strange environment. The woman who a few minutes ago became a mother looks at her baby with a smile on her lips and tears in her eyes.

She is 41. For 20 years she and her husband hoped for a child, but Rh-negative blood and various ailments conspired against it. A year ago a child was delivered by Caesarian section but it died an hour after birth.

The last try was made February of this year at Moscow Maternity Home No. 20. Every possible precaution was taken—blood for the mother and child, an oxygen tent and equipment for reviving newborn infants were all close at hand. The struggle began at 10 A.M. with another Caesarian; at noon the 20-year family drama came to a happy end with the birth of a strong, healthy 8½-pound boy. And head physician Klavdia Sbusina smiled for the first time that day at this latest addition to the long line of boys and girls she had helped to bring into the world in her 35 years of practice.

After a careful examination of the squalling infant, Dr. Sbusina handed him to the nurses. He was given the attention he needed and taken to one of the sterile wards. Each of the 21 infant wards, scrupulously cleaned and quartz irradiated, has room for eight babies.

The maternity home has a ward set aside for premature infants and those born undersized or sickly. Three children born in the sixth and seventh month stayed there for several months before they were discharged as healthy. Years ago these infants would have died; today they are saved by long and painstaking care. The modern physician has at his service, among other lifesaving equipment, apparatus to revive babies suffocated during delivery. Jets of water are used to pump out fluids from the infants throat. Last year 12 infants were revived with this equipment. For the past three years the maternity home has had no deaths among mothers from childbirth or its aftereffects.

The newborn babies lie in high beds, each one numbered. They sleep, cry, drink a little glucose and saline solution and are nursed by their mothers seven times a day.

At the daily morning conferences physicians and nurses check on the babies' progress as well as the state of health of the mothers.

These infants staring blankly into space are not aware of the happy excitement their births generate, or of the numbers of people who have already worked hard to make sure they arrive healthy and strong. At the first signs of pregnancy their mothers went to a maternity consultation clinic where they were examined and where gynecologists, internists, roentgenologists and electrocardiographers discussed their chances of normal pregnancy and childbirth and whether special treatment was necessary. They were given quartz treatment in winter so their babies would not have rickets. They were taught not to be afraid of childbirth and learned how they could actively help the obstetrician to deliver their infants speedily and safely. They paid nothing for the examinations, consultations, analyses, lectures, treatment, delivery, hospitalization, and if they held jobs, received 112 fully paid days of maternity leave.

A week after delivery mother and child are discharged. The maternity home has notified the neighborhood children's polyclinic of the new arrival, and the following day baby and mother are visited at home by a pediatrician and nurse.

Some of the new mothers will have forgotten the lectures they heard and the advice they were given. The windows will be shut tight, the baby wrapped up so no breath of air gets to him. The doctor changes all that at once. He examines the child, who will be his patient until the age of 14. The nurse helps the mother bathe him. The first week the nurse visits almost daily; thereafter she comes once a week. When the baby is a month old, the mother brings him to the polyclinic for the first of regular monthly visits until he is a year old.

If the mother has difficulty nursing the child, the physician sends a specially trained nurse. Milk, milk foods, gruels, kefirs and curds—all sterilized, and of first-grade quality —are available at children's milk kitchens at very low cost. Students and mothers with low incomes or large families pay nothing.

Women with many children and single mothers get monthly state subsidies. After the third child the mother is granted an extra subsidy. All this is part of the generous concern of the state for the health and well-being of its future citizens. ★

THE GREATEST BATTLE OF ARMOR

For the Battle of the Kursk Bulge, Hitler marshaled an army of a million men that was to avenge his defeat at Stalingrad (now Volgograd). In a titanic battle fought for two months—July and August of 1943—the fascist forces were completely routed.

Pavel Rotmistrov, the author of these reminiscences, commanded the Fifth Guards Tank Army that fought at Prokhorovka in the decisive encounter of the Kursk Bulge. History has no precedent for the simutaneous use of such great masses of armor.

BY PAVEL ROTMISTROV

CHIEF MARSHAL OF THE TANK FORCES OF THE USSR

EARLY in the spring of 1943 I was appointed commander of the Fifth Tank Army, which had just been formed.

It is no coincidence that this army was organized shortly after the Battle of Stalingrad. We had learned from the battle on the Volga that more massing of our tank forces was necessary, and within a short period of time five tank armies were formed. They all played a decisive part in the Kursk battle.

I was called to Moscow on several occasions at the time. On one such visit to the capital I received permission to visit my family. They had been evacuated to the village of Pochinki in Gorky Region. I went there by plane. The villagers gave me a warm welcome and bombarded me with questions: "When will we drive out the fascists?" "What's the situation at the front?"

Things were not easy then, but I saw no signs of discouragement.

The meeting with my family was a happy surprise, but very short. My wife taught German at the village school. She looked very tired. My son was already 15. He told me proudly that he had joined the Young Communist League, that he was doing well in school and was working on the collective farm. My six-year-old daughter hardly recognized me.

A few hours, and I had to leave again. It is never easy to leave dear ones, especially in wartime.

I did not know then that one of the great and decisive battles of all time was about to be fought.

Dream for Revenge

Hitler pinned his hopes on that summer of 1943. He dreamed of his revenge for the smashing defeat of the German forces at Stalingrad, which the Nazis blamed on "General Winter."

Profiting by the fact that there was still no second front, the Germans concentrated near Kursk an army of unprecedented size—70 divisions consisting of 900,000 officers and men, 10,000 pieces of artillery, 27,000 tanks and self-propelled guns. "There must be no failure," Hitler declared.

The German Command aimed to win with powerful armored thrusts covered by heavy air support. The fascists dreamed of a "great offensive."

The operation, in the opinion of the Hitlerite command, was directed by outstanding strategists: Field Marshals Manstein and Kluge, as well as Generals Model, Got, Kemper and others.

By the summer of 1943 the Germans had been able to rearm their forces very considerably and were putting new types of heavy and medium tanks in action.

Their heavy T-IV Tiger tank weighed 56 tons, a powerful machine with a 100-millimeter front plating and an 88-millimeter gun.

The T-V Panther tank weighed 45 tons, was armed with a 75-millimeter gun and had a front plating of 85 millimeters.

The self-propelled gun mount Ferdinand weighed 70 tons, had a front plating of 200 millimeters and an 88-millimeter gun.

Almost all these new machines were concentrated at Kursk.

Birthday

Our tank army was stationed 185-250 miles from the front as a Supreme Command reserve.

July 6 is my birthday, and I naturally wanted to celebrate it with my comrades in arms. On July 4 I sent dinner invitations to fellow officers, and on July 5, the first day of the German offensive at Kursk, I received preliminary orders to put the army on the alert. I knew that the order to move out would come late on July 6. But I decided not to cancel my invitations.

I wanted personally to brief the corps commanders and the commanding officer of the army's vanguard. Our army had to do close to a 250-mile maneuver march before it engaged the enemy. I wanted to warn them that we might also have an unexpected meeting with the Nazis en route and an encounter battle. This was precisely what happened.

When the officers and generals arrived, I invited them to a big tent (the army headquarters was in a forest). My guests were very much surprised when they saw maps with the military situation plotted instead of a table set for dinner.

Right there, in the tent, I gave the corps commanders their orders. They had to leave for their units immediately. But just before they left, after all the questions had been answered, we drank some captured champagne to the success of the operation. This rounded off my birthday party.

A few hours later the army started for the village of Prokhorovka. The columns of tanks moved in an endless line.

I shall never forget the anxiety and hope with which the children and women of the villages we passed through looked at our armored columns. There were tears of joy in their eyes and the nagging question: "Will they be retreating, too?" Our people had suffered greatly during the years of occupation when our army had to retreat.

On July 9 I reported to the Commander of the Voronezh Front, N. Vatutin, that we had completed the march.

The Last Stake

The Nazis' offensive toward Kursk was petering out, the reason they decided to change the direction of their main thrust. By July 12 they had concentrated a large tank force west of Prokhorovka. It included 600 tanks and a large number of self-propelled artillery pieces. The group comprised the best of the SS Panzer divisions—Adolf Hitler, Death's Head, Reich and others.

The offensive at Prokhorovka, so the Nazi military experts thought, would decide the outcome of the Kursk battle in their favor. It was the German Command's last card.

The fascists planned to start a decisive offensive on this sector of the front on the morning of July 12, encouraged by some slight progress they had made there the day before. They were certain that only our infantry contingents would be facing them. Instead they encountered a formidable armored force.

With the approval of General Headquarters, the Command of the Voronezh Front decided on a counterattack with five armies that same morning. The major role in the counterthrust was assigned to the Fifth Guards Tank Army.

However, the situation had changed by the morning of July 12. The enemy had succeeded in forcing back some of the units which were to make the counterthrust together with the Fifth Tank Army. They could not therefore contribute as much to the operation as the Command of the Voronezh Front had anticipated. As a result, the Fifth Tank Army had to carry the brunt of the battle.

Very few people slept that night of July 11, before the biggest battle of armor in history. Every tankman, from private to general, knew that the decisive hour of the Kursk battle had arrived. Every Soviet officer and soldier was determined to hold on and, regardless of cost, to prevent the enemy from reaching Prokhorovka, to rout his Panzer force.

The enemy also prepared for the showdown that night.

The Attack

Soviet bombers and attack planes softened up the Panzer divisions on the morning of July 12. The tanks of the first echelon staged an attack after a short burst of artillery fire.

Hundreds of German tanks, self-propelled guns and armored troop carriers rolled toward our attacking machines.

This began the Prokhorovka engagement, with close to 1,500 tanks and self-propelled guns from both sides involved.

I had a good view of the whole battlefield from my observation post. It was jammed with hundreds of armored vehicles. Two waves of attacking tanks drew closer and closer in a cloud of dust raised by their tracks. The gunfire was one continuous roar.

We moved so fast that the Nazis had no time to prepare a counterattack. The front rows of the Soviet tanks went right through the first Nazi echelon. The Germans lost track of their forward units. The Tigers, their superiority in gun power and armor cancelled out at short range, were knocked out by our T-34 tanks.

A huge number of tanks whirled around on the battlefield. There was no time or place for disengagement and regrouping. Fired at short range, shells pierced both front and side plating. This often blew up the ammunition stocks, and the resulting explosions sent tank turrets flying scores of feet from the crippled machines.

A desperate battle was also being fought in the air. Bombers, attack planes and fighters shut out the sky over the Prokhorovka area. One dog fight followed another, with scores of planes taking part. Air supremacy remained in the hands of our valorous fliers.

Ram Attack

Very soon the whole sky was shrouded in smoke. Tanks burned like torches in the steppe. There was no way of telling which side was attacking and which was on the defensive.

One of our tank battalions, advancing along the left bank of the river Psel, ran into a group of Tigers. They fired from a distance, their powerful guns menacing our tank crews.

Our tanks had to force the enemy into close combat as quickly as possible to deprive him of the advantage of distance. The battalion commander, Captain P. Skripkin, rode full speed directly at the center of the Nazi defenses. With the very first shot, his tank shattered the side plating of a Tiger, then turned around and pumped three more shells into a heavy enemy tank, setting it on fire.

Several Tigers opened fire on Skripkin's tank. One shell smashed its side, another wounded the commander. The tank caught fire. The driver and radio operator dragged Skripkin out of the machine and hid him in a shell hole. But then they saw one of the Tigers heading straight for them.

The driver, Alexander Nikolayev, dived into his crippled, blazing tank, started the engine and raced toward the enemy—a thunderbolt streaking across the field. The Tiger stopped, pulled back a little, and started turning. But it was too late. The blazing KV crashed head on into the German tank with an explosion that shook the ground. The ram attack of the Soviet hero stunned the Nazis, and they began a fast retreat.

I want to take the opportunity to mention the part that Nikita Khrushchev, member of the Military Council of the Voronezh Front, played in organizing and winning the Kursk battle. When the engagement was in full swing, he rode up to the Prokhorovka battlefield in an open car and stayed there with the tankmen, in the middle of bursting shells and flying bullets. Word got around to all the tank crews that he was there. He brought the Guardsmen cheering news from other sectors of the front.

The junior officers and privates displayed remarkable initiative in this battle. The platoon commanded by Lieutenant Bondarenko, for instance, was ordered to the assistance of the Second Company, which was in a tight spot.

As the platoon rushed to the Second Company's position, two Tigers moved to intercept Bondarenko's tank, keeping it under constant fire. Maneuvering skillfully, Bondarenko pulled his tank up behind one of the German machines that was beginning to burn. The Germans thought it was Bondarenko's tank on fire. The platoon commander carefully aimed his gun at one of the enemy tanks and pumped four shells into it. The Tiger burst into flame. The crew of the German tank was mowed down by machine-gun fire as they jumped out.

After making short work of the Tiger, Bondarenko had time for two enemy guns that were firing at his tank. He coolly aimed at one, and knocked it out by a direct hit; his tracks rolled over the other. Bondarenko's tank crew and his platoon battered the enemy badly. His own tank was set ablaze by an enemy shell. The crew could not put out the fire; they left the tank and continued fighting on foot.

In the afternoon the Hitlerites pulled up reserves from other sectors of the front and savagely attacked the Fifth Tank Army. The Guardsmen, however, had enough time to dig in, and all enemy efforts to dislodge them from the positions they occupied failed. The Germans suffered huge losses, but they could not break through to Prokhorovka. The armored fist of the Nazis smashed in vain against Soviet armor, against the heroism and self-sacrifice of Soviet soldiers.

The Rout

In the Prokhorovka battle our tank army destroyed almost 400 enemy tanks (including 70 Tigers), 88 artillery pieces, and killed 3,500 Nazi officers and men. Our tankmen won the day in spite of the large number of new tanks, superior to some types of ours, which the Nazis threw into the battle.

"Field Marshal Summer," whom the fascists had counted on, was not much help. Before then the Nazis used to comfort themselves with the thought that the Russians could advance only in the winter. This time "General Winter" was not there to take the credit.

The defeat at Prokhorovka was a shock for the Nazi military. Fascist losses in equipment, particularly in tanks, were catastrophic. By July 14 only a few Panthers had survived the Kursk battle. Walter Gorlitz later pointed out that "the neck of the German armored force was broken" at Prokhorovka.

The Supreme Command of the German Armed Forces was quick to pin the blame for the Prokhorovka defeat on the Commander of the SS Panzer Corps, Obergruppenführer Hausser. They took away his command.

As early as July 13 Hitler summoned Field Marshals von Manstein and von Kluge and ordered "Zitadelle" (the Nazi code name for the Kursk operation) immediately discontinued. The enemy went on the defensive.

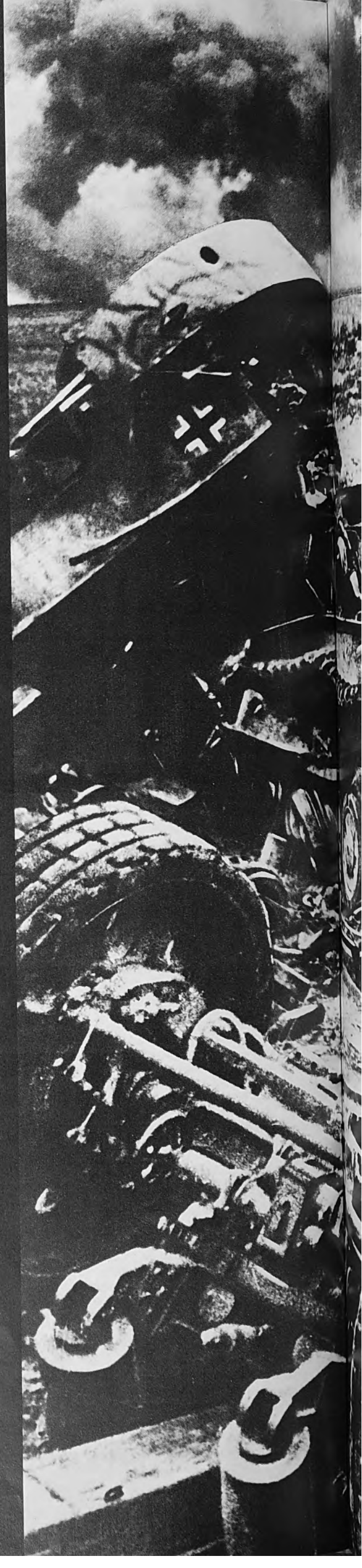
The meticulously prepared operation "Zitadelle," which the rulers of fascist Germany hoped would bring them victory on the Soviet-German front, was a complete fiasco. The rout was one of the factors that made it possible to launch an all-out Soviet counteroffensive. That same year almost two-thirds of the occupied territory was liberated.

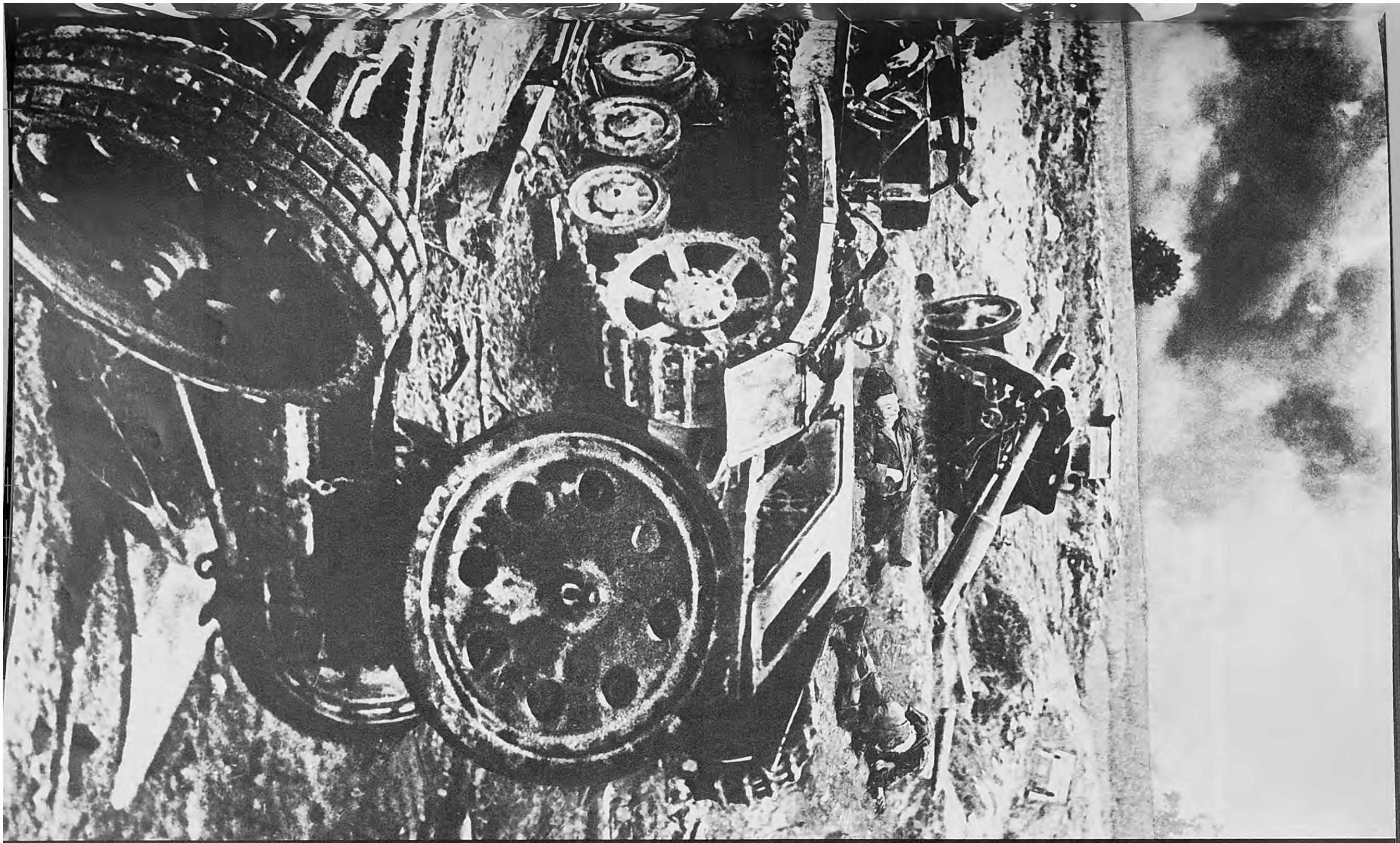
The Nazis were unable to retrieve the losses they suffered in the Kursk battle. According to German sources, in the 50 days of fighting they lost more than half a million officers and men.

After the Kursk battle, Field Marshal Manstein wrote, "The initiative went over irretrievably to the Soviet side."

The Kursk battle was vitally important to our allies as well. It compelled the German Command to move large forces from the Mediterranean theater to the Eastern Front. Hitler could no longer help Mussolini. The *Daily Express* said editorially on August 7, 1943: "The victories in Russia have created definite opportunities in the Mediterranean. A few German divisions could have kept Mussolini in power, but Hitler could not afford to divert from Russia even such insignificant forces."

But the greatest value of the Kursk defeat was that it showed the Germans at the front and in the rear, as well as their allies, that they could not hope to win the war against the Soviet Union. ★





Women's Page

BEAUTY REQUIRES PATIENCE

BY IRANA KAZAKOVA

I used to hate going to the hairdresser. It was altogether too expensive for me.

Not in terms of money. A set costs less than a ruble in a first-class beauty shop in the USSR. And a manicure is only 38 kopecks. But I find that though the prices are insignificant, the time you spend waiting is usually at least an hour. Therefore, if you go by the American saying that "time is money," a visit to the hairdresser is an expensive business.

I finally decided to do my own hair. I acquired curlers of various shapes and sizes, brushes and a miniature dryer. Unfortunately I couldn't buy patience. That was why, as soon as I heard about them, I hurried to visit one of the five new beauty shops that had opened in my neighborhood.

Entering the vestibule, I did not notice anything unusual at first. The interior, with its modern lines, looked like that of any new building. But there was something unusual about that vestibule— it was empty, most unusual for Moscow beauty salons. Soon, however, a young man in a spotless white coat appeared and led me to a waiting operator.

My first visit to this new beauty shop was full of pleasant surprises. I enjoyed sitting under the graceful French dryer. Streams of air wafted through my hair, seeming to be coming now from the Sahara, now from cool Greenland. I was sitting between two girls who were also getting their hair dry. One was assiduously leafing through a book. The other had just closed hers and was obviously memorizing something to herself. I glanced at the cover and smiled.

Odd how you can come upon interesting phenomena in the most unexpected places! And modern Soviet woman is phenomenal, from my point of view. The distinctive features of this particular phenomenon? Hair in curlers and in hand a textbook on higher mathematics.

Had the manicurist started to talk about cybernetics to her customer and had the latter turned out to be a Doctor of Physicomathematics, I would hardly have been surprised. But what did surprise me was the fact that there were so few customers. For that I was totally unprepared.

The next day, when some friends of mine commented on my hairdo being especially becoming, I generously shared my new-found discovery with them. But that was a mistake. My second visit to the new salon was less enjoyable—I had to wait in line.

Whenever something happens to spoil my mood, I talk to myself. That was what I found myself doing on this occasion. The subject was the state of our service industries. At first I thought in rather trite patterns: spaceships and waiting lines in beauty salons, huge synchrophasotrons and much smaller hotels, the solved problem of eating in space and the unsolved problem of cafés and restaurants on earth.

I found myself choosing parallels subjectively. And for a journalist to be subjective is not the best thing.

Even if you are the kind of person who doesn't mind a long wait, you'll have to admit that the number of barber shops and beauty salons has grown considerably. Seventy-six new ones have opened in Moscow in the past 18 months. In the new sections they sprout like flowers after the rain.

And so far as the hotel problem is concerned, I have to admit that it is not really so acute after all—particularly with all the modern hotels that are going up all over the city.

Moscow could do with more cafés and restaurants, that's true. The city authorities seem to think so too. That is why there are always new cafés, cafeterias and restaurants opening up in the capital.

At its session last year the Central Committee of the Party discussed the problem of developing the service industries, along with questions of industrial funds to be allocated for the purpose.

In the Soviet Union service lags behind science, industry and construction. Why?

The other day I was interviewing Yelena Vorobei, deputy director of the USSR Fashion House. I asked her the same, or almost the same, question: "Why are we lagging behind in the field of fashion?"

"The first thing you do when you rebuild a house destroyed during a war is get the foundation dug and the walls up; after that you think of the outside," she answered. "We spent a lot of time on the foundation. Now we can give thought to the other things."

"Our styles could be improved, of course. We've been making those military outfits and heavy overalls for much too long a time. But I think now we'll get things straightened out."

To be frank about it, I hadn't expected such a sensible answer from someone who seemed to be altogether occupied with the latest fashions. But her answer—it came to mind while I was waiting in the beauty salon—was convincing enough.

But there is another side to the problem I'd like to mention: Not too many women want to work in the service industries. There are only 83,297 women hairdressers and manicurists in the USSR, considerably fewer than the 120,190 women in science. We have 179,464 waitresses as against 1,650,199 women engineers and technologists, 457,563 female cooks and 1,517,088 medical workers.

My own explanation is that the fields offering broader scope for creative work, such as are found in the intellectual sphere, appeal much more to our women than dull household chores. The second reason is that women have a wide choice. When they are free to make a choice, they almost instinctively stay away from trays and napkins or anything else that smacks of waiting on others. Today domestic service has no appeal at all for young girls. It is strictly the domain of middle-aged women.

Incidentally, those who want to become hairdressers or cooks receive every encouragement. They pay no tuition, receive state stipends, get their practical training in the finest beauty salons and restaurants, and are guaranteed a job immediately after they finish their training.

All in all, much more attention is now being paid to the services—that was the turn my thoughts finally took as I waited. The wait was no shorter as a result. Or perhaps it was.

When the operator finally called me in, I looked at my watch and found that I hadn't waited too long after all. And when I succumbed to the shampoo, cut and set, I stopped thinking of everything except my hairdo. ★

ON THE E

EVE OF THE THIRD SPARTAKIAD

BY VICTOR KUPRIANOV

IN the Soviet Union the word "spartakiad" is rapidly winning universal recognition. Lexicographers may not be aware of it, but sports fans know the word means excitement galore. No matter what you call it—Spartakiad or USSR People's Games—it's a thrilling spectacle.

The games are held every four years, prior to the Olympics, and help to uncover new talent. But this is not their prime purpose. The games were conceived as a way of popularizing sports and making physical fitness a really grass-roots movement. The names on the entry lists run to the millons.

This year's finals are being held in Moscow from August 10 to August 17. They were preceded by qualifying tournaments that began at virtually backyard level. Prizes are offered for individual and team performances in 23 different sports, and we expect some 11,000 athletes from every one of the 15 union republics to be vying for top honors.

The qualifying round started in the spring with mass tournaments sponsored by factory and farm clubs. In June and July the winners competed at the district and city level, then at the republic level. The best were selected for the trip to Moscow.

A new departure in this year's Spartakiad is the inclusion of a school-sports category. Approximately 20 million boys and girls took part in their home town elimination contests, and 3,500 youngsters made the finals held in Volgograd last month. The stands rocked with cheers as the 14- to 18-year-olds competed in 10 sports, at times displaying unexpected form and skill.

What we saw in Volgograd was no mere contest of talent—we were viewing the future of Soviet sports. The current accent is on youth, and an all-out drive has been started to get every boy and girl excited about physical fitness and sports. Valeri Brumel and Igor Ter-Ovanesyan, the two world record-holders were in the group that initiated the idea of Olympic stars coaching school athletes. The reader can imagine the enthusiastic response. More and more youngsters are coming to the fore in all sports.

We saw some of tomorrow's Olympic stars in action in Volgograd. They gave us very promising shows in track ond field, gymnastics, swimming, diving and bicycle racing. We spotted any number of hopefuls in volleyball, basketball, table tennis and soccer.

The exhibition of junior talent was actually a review of the good work done by the country's 80,000 physical training teachers, of the progress made by the more than 2,000 children's sport centers, from which well over half a million boys and girls derive the know-how that helps send them up the sports ladder.

What can we expect to see at the Moscow finals? With simultaneous competitions in 23 sports, deciding what event to watch and getting to it on time becomes something of a problem. Of course the man who wants to be in the know can come equipped with a transistor radio; the events will be covered by nationwide radio and TV.

Moscow is a city of great distances, and covering everything is going to be a herculean job. Your reporter found it a grueling experience in the past, returning footsore and weary at the end of the day. From past experience also he can predict that the capital's pace will be greatly accelerated, with everyone wanting to get places in a hurry.

Mother Goose is always paraphrased at Spartakiad time. Remember the rhyme about the old lady who lived in the shoe with so many children she didn't know what to do? The Spartakiad will take care of that: Everyone of the kids will be covering at least one event for the old lady, and all the neighbors will be coming to her for the bits of information the sports reporters and commentators might have missed.

The first two Spartakiads, in 1956 and 1959, taught us much. Now we know enough to expect sensations by the score. We are primed for new records, new names and major reassessments.

I still have the statistics I gathered at past Spartakiads. The entry list in the 1959 finals included athletes of 43 nationalities.

In 1956 the easternmost contestants—two 22-year-old canoers, Stepan Oschepkov and Vladimir Yakushin—came from Komsomolsk, a city on the Amur River. They had started as schoolmates, then became workmates and sportsmates. They have twice won the USSR title in their event. In 1959 again it was a 22-year-old athlete who was the easternmost competitor—Vasili Novosyolov, a smith from Sakhalin Island in the Pacific. He excelled in walking.

It is a 4,800-mile hop from Sakhalin in the Okhotsk Sea to the port of Liepai in Latvia. This city has contributed quite a number of competitors to every Spartakiad held thus far. As for our westernmost contestants —after pouring over the map and much measuring, etc., we decided that Astrida Bykava and Arvid Mendis (track and field), Violetta Vimbare (bicycle racing), and Janis Zviedris and Hariis Felmanic (soccer) could lay equal claim to that distinction. That was the situation in 1956. But three years later it turned out that an 18-year-old high school graduate, Sylvia Ravdone, lived slightly farther west. Just out of school, she had not yet made up her mind at the time about her future profession. She was more than certain, though, about the sport she preferred. No question about it—Sylvia was born to play basketball. She stands six feet two! By 1961 she was the country's best center, and has now been picked for the USSR national team.

A 22-year-old volleyball player at the finals in 1956, Mikhail Yesipov came from Arkhangelsk, the northernmost point. Three years later from still farther north, Petrozavodsk, came Karel Nazarov, a member of the sculling crew that held the USSR title for the next three years.

The southernmost home town was Kushka, on Turkmenia's border with Afghanistan, evidently a sharpshooter's town. Two of the top men in the 1956 competition were Gennadi Ivanov and Dmitri Paschenko, who came from there.

The USSR Games give us a good cross section of the country. The athletes not only come from far and wide but also from high ond low.

Mountaineers from the Caucasus and Tien-Shan add a touch of color to the games. It took me much time at the USSR Academy of Sciences' Institute of Geography to determine which athletes came from places of the highest and lowest altitudes. In 1959 the entry from the highest point was the equestrian steeplechase champion of Kirghizia, Tyrgot Konurbayev, who lives on a stud farm about 10,000 feet above sea level. In the competitions three years later Tajikistan's champion wrestler Azolsho Alimov claimed the highest home town. He came from the Pamir Mountains, more than 9,000 feet above sea level.

And the lowest? That distinction went to Machakh Aslanov from the Caucosian republic of Daghestan. He was a sprinter, born high in the mountains, who moved to Makhach-Kala to study medicine. That's where he came from for the finals, and that city, say the geographers, lies about 90 feet below sea level.

So far we have been talking geography. The age statistics are just as interesting. In 1956 a Leningrader by the name of Vasili Antonov was competing in the shooting contest after having celebrated his sixty-first birthday. Only the previous year he had held a trapshooting record of 160 successive hits! The youngest contestant that year was Lyuba Krylova, 13-year-old swimmer from Tbilisi. In 1959 the old man of the games was Victor Lapchinski from Riga. Trapshooting was his sport too. His age? A youngish 77. He scored 91 out of a possible 100.

These games constitute a strong argument for sports as the key to longevity. So start early! A very early starter in 1959 was Laima Balaishite, from Latvia, aged 11 and already a top-notch table tennis player. She was coached by her mother, a one-time champion. Last year Laima celebrated her fourteenth birthday by winning the USSR table tennis crown.

Basketball is one of the major drawing cards at the games. Along with high-caliber performances there is much to tickle the funny bone.

The stands were always packed whenever Kazakhstan played. Kazakhstan was supposed to be an also-ran, but it scored one surprise victory after another.

Credit was due to the 25-year-old giant Uvois Akhtayev, who just didn't give the other side a chance. He stood a fantastic 7 feet 9 in his socks. All he had to do was park in front of the basket to make it invisible and unreachable. This human mountain weighed 363 pounds and ran with the grace of a brontosaurus.

His mentor in the game was right forward Armenak Alachachan, who stood nearly two feet shorter and weighed a mere two-fifths of his "big brother." When the two come out on the court, the fans laughed in anticipation of a vaudeville act. But the other side saw nothing funny about it, especially when their six-footers found themselves stymied. Fans were wondering whether the game wouldn't be ployed from a helicopter next, and the coaches were thinking of shifting to other sports before it was too late.

At one stage in the game a sorely harassed Uzbekistan team tried a stunt to neutralize Akhtayev. When Akhtayev started toward their basket at a "there's no rush, boys" pace, the left guard hopped on the right guard's shoulders to protect the basket. The crowd roared, and the referees were stumped—there was nothing about such a play in the rules book. After a huddle they called time to get in touch with the USSR Basketball Federation. The big shots decided that what the Uzbek boys were doing was not altogether "according to Hoyle."

At the Spartakiad, Kazakhstan scored 615 points in nine games, with Akhtayev responsible for 339. Unfortunately illness made this basketballer's nightmare drop out of the game and he never showed up in international basketball.

Watching the Spartakiad finals is like crystal gazing about the future. We all remember that lanky 18-year-old from Lvov, Igor Ter-Ovanesyan, who jumped a mere 22 feet and placed nineteenth in the running broad jump. Most fans did not stop to look twice—but the coaches did. Three years later he passed the 26-foot mark, and a year after that he chalked up 27 feet 2¾ inches to set a world record.

While we're on the subject, another debut that went almost unnoticed—this one a double—was of two now-famous school girls from Samarkand, Tamara and Irina Press. Tamara placed fourteenth in the discus and twenty-eighth in the shot put. Irina was twenty-first in the pentathlon and thirty-sixth in the hurdles. Leningrad coach Victor Alexeyev, who is called "the maker of champions," took them under his wing. Now Irina holds the world pentathlon record; and sister Tamara, the shot put and discus.

Thinking back, there was the sensation caused by an 18-year-old Moscow sculler Vyacheslav Ivanov, who in one season zoomed into first place as USSR champion. He went ahead to win the Olympic gold medals in 1956 and 1960. And at the World Championships last year he was way ahead of the rest of the field.

Then there was Antonina Seredina, a Moscow building technician, who placed fifth in the kayak races. In three years she took the USSR title. And at the last Olympic Games she added two gold medals to her collection.

Take weightlifting. Rudolf Plukfelder is a familiar name to every follower of that sport. Seven years ago he came all the way from Siberia to create an impression, which he did. Two years later his name was among the world record-holders.

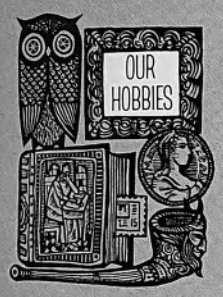
The picture is the same in all the sports. In boxing the Spartakiad attracted a youngster by the name of Oleg Grigoryev, who was to win the European and Olympic titles. In fencing we have Alexandria Zabelina, who went on to win the world crown and an Olympic medal. And so on down the list.

There used to be a time when only the big cities could boast of headline performers. But then the Spartakiads began to attract athletes from all over. Some of these victories made the front page: one was the kayak gold medal that Ibrahim Hasanov took by such a big margin that it had both the European champion and the world championship runner-up blushing.

Hasanov came from Tajikistan, a part of the world known for its lack of boating facilities. It has a few miniature lakes and turbulent rivers that couldn't float a paddle, let alone a kayak. The Tajik capital swelters in the summertime, with no place to swim or row in but a city pond whose muddy water is close to the boiling point. However, there is a fine reservoir some two and a half miles out of the city. It measures only 700 by 200 yards, but that's just about enough for kayak and canoe racing—if there aren't too many boats in at the same time. Since these races were in the Spartakiad program, the sports officials hurriedly obtoined a coach from somewhere in Russia and got down to a training program. Hasanov was one of the pioneer products, a 19-year-old pedagogy student at the time.

There are supposedly no miracles in sports, but there is one previous Spartakiad performer who would dispute that idea. He was a 17-year-old youngster from Lugansk who jumped 6¼ feet, placing eighth. No one remembered the name. But coach Vladimir Dyachkov did, and six months later he was helping the boy climb the athletic ladder rung by rung. It was Valeri Brumel, the vertical take-off wizard.

The Third Spartakiad is now on—a review of the country's physical fitness program and a look-see at its Olympic readiness. It is bringing together veterans and newcomers. About the latter, perhaps we'll be saying someday: "I saw him compete at the Third Spartakiad. . . ." ★



Handle of a birch cane carved by a Lithuanian craftsman, Linkevicius.

This satyr carved of bronze and stainless steel came from Austria.

This Japanese demon was carved from ivory. The craftsman is unknown.

This benevolent Alaskan satan was carved from the tusk of a walrus.

185 DEVILS

BY BRONIUS AKSTINAS

DEVILS, big and small, villainous but jolly, peep out from every corner of this spacious airy studio. In the nether world? By no means. This is the workroom of the well-known Lithuanian painter Antanas Zmuidzinavicius, and it is very much in this world of ours.

There are Americans who know him and his work; he has exhibited twice in the United States. The 87-year-old artist has painted since the beginning of this century. A gray-haired ancient now, he still works with youthful enthusiasm depicting the life of his native Lithuania.

The painter is an inveterate collector of . . . devils. He has been collecting them for several scores of years.

"One day—I believe it was in 1896," Zmuidzinavicius explains, "I acquired for all of a ruble a work by an unknown master from Northern Lithuania. I took a liking to this 'Zemaite Devil,' the hero of many a folk tale, he was so frightening with his jutting little wings and hemp tail. Soon I discovered another one to keep him company. Then someone presented me with a third. At first I thought that I would collect a devil's dozen and give them to a museum, but a fourteenth devil turned up and I had no choice but to go on collecting a devil's dozen of devil's dozens. So I just went on collecting them, but when I had collected 169—13 times 13—my friends made me a gift of the 170th, and this one's impish cunning upset my whole applecart of good intentions. Now I have 185, but I doubt that I will be able to multiply my devil legions another 13 times."

You can't begin to imagine the number of different kinds of devils in the artist's collection! There are devils of wood, devils of metal, devils of glass, devils of amber, and modern devils of plastic. Most are the handiwork of Lithuanian folk craftsmen. Folk artists who carved the wooden saints for small roadside chapels would often carve images of the "evil one," wonderful examples of peasant wit and humor.

The artist has devils from Chukotka and Kazakhstan and from Japan and Ghana; he has a gargoyle from Notre Dame in Paris and an imp from Rome. Zmuidzinavicius has done much traveling, always bringing back sketches and . . . devils. He has a great fondness for these fiendish tenants of his studio.

"I like to have them around," he says. "They watch me at work and keep me in good spirits. They'll stay with me until I die."

This is the only one of some 20 different collections he's gathered that the artist still keeps at home. At one time or another Zmuidzinavicius made valuable collections of folk art and handicraft—500 Lithuanian musical instruments, including zithers and shepherd pipes, and more than 800 articles woven in Lithuanian national patterns, including belts, aprons and scarfs—all of which, along with his 800 paintings, he has presented to the Ciurlionis Art Museum in Kaunas.

"I want everything I've painted and collected to be within the people's reach—that was why I did that," Zmuidzinavicius will tell you. ★

Artist Antanas Zmuidzinavicius' granddaughter is the unofficial curator of his unique collection.

VALENTINA TERESHKOVA WITH A GUEST FROM AFRICA
AT THE ANIKOVO REST HOME NEAR MOSCOW IN 1962.

USSR

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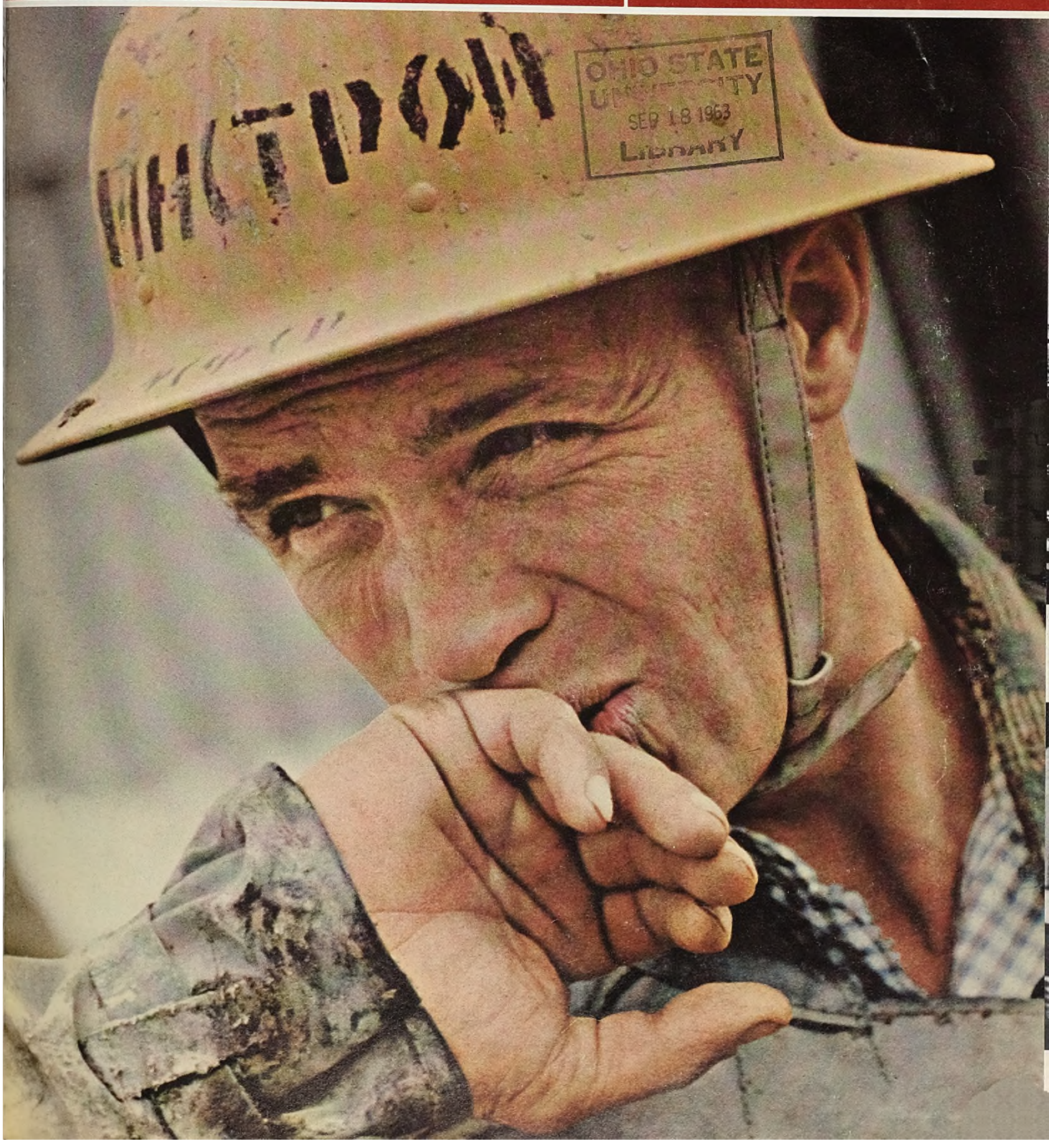

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IOWA FARMER ON SOVIET AGRICULTURE

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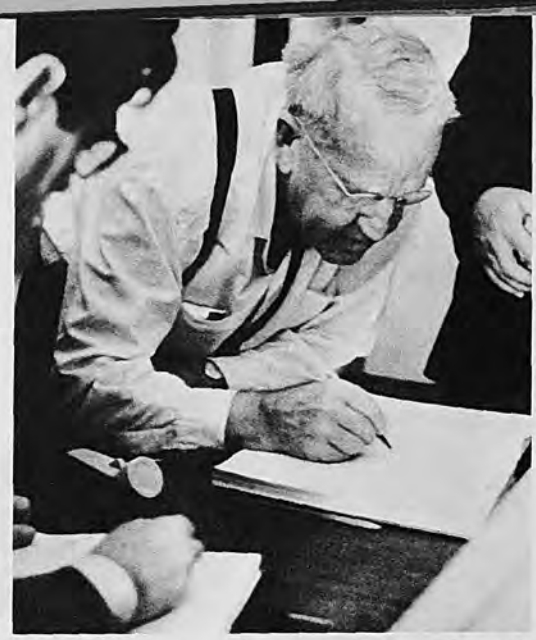


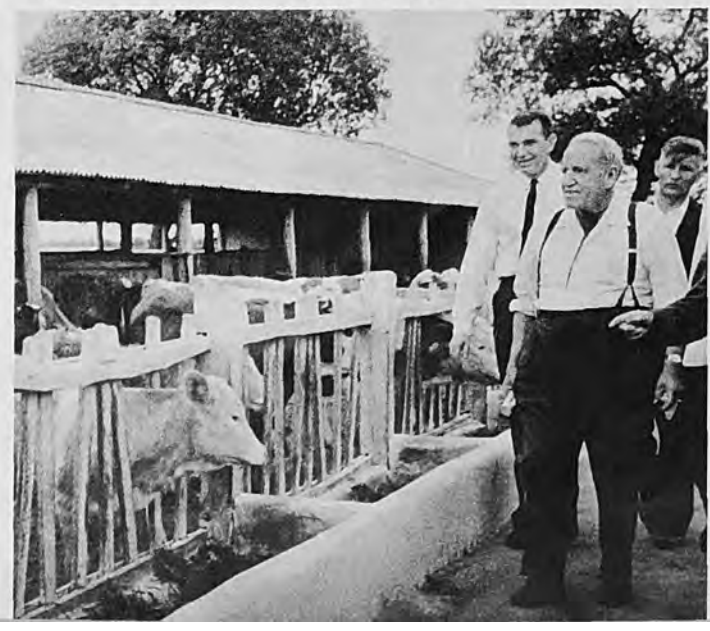
Roswell Garst signs the guest book on his visit to the Friendship Collective Farm in the Ukraine.

Mr. Garst said Soviet farming had made 22 years of progress in the 8 years since his last visit.

He felt that more chemical fertilizers would bring Soviet farm productivity to the United States level.

Chairman Khrushchev and Roswell Garst are old friends. When he toured the United States, Khrushchev stopped to visit Garst.

"If I were a calf," said Mr. Garst on his visit to the Terezino experimental station cattle farm, "I would like to be born here."



Mr. Garst looks over cattle farm equipment and gives his frank and favorable opinion.

With his nephew John Crystal inspecting the collection of the Friendship Farm library.

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Front Cover: A worker of the Magnitogorsk Iron and Steel Mill. *See story page 4.*

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OUR TRENDS

Windows Facing South

In the past six years (1957-1962) 75 million Soviet citizens moved to new homes. In this laconic summary we have one of the most distinctive characteristics of the Soviet Union's economic and social development.

Cities are being built all over. Moscow gets 110,000 new apartments annually, but in terms of growth of housing facilities per person, it stands only twenty-second among the country's cities. That things are going even better elsewhere is no grief to the capital.

Excellent solutions to the problems of modern city planning have been found in ancient Kiev and Riga, capitals of republics. But according to the experts, even more interesting examples of urban development are to be seen in Angarsk and Divnogorsk, two Siberian cities which have barely begun their history.

Soviet city planners provide for maximum comfort and most convenient community living—and on an ever larger scale. There is an individual approach to the planning of interiors, with apartments laid out so that a family will be able to shift walls and room arrangement to suit its need. A city block becomes a self-sufficient group of structures, with shops, laundry, restaurant, nursery, school, movie theater and library close at hand. The purpose is to save people, especially women, time in doing their household chores, and to add that much time to recreation, study and self-improvement, cultural interests and hobbies.

And this new planning, quite naturally, provides for an abundance of light in every window, for a garden near every wall and for plenty of fresh air for every city person.

For state-owned apartments—these make up the bulk of city housing—the rent and utilities add up to no more than four to five per cent of a family's budget. That is why even a very large apartment presents no financial problem to a Soviet family. Soviet families tend to continually improve their housing conditions, which stimulates the state to keep building.

Soviet villages are also putting on a new look. You can see a great many modern new farmhouses not only in the Ukraine and in Byelorussia, where the invasion of the Nazis left nothing but ruins and ashes and where, consequently, everything had to be built anew, but also in places the thunder of war never reached—in the steppes of the middle reaches of the Volga, on the broad expanses of the territory lying beyond the Urals and in the valleys of Uzbekistan.

Our era has added the agrotown to hamlets and villages, the traditional types of farm settlements. The idea of building such towns, like many other ideas we have incorporated into our new society, came from Chairman Khrushchev. Agrotowns are built mainly on large state farms. Instead of the one-family houses typical of rural areas, an agrotown is made up of four- or five-story apartment buildings. Each of the farm families has an apartment with the usual city conveniences. An agrotown is, in effect, a modern city district, with all its conveniences and cultural facilities, transplanted to the country—a realistic step toward raising rural living conditions to the urban level.

There are not many agrotowns in the country thus far; they are neither easy nor cheap to build. But the probability is that the future of the Soviet countryside rests with the agrotown.

Housing is one of the very acute problems of our modern world. In the Soviet Union it is being solved with enterprise and dispatch. The time is not far off when every Soviet family, including newlyweds, will have a modern apartment of its own.

New Men for New Times

"Milling machine operator Ivan Leonov, Deputy Chairman of the Supreme Soviet of the Russian Federation, works here."

This sign hangs over a machine in one of the shops of the Kirov Plant in

Leningrad. That sign speaks volumes—a plain benchworker is a member of parliament and holds high public office! But there is more to Leonov than the sign says, for he is also an inventor and a production innovator, one of the initiators of the movement for the prescheduled fulfillment of the seven-year plan. Besides, he is a member of several scientific councils and the author of a very interesting article, "The Hero of Our Time," which was published in the Moscow literary monthly *Znamya.*

Here is another example. Nadezhda Zaglada is a farm woman who lives in the Ukrainian village of Vysokoye. She is a team leader, which means that she heads a small group of collective farmers who work as a field team. For many years Zaglada's team, which uses advanced farm methods, has been growing bumper crops of corn, flax and sugar beet.

Like Ivan Leonov, Nadezhda Zaglada is a member of her republic's parliament and an important public figure. Her *Life, Work and Thoughts* was recently published in Kiev. The book deals with present-day Soviet farm life and the problems of molding the man of the future.

Ivan Leonov and Nadezhda Zaglada are both manual laborers, if you think in old status terms. But it is quite obvious that they have reached out far beyond the boundaries of the term. He is not an ordinary industrial worker any more, nor is she an ordinary farm woman. In these two people the qualities of manual labor have blended organically with the qualities of mental labor. Soviet sociologists describe this new type of Soviet citizen as a nonprofessional intellectual.

The poet Vladimir Mayakovsky, who had a subtle sense for tokens of the developing new society, in his time wrote about the Soviet farmer: "He'll plow some land, then write some verse." Though in context these words have a slight tinge of irony, they in fact reflect a profound social truth. Soviet working men indeed have a compelling desire and need to expand their intellectual horizons, to grow culturally and professionally, to be participants, not onlookers, to do several things well, not merely the one they make their living by.

Forty per cent of the workers and 23 per cent of the farmers in the Soviet Union now have a secondary or college education. As many as 60 million people in the country are studying. "The day and hour are not far off," said Nikita Khrushchev with conviction, "when the entire working class and all the collective farmers in our country will be highly educated people."

The number of workers and farmers like Leonov and Zaglada keeps growing. The favorable climate of Soviet life—the unlimited opportunity it affords the worker to educate himself and to use his talents in any one of a hundred spheres of effort—breeds such people.

These nonprofessional intellectuals are products of the new society and the profound cultural transformation it represents. The differences between manual and intellectual work are gradually being erased. This will lead to an even fuller development of personality.

20 Million YCLers

There are about 20 million members in the Young Communist League, the organization of the Soviet Union's young men and women. There are, of course, more than that many young people between 15 and 25 years of age in the country, but not too many more. The League enjoys the complete trust of our youth, and if a small fraction has not yet joined it, the reasons for the most part are casual.

YCL'ers are a very lively and colorful bunch. They represent 100 national languages and innumerable temperaments. They are capable of very serious work and of horseplay. They can display an astonishing unanimity, and they get involved in the most heated debates, not always worth the effort. They will all get together and volunteer their services to help put up a building in their free time—a stadium, let's say. And all of them, a whole local YCL organization, might show up at the wedding party of a friend. They volunteer to work as quality inspectors in a factory canteen and follow that with a discussion on poetry.

However, despite the great variety and youthful dispersion of their talents, interests and hobbies, YCL members have decided political and ethical principles to which they all subscribe.

When tens of millions of acres of virgin land had to be plowed up in the eastern part of the Soviet Union in areas which were unpopulated wilderness, 700,000 YCL volunteers went there from all parts of the country. Sometime later 1,200,000 young men and women left their homes in the central, western and southern parts of the country for major construction projects in Siberia and the North. Then there was need for an accelerated development of the chemical industry, and another 150,000 YCL'ers responded.

The pioneer spirit and an enthusiasm for building things of enduring social value have captured the hearts of Soviet people for the past few decades, starting with the first five-year plan period. This spirit and enthusiasm has been passed on from generation to generation. In the early days such pioneers put up the nation's first hydroelectric stations and industrial plants in the central regions, and their successors have been doing the same in the outlying parts of the country. Though the scale and technique of construction have changed, the spirit is the same.

Vladimir Denisov, a Siberian and one of the thousands of young volunteers building the world's largest hydropower station at Krasnoyarsk on the Yenisei, wrote the following in a letter to the youth newspaper *Komsomolskaya Pravda:* "Why am I happy? The reason is that my own dream of seeing the industrial and cultural flowering of my native region is the dream of the entire people, the dream of millions of my YCL comrades."

The YCL builders encounter difficulties and hardships, sometimes considerable ones. They write about them in their letters to the newspapers, but more often they tell about their aspirations and ideals. These difficulties and hardships do not shake their conviction that they are doing what they should do, continuing the heroic traditions of their fathers, serving the common welfare.

Youth and the romantic spirit are indivisible. The ideals, thoughts, feelings and deeds of Soviet young people are nourished by the ideals and goals of the new society.

Wider Horizons

The Soviet Union maintains cultural contacts with 100-odd countries. With many of them, the United States included, these contacts are regulated by long-term agreements. One can see these agreements at work practically every day in the mutual exchanges taking place, proving,among other things, that the muses are international.

A great deal is being done in the USSR to popularize the cultures of other peoples, past and present, the treasures of world art, and the fruits of scientific exploration. The 830 million copies of fiction by foreign authors put out by Soviet publishing houses represent only one of many proofs of the welcome Soviet people accord the cultures of other lands.

In many and a variety of ways the Soviet Union fosters world cultural reciprocity. Thousands of foreign students study every year at Soviet higher educational establishments, and Soviet students, in turn, study abroad. Scientists from other countries frequently lecture in the Soviet Union.

Last summer Moscow held its third international film festival.

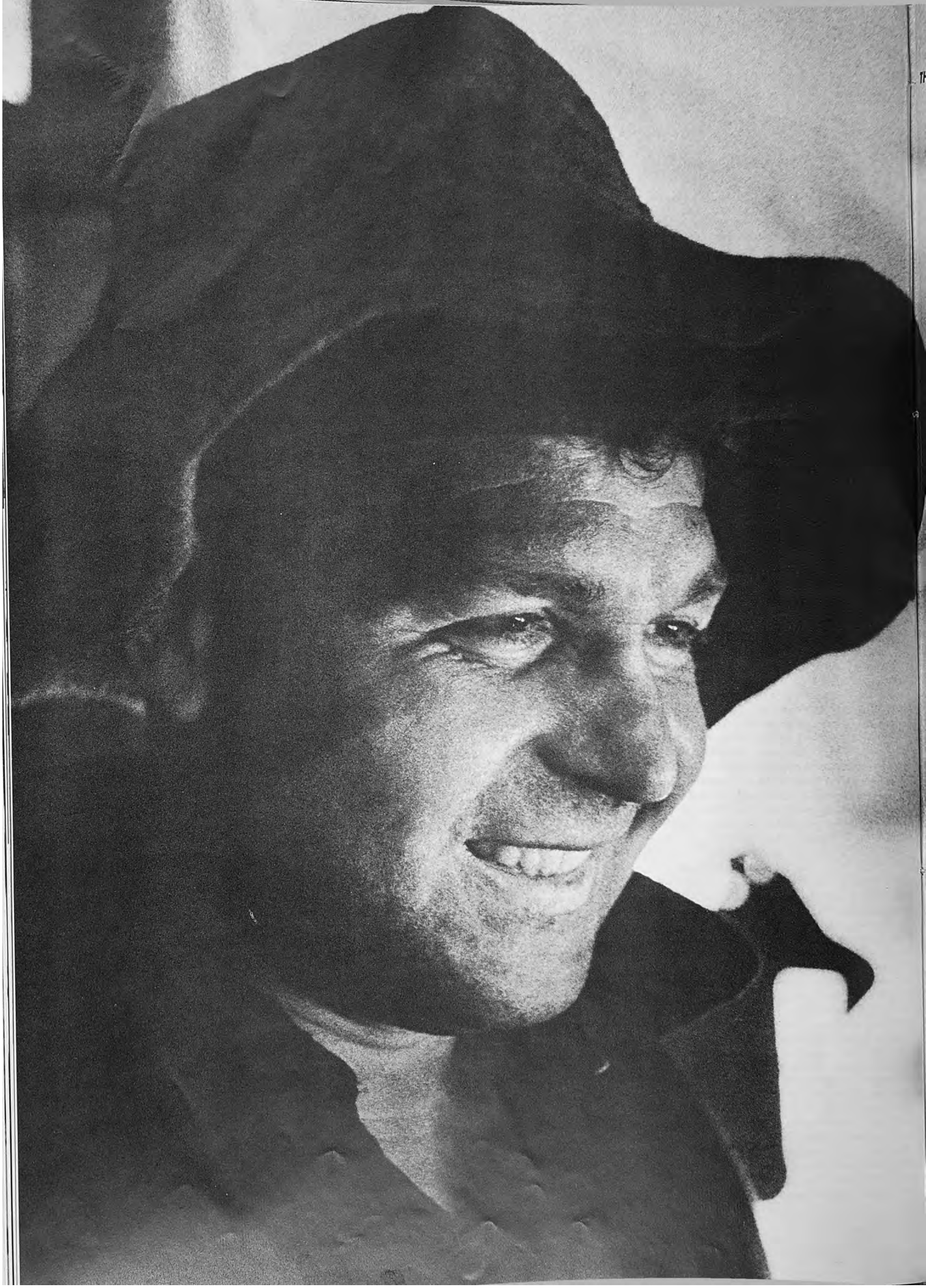
One can become a new man in the true sense of the word only when he has made all of man's cultural values his own. This is how Soviet people see it. Naturally, it is what you might call a maximum program, but it has determined and will continue to determine the position of the Soviet Union on cultural exchange.

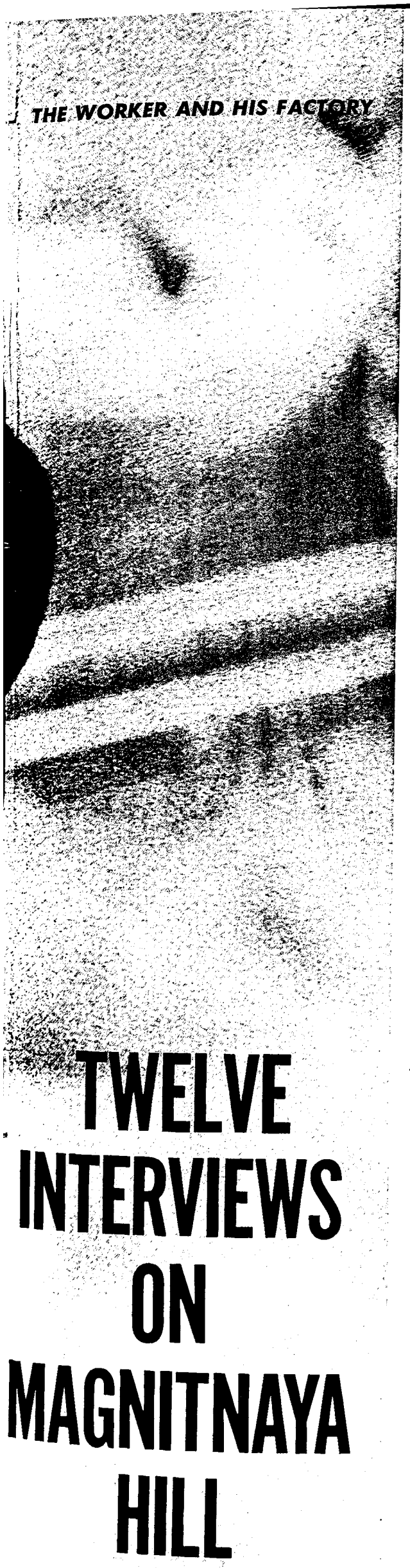
The concept of cultural values, though very broad, has definite meaning for Soviet people. Whether a philosophical treatise or a musical composition, a work of art or a dance, it must never be alien to man, must not degrade him. It must be human, close to his heart, elevate him. This demand insists upon understanding and rules out the evil and malicious. But does it exclude anything worthwhile from universal culture?

The Soviet people do not, for instance, accept abstractionism in art and phrasemongering in poetry. Furthermore, they consider such efforts as evidence of incompetence, as manifestations of reaction and decline, not of progress and innovation. Anyone who can is invited to prove this wrong.

Ideological problems have been widely debated by the Soviet public this year. The emphasis has been on the need to preserve the purity of the world outlook of the new society.

This has given rise to talk in some quarters abroad of the "self-isolation" of Soviet culture, the allegation that the USSR will now restrict its cultural contacts with the West. This is pure fantasy. The Soviet Union has never foregone its own ideological principles, but this has not prevented it from vigorously championing world cultural exchange. The Soviet Union will continue to do so in the future. ★





TWELVE INTERVIEWS ON MAGNITNAYA HILL

BY YURI GRAFSKY

PHOTOS BY VSEVOLOD TARASEVICH

I LIKE boarding trains at night. The platform fades, the city lights blink, then the station disappears, and there is nothing but space. . . .

Space . . . the staccato rhythm of wheels on rails . . . violet tree trunks . . . flag stations buried under snow . . . they flash by in the owl's-eye glow of the coach windows, and then they too are gone.

I look at my reflection in the window. My fellow passengers have stepped out of the compartment, and I am alone. So we converse, my reflection and I.

What I Said to Myself, and Vice Versa

"What are you going to the Urals for anyway?"

"Ah, that's a long story."

"That's all right—I've got all the time in the world."

"Well, remember five years ago when I escorted an American delegation to the Magnitogorsk Iron and Steel Mill? That's the one we call Magnitka for short. The Americans were very much impressed with it. I wrote up the trip in the October 1958 issue of *USSR*. We had a good many talks, the American experts and I, about working conditions, earnings, the part benchworkers played in management, their relations with the professional staff, and so on. Those talks got me thinking about an article that would answer the questions the Americans asked. That's how I came to write 'The Worker and His Factory.'"

"And you chose Magnitka?"

"Naturally. First, because it's so well known. Second, because the questions that wanted answering had been put to me right there. Third, because Magnitka is so typical. It was built in the Soviet period; it's part of our industrial tradition, symbolizes the present and projects us into the future. The story of Magnitka is the story of the foundations on which Soviet power rests. It brings a Soviet industrial enterprise and those who man it face to face, shows us how the government looks on the worker and the worker on his government."

"Well, good luck to you."

Next I Interview a Blast Furnace

The dark round outlines of Magnitogorsk's blast furnaces suddenly broke through the clouds of smoke and steam to stand out in relief against the sky. I immediately recognized the one at the end, it was the furnace the American delegates and I had looked over.

"Hello, there," I said as I drew abreast of it. "You remember me, don't you? Well, what have you got to say for yourself? Anything new since I was here five years ago? When the American steel experts stood here watching the melt and counting off the buckets, you poured 250 tons if you poured a drop. Any changes?"

The blast furnace snorted and sent up a plume of white steam. Then it growled good-naturedly:

"A lot of iron has flowed since then. Your figures are way behind. Now each of the furnaces gives 270, 290 and even 300 tons to the melt."

"How many tenders do you have?"

"About 100."

"Can you give me an idea of how much iron per man per year that will come to?"

"7,600 tons."

"What's the volume per ton?"

"0.57 cubic meters." (It was 0.63 in 1958.)

"And how much does a ton cost?"

"16 rubles 94 kopecks." (It was about 18 rubles in 1958.)

"You're doing all right. And how are things coming along next door in the open-hearth and rolling shops efficiency-wise?"

"They're getting more than 9.5 tons of steel from every square meter of hearth bottom." (It was only 9 tons in 1958.)

"What about the rolling shops?"

"They hit a steady 770 tons per man."

"Not bad, old man, not bad at all. Thanks for the interview!"

The blast furnace rumbled complacently, and belched another plume of white steam into the smoky gray sky.

"Not bad at all," I repeated to myself as I took in the contours of the blast furnaces and the chimneys of the open-hearth shops from which the Soviet Union now gets its cheapest pig iron and steel. Magnitka has the highest labor productivity of any iron and steel plant in the country.

All very good and fine, but exactly what does that mean to the workers? How do lower production costs affect their standard of living?

I got the answer to these questions from a worker.

Furnaceman Dmitri Karpeta

We met in the blast-furnace shop during his shift. Dmitri Karpeta was standing in front of his blast furnace. He calls it "the stove."

The molten iron had just been poured, and the edges of the trench were still letting off steam. The reddish crust of slag on its bottom looked like smoldering coals. The furnacemen were chopping up the slag and shoveling the gray clinkers away.

Behind them Dmitri Karpeta, a huge fellow, sprinkled fresh sand along the trench and banked it against the sides, still glowing in the half-light.

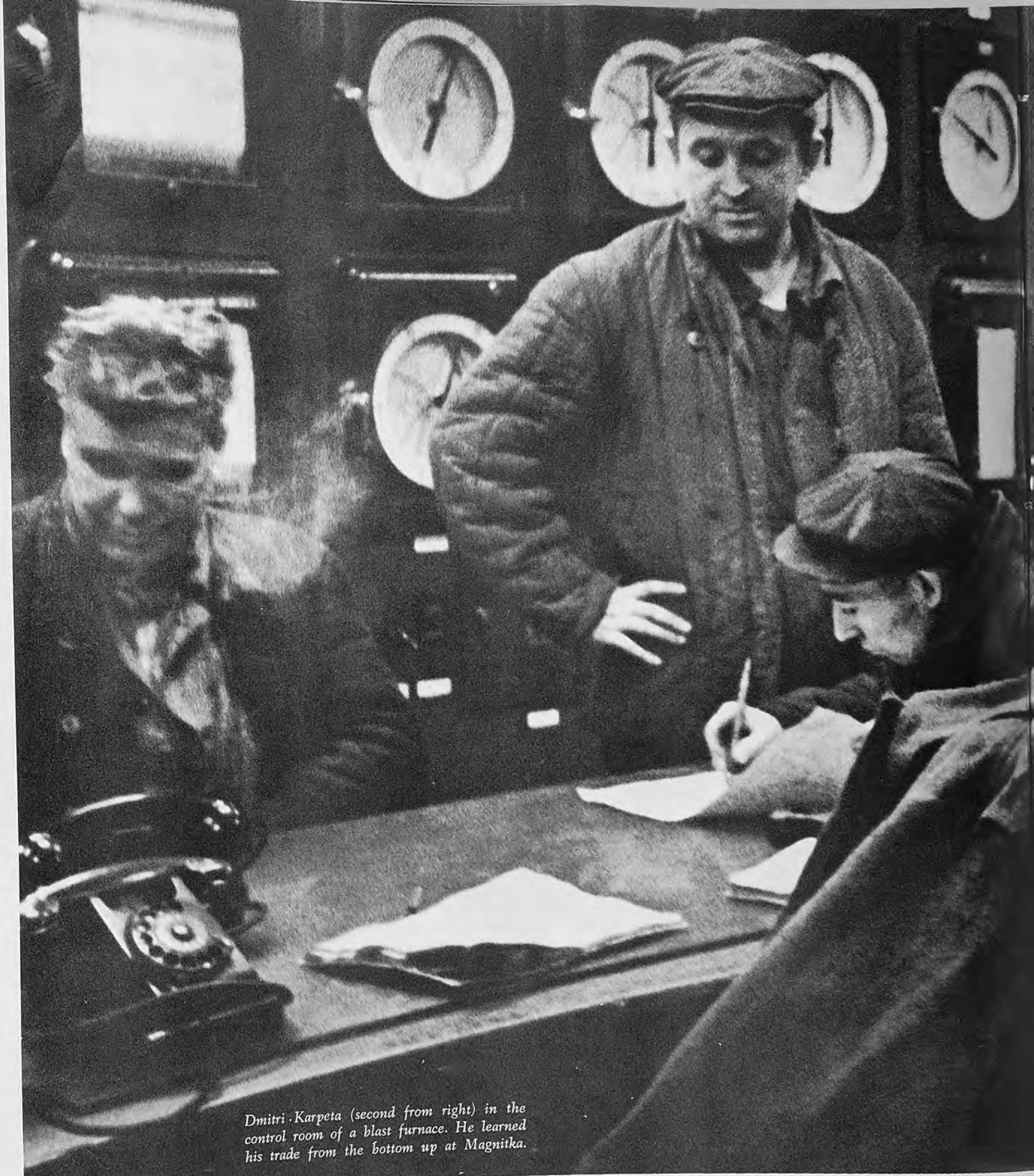
As soon as the slag was cleared, came the job of "fixing up" the syphon, a tricky piece of business that Dmitri Karpeta supervised personally.

The syphon links two settling pits. The slag collects in one while the iron pours off into the other. The idea is to get the iron, which is heavier, pouring out of the first pit, where the slag remains, into the second pit.

Dmitri Karpeta proceeded to "fix up" the syphon himself. He fitted and measured the bricks slowly and deliberately. Then he laid them out, leaving room for the opening, and smeared them with clay. That done, and without so much as a turn of the head, he stretched out his hand, into which one of the furnacemen placed a wide segment of pipe. The gas was turned on, and a jet of fire burst from the end of the pipe like a flame thrower in action. That was for "drying" the syphon.

When he climbed out of the trench, Dmitri's face was dripping wet; an amber drop of sweat had collected at the end of his nose. He wiped the perspiration away with his cap and came up to me.

"Not an easy job, that one," I said.



Dmitri Karpeta (second from right) in the control room of a blast furnace. He learned his trade from the bottom up at Magnitka.

"It's all in a day's work," Dmitri answered.

"How do you explain your high labor productivity? Would you put it all down to skill and experience?"

"Hardly. Skill and experience mean a lot down here, where we pour the metal. But so does automation."

Dmitri Karpeta showed me the control panel installed in a special room next to the blast furnace. It was warm there and very quiet. The lights on the panel flashed on and off, showing the continual charging of the furnace.

"We use high-pressure and hot-air blasting," explained Dmitri. "By raising the temperature 10 degrees centigrade we added 8,500 tons to the annual output figures. Last year we began to blow the mazut too, and that gave us another big boost in output. Then there's the quality of sinter—57 per cent iron. That's the highest rate yet anywhere."

"I see you have it all down pat," I said. "Did you go to a technical school when you finished high school?"

"No, I didn't, I'm sorry to say. The way things shaped up for me, I couldn't even get to high school. I came here in 1951 from an elementary trade school and began as a furnace tender's apprentice. After three months of that, I was given a sixth-category rating and a tender's job.

"What did that call for?"

"Getting the hang of the job and knowing what a fourth furnace tender is supposed to do."

"Did anybody train you?"

"Yes, the first tender. He got extra pay for it."

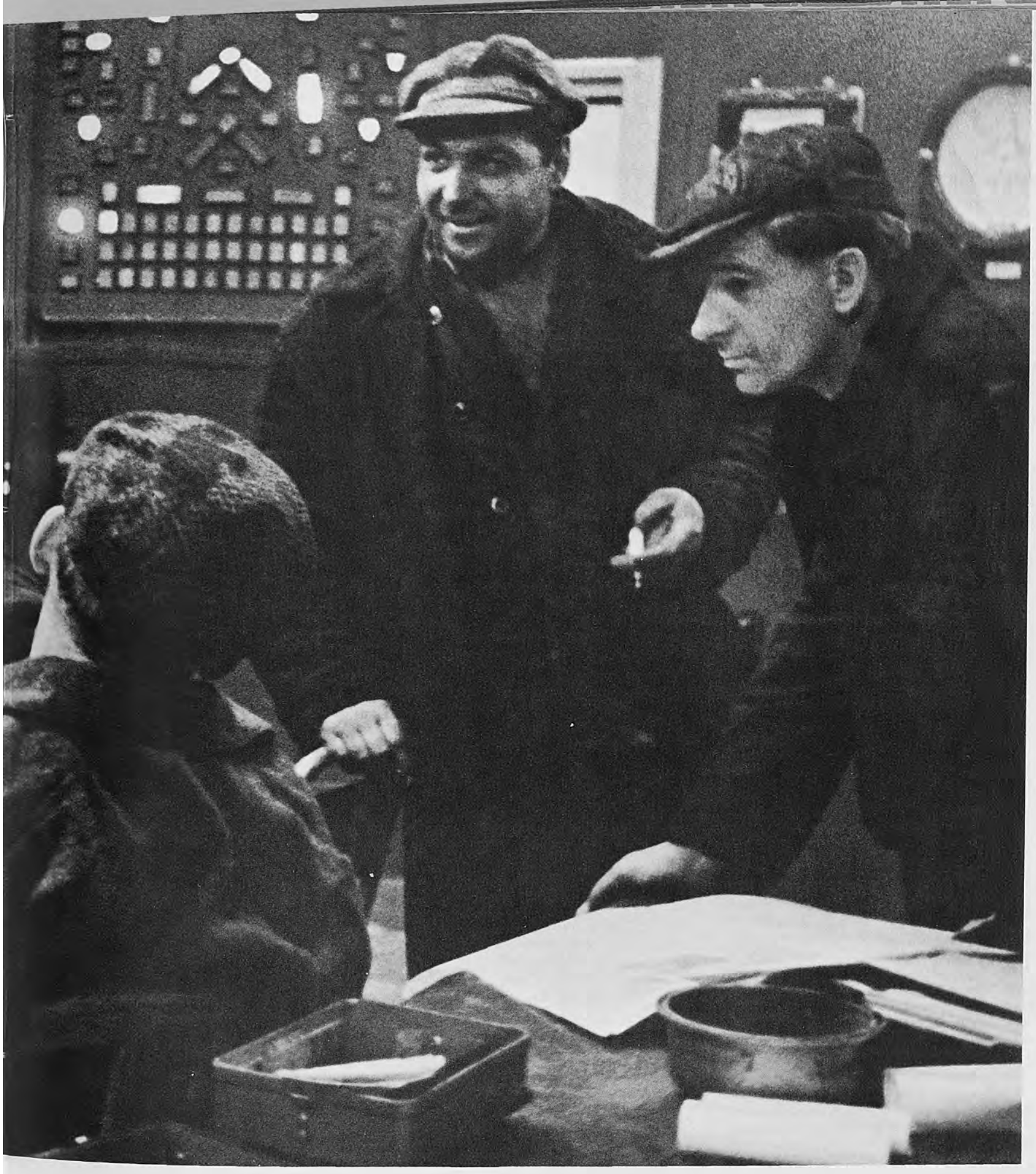
"And you—did you make anything while you were learning?"

"A trainee's wage—30 rubles a month."

"You paid for your training?"

"No."

"Did you have a test or something of the sort to take before you could become a full-fledged tender?"



"Sure. I had to pass a classification exam."

"What's that?"

"Well, there's a special commission made up of people from the management and the trade union committee. They decide whether you know your job."

"And the commission decides what category you go into?"

"That's right. Until 1956 I worked successively as fourth, third and second furnace tender, and after 1956 as first. All of us tend the main blast 'hole,' as we call it here."

We went back to Dmitri Karpeta's "stove." Everything was ready for another melt to be poured. Dmitri threw a bridge of corrugated iron across the trench and began to scratch at the "hole" with a narrow shovel.

"This is called tapping the iron," he explained. "You have to break through about six feet of clay."

He kept poking with the shovel until a tongue of orange flame licked through.

"Looks pretty risky," I ventured. "Or isn't it?"

Dmitri Karpeta smiled.

"Once when I was tapping through, the molten iron burst out."

"And?"

"I jumped aside just in time. My clothes caught fire. . . . I just about managed to put out the flames."

"You must have been badly burned."

"33 per cent of me."

"Ouch! How much is supposed to be fatal?"

"30 per cent."

"Seriously?"

"All jokes aside." Again the smile. "I burned my hands," (he spread them out for me to see: the skin of his hands was yellow and wrinkled), "and my abdomen and face."

"There are no scars on your face," I said. "The skin looks smooth, and the color is fresh and healthy."

"Yes, but look at this." He pointed to several scars behind his ears and on his forehead.

"You must have been bedridden a long time."

"About 20 days in the hospital and another 20 at home. The doctors said I was too strong to be killed that easily."

He smiled again. Suddenly I was aware of his powerful physique, of the bulging chest and massive shoulders under his shirt.

Dmitri Karpeta gave the furnacemen the signal and with a habitual gesture turned the 20-millimeter steel poker. All the men put their strength on it, struck out once, then again. The hot metal gushed out from the "stove" in a shower of blazing sparks. The men stood around, looking a little dazzled by the roseate glow, as if they could not believe that it was their hands that had performed the miracle. The iron flowed on, white hot. I could hear it gurgle. Not like water though. This was hot molten metal that filled the settling pit and flowed into the buckets and the trench, illuminating it and seeming to widen it.

I asked Karpeta a last question:

"How much do you make?"

"250 rubles a month."

"Is that a flat wage?"

"No. I'm supposed to average 170 rubles by the schedule."

"Then how come you get 250?"

"You'll have to see the people in the Labor and Wages Department for the answer to that one."

Pig Iron and Money

The information I wanted was furnished by the economist of the blast-furnace shop, Pyotr Platonov, a natty little man who dotted all his i's and crossed all his t's.

"You want to know how we go about calculating what the men earn," he began, "and how those earnings are affected by the way they meet plan quotas? Fine. Sit down. It will take me about 20 minutes to explain it to you."

Platonov took the cover off his adding machine and pulled it closer.

"So," he said a bit pompously, "what we do is refer to the standard wage scale to find out how much a worker in each category earns per hour and shift."

"Could I see the scale?"

"Of course."

The Wage Scale

Category	One Hour's Pay	Eight Hour's Pay
1	28.57 kopecks	2 rubles 28.57 kopecks
2	32.29 "	2 " 58.29 "
3	36.57 "	2 " 92.57 "
4	41.43 "	3 " 31.43 "
5	47.00 "	3 " 76.00 "
6	53.43 "	4 " 27.43 "
7	60.86 "	4 " 86.86 "
8	69.43 "	5 " 55.43 "
9	79.43 "	6 " 35.43 "
10	91.43 "	7 " 31.43 "

"Now, if you run through the scale, you'll see that Dmitri Karpeta, as a first furnace tender, is rated in the tenth category. His shift is eight hours, and last month his team worked 23 shifts, which gives . . ."

He turned to the adding machine.

". . . which gives us 168 rubles and 23 kopecks. That's what Dmitri makes if he just meets his daily quota by 100 per cent. But last month Karpeta's team did 104.69 per cent. So we multiply, add that on, and we get a piecework wage of 176 rubles and 4 kopecks.

"That's his average for the month. It's a very important figure, because we use that to calculate the bonus he gets for fulfilling and overfulfilling his plan. For 100 per cent fulfillment he receives an additional 20 per cent of the monthly average, and for every per cent above 100—another two per cent. Let's see what that comes to. Last month Karpeta's team fulfilled its plan by 102.19 per cent. We multiply the monthly average by 24.38 per cent, and that gives us his bonus. We add it to his average for the month."

The adding machine tinkled up a total of 218 rubles and 96 kopecks.

"But that's not all," cautioned Pyotr Platonov. "We also have the zonal percentage to add on. The wage scale in the Urals is 1.15 times that of iron and steel plants located in the southern part of the country. So we multiply and add, and the sum is 251 rubles and 80 kopecks, which is exactly what Dmitri Karpeta collected last month."

"You mentioned an eight-hour shift." I put in. "Does that mean you workers put in an eight-hour day?"

"No, of course not. The workday is seven hours, but the blast-furnace shop works round the clock, and so we have to adhere to an eight-hour schedule. The team works eight hours a day for four days running, and gets every fifth day off."

That finished my questions to Pyotr Platonov. I thanked him for the interview and left his office. Other questions were already taking shape in my head. What relation was there between the production plan for the whole mill and its wage fund? Did a rise in total output mean a corresponding increase in the wage fund?

The man to answer these questions was assistant director Vasili Kiselyov.

An Interview with a Former Worker

Vasili Kiselyov does not look like the manager of a big mill. Big and burly, he looks as though he had stumbled by accident or misunderstanding into the large and well-appointed office where I found him at his desk. One could more readily picture him smelting steel or tapping iron.

That, I later learned, was exactly how he had once earned his living. His is the typical Soviet worker-to-foreman-to-shop superintendent biography. When the American experts visited the mill in 1958, he was working temporarily as chief engineer. He was promoted and is now assistant director in charge of labor and wage questions.

I went straight to the point: How is the production plan of the mill geared to the wage fund; does an increase in the volume of output mean a corresponding increase in wages?

Vasili Kiselyov paused to turn the question over in his mind, then began to speak slowly. My general impression of Magnitogorsk was that most people there speak with a slow, quiet dignity.

"That would be the case only if the relation of the worker to the production process was on a man-nature or man-raw materials basis. Follow me? The operating principle then would be: the more you produce, the more you work, and the more you work, the more you get.

"In practice it doesn't operate quite that way. The machine stands between man and nature and radically alters the relationship between the worker and production. The machine is something like a mathematical coefficient. Even with production rising, it can direct the wage curve up, or make it mark time, or even drop. Get the point?"

"Not quite."

"Well, imagine that you have raised quotas and increased total output. You would think the wage fund would also rise in the same proportion. But that does not necessarily follow. Greater output comes mostly from the introduction of new machinery, with a consequent rise in labor productivity. Actually the same number or even fewer workers will account for a larger volume of output. The wage fund will grow by comparatively little, enough to cover the higher skill called for by the machines. The operators will have a higher category rating and will earn more."

"Under what circumstances would the wage fund decrease?"

"Only if the increased productivity of labor were to result in staff reductions. But we do not cut our staff."

"Why?"

"Because in our, or any other socialist enterprise, the introduction of new machinery does not throw people out of jobs."

"Not even when the new machines replace their skills?"

"Not even then. I can tell you exactly how many jobs were eliminated last year because of the introduction of new machines. One minute, please, I have the figures right here. Last year the jobs of 1,192 of our workers were eliminated by automation, mechanization and better organization."

"What happened to the workers?"

"They're right here at the mill, working on other jobs. We keep expanding production all the time. Last year, for instance, we put in two open-hearth furnaces, a "2500" rolling mill, a mold-casting shop and some smaller units. To staff them, we required an additional 2,100 workers, engineers and office employees."

"So you used the workers automation replaced?"

"Yes, and took on a thousand new ones besides."

"That's clear now. My thanks. And how did

the plant come out at the end of the year?"

"Our output increased by 8.2 per cent last year, and labor productivity by 6.2 per cent. Wages showed a rise of 1.7 per cent. I'm comparing all these figures with 1961."

My interview with Vasili Kiselyov made this important point clear—that the workers at Magnitogorsk have a direct interest in expanding production and increasing labor productivity. Automation makes work easier, requires higher skills and brings larger earnings. That gives the workers a stake in automation. Earnings rise when the quotas called for by the state's economic plans are fulfilled and overfulfilled. That too gives the worker a personal stake in seeing that the plan quotas are met.

But, as I reminded myself, high wages are not the only values that accrue to the workers when their plant operates at a profit. To get the whole picture I had to find out about . . .

The Mill Fund

I had a long talk with Feodosi Voronov, the director of the mill. He is an experienced industrial manager and a skilled engineer. We attacked the subject in a roundabout way.

"Tell me, please," I asked Voronov, "what's primary in your thinking and planning—profits or the product?"

"The product," said the director without a moment's pause. "That's why an iron and steel mill was built on Magnitnaya Hill in the first place. For the first few years it operated at a dead loss. Still, we justified our existence by supplying the country with the metal it needed. At any price. Gradually, as we improved, we developed into a profitable business as well."

"Then you don't rule out the profit motive?"

"Of course not. We sell metal to other factories at prices fixed by the state. It's to our advantage to keep the cost of producing that metal as low as possible."

"What is your cost of production, if it's no secret?"

"Every ruble of the product we sell costs us 62 kopecks to produce."

"So that the mill, and that means the workers, are interested in making a profit."

"Obviously."

"Exactly what does their interest amount to in rubles and kopecks?"

"Well, you probably know that a certain percentage of our profit goes into what we call the mill fund. If we make enough to give the state its share of the profits as specified by the plan, we have a fund; if we can't meet that obligation, we do not have a fund. Here's a concrete instance. In 1961 we did not make the profit the plan called for, and so we did not have a fund. But last year we made enough to give the state not only the planned profit but 5.2 million rubles over and above that. As a result we now have more than four million rubles in the fund."

"How do you spend the money?"

"For a detailed answer to your question, item by item, I'll have to call in the head bookkeeper." He pushed a button on his desk. "But there's this I do want to say—not a ruble of the fund is spent by the management without the trade union committee's consent. If you check the vouchers, you'll see that every one of them is signed by both the director and the chairman of the trade union committee."

Head bookkeeper Sergei Kovalenko turned out to be a lean Ukrainian with close-cropped hair. He listened to the questions and went on to explain how the fund is used.

"Twenty per cent goes for the expansion of production, the construction of new buildings, and the purchase of machinery and equipment. Forty per cent is spent on the construction and repair of housing, clubs, schools and kindergartens."

"Last year," the director interpolated, "to cite a concrete example, we used part of the fund to build a sanatorium in Yessentuki, a famous mineral spa in the North Caucasus, for people suffering from stomach ailments. The sanatorium is exclusively for the staff of our mill, and the charge for treatment is minimal."

"We also built a school and two kindergartens in Magnitogorsk," Kovalenko went on, "and laid a road from the city to the vacation spots around lakes Bannoye and Solenoye. All that was paid for out of the fund, or, to put it more accurately, from that part of the fund which was budgeted for housing construction and cultural services."

"That takes care of 60 per cent of the fund," I put in. "How about the remaining 40?"

"It went for bonuses to the staff, to maintain our rest homes and tourist camps at the lakes, and to cover the cost of accommodations at these sanatoriums and resorts. As you know, the workers themselves pay only 30 per cent of the actual cost of their vacation accommodations, the rest is paid for out of the fund."

More Bookkeeping

Coming down the stairs with Sergei Kovalenko after my interview with the director, I asked him:

"What happens to the rest of your profits after the amount for the fund is deducted?"

"The rest goes to the state—the national budget and the budget of the republic."

As the head bookkeeper spoke, a vision of an enormous, common pot rose before my eyes. Pipes from industrial plants all over the country stretched to it, and through them the profits of all those enterprises flowed into the common pot.

But this is a special kind of common pot, I thought to myself. Stretching from it are other pipes representing the expenditure side of the budget. Our planning bodies, after the budget is approved by the USSR Supreme Soviet, send money back through those pipes to wherever it is needed.

"Now tell me this," I said. "How much does the state allocate to the mill in the national budget?"

"Last year we received 89 million rubles for capital construction."

"And what did you do with the money?"

"We're building a new blast furnace and a new sintering factory. A great deal of the money is going into housing and community building."

"This is in addition to the fund money you are spending on housing and other building projects?"

"That's right. Our fund is only a little more than four million rubles, while 13.5 million rubles has been allocated in the budget for new housing and community improvements. Some of the state budget allocation will also go for the construction of kindergartens, nurseries and schools. Our mill is building a television center for the city."

"That's as it should be, considering that most Magnitogorsk citizens work in the mill."

"There are several other plants in Magnitogorsk, but ours is the biggest."

"How about the schools, hospitals and kindergartens—they're all maintained, I suppose, by state funds?"

"Yes. You can get the figures from the Executive Committee of our City Soviet."

What the State Gives Magnitogorsk

I had an appointment with Ivan Bosenko, chairman of tbe City Soviet Executive Committee, that same day. He rushed forward to greet me, his round face wreathed in smiles, and stretched out a calloused miner's hand to mine. We sat down on the sofa in his office.

"I know, I know what information you want," he said (I had already explained myself over the phone), "and I've prepared all the material."

He took some folders out of a drawer and began to throw out his figures with the relish of a card player who knows he holds a winning hand.

"Here we are," he began. "Road and bridge construction and planting greenery—1,760,000 rubles. Elementary and high school—7,700,000 rubles. Health—12,000,000; capital construction—2,000,000; pensions—12,500,000; grants to unmarried mothers and mothers of large families—300,000 rubles. The trade, factory and technical schools costs us 3,000,000 rubles a year to maintain; technical secondary schools specializing in heavy and light industry and teacher training—1,500,000 rubles; colleges—2,800,000 rubles. And that," boomed Bosenko, "adds up to 43,560,000 rubles."

The sun had set by the time I left Bosenko's office, and the falling snow was illumined in the orange rays of light that streamed from the house windows.

I walked back to the hotel, shifting the figures I had gathered from Bosenko, Kovalenko and Voronov around in my mind. What intrigued me was how much it would cost the workers if they had to pay for the upkeep of their houses, schools and colleges out of their own pockets. It added up to about 60 million rubles. But who got those 60 millions was determined not by earnings but by need. You have two sons? Send them both to college, by all means. Is your wife ailing? Give her free medical attention until she is entirely cured. When it comes to that money from the common pot, everybody is equal.

It's a good thing, that common pot—the na-

tional budget. Even the millions that do not go back to Magnitogorsk directly are spent on behalf of the city's people—for example, for national defense and scientific research.

Thus, having gotten down to the root of the question "Why is the profitable operation of his factory so important to the Soviet worker himself?" I chanced as well on the answer to another of the questions that our American visitors had asked me, "Why are there no strikes in the Soviet Union?" A strike means curtailing a factory's production with the result that it will contribute less to the common pot. Which means that we'll all be the poorer in the long run. What good does that do us?

That is why the Soviet worker considers himself his own master and part owner of his factory. That is why every worker tries to do the best and most productive job, not only at his bench but also by participating in the management of the factory.

The question that occurred to me at this point was:

Who Draws Up the Mill's Production Plan?

And who sets the target figures? These are really very critical questions, since the mill's profit and the workers' earnings depend upon whether the goals are reached or exceeded.

I had a talk about this with the head of the mill's planning department, Gennadi Andronov, a very astute person, up on every detail of production.

"The plan is drawn up on the basis of the practical possibilities and not the maximum capacity of the mill," he told me.

"What do you mean by that?" I wanted to know.

"I mean that an enterprise, like a living organism, can develop all sorts of ailments: bottlenecks, organizational difficulties, stoppage for repairs and involuntary idleness due to raw material shortages. The plan must take all this into account and still chart the steady growth of production."

"I'd conclude from what you've just said that the plan cannot be drawn up without the participation of those who are doing the producing, the workers."

"Exactly. Which is why the planning begins right at the bottom, if I can put it that way, in the shops and departments."

"Could you give me a picture of the planning process?"

"Certainly," he replied. "Suppose we take the blast-furnace shop. We began our planning for 1963 there back in May of last year. A draft plan was first submitted by the shop management for discussion at workers' meetings and at the shop trade union committee meetings.

"The furnacemen worked it all out very simply. They took the production figures for the first three months of 1962. Then they calculated how much iron they could have smelted if there had been no furnace repairs. They took into account the number of units they would have to overhaul in 1963 and certain organizational and technical measures for improving production, such as increasing the temperature of the blast and cutting down idle time. With all this figured in, the blast-furnace shop estimated the iron melt target for 1963.

"Our planning department then began making its own calculations, taking into account certain aspects of the problem which the blast furnacemen could not be expected to know about."

"Such as?"

"Firstly, the drop in the ore content of the agglomerate. With the ore resources of Magnitnaya Hill running out, we have to get part of our raw material from the Sokolovo-Sarbai deposit in Kazakhstan. Secondly, the shop had underestimated the overhauling and repairs that would have to be done. To compensate for these losses, we suggested making more use of sorted agglomerate and rebuilding two agglomerators.

Magnitogorsk workers are involved in managing the big steel mill in a very direct sense. Workers in the open-hearth shop discuss their production quota at a meeting.

Mill director Feodosi Voronov reports to a general meeting of Party members on the 1963 production plan. There are 5,600 Communists at the mill, 80 per cent of them workers.

This would immediately increase our output of pig iron by nearly 70,000 tons. Even with all this, however, our figure for the year's melt was 27,000 tons less than the shop's."

"The mill management accepted our figures. Then the plan for the mill as a whole was approved by the trade union committee, and our proposals, signed by the director of the mill and the chairman of the trade union committee, were forwarded to the economic council of our economic area. It studied our rough drafts for two months, sent experts over to check on details and consult with the management, and at the end of August 1962 the economic council submitted its proposals. They turned out to be 59,000 tons higher than our figure and 32,000 tons higher than the shop's."

"Why?" I wanted to know.

"That is just what we asked the economic council. The explanation we got was that we could make repairs on one furnace in 1962; we did not have to wait until 1963. That was true. Furthermore, experts from the economic council showed us how to increase the coefficient of effective use of blast-furnace volume. We, that is to say, the blast-furnace shop and the plant as a whole, went along with the proposals of the economic council. They were then shipped off to Moscow, to the State Planning Committee and the Economic Council of the Russian Federation. Late last year we received an approved plan. The target for iron was increased by another 38,000 tons, but a covering letter pointed out that the boost was connected with certain innovations which would unquestionably improve production."

My next question was:

"What happens after the plan is approved?"

By way of reply, Gennadi Andronov escorted me to open-hearth shop No. 1. In progress there at the time was a

Workers' Meeting

This meeting had a curious background. When the shop received the approved state plan, it was found to top the draft target submitted by the shop personnel by 100,000 tons. Asked why, the management explained that the economic council was planning to commission an oxygen installation. This would speed up the smelting process so that the shop could easily produce the extra 100,000 tons of steel.

It is traditional procedure at every Soviet enterprise for workers' meetings to discuss the concrete steps for implementing the approved plan. Shop superintendent Yakov Goncharevsky and trade union committee chairman Vasili Usik were preparing to convene such a meeting when the shop chief's assistant, a young engineer by the name of Gennadi Ovchinnikov, came up to them and said:

"We can produce the additional 100,000 tons without an oxygen installation."

"Show me," Yakov Goncharevsky said.

Gennadi did. Goncharevsky looked over the calculations and said:

"You'll do the talking at the meeting instead of me. Tell them about the plan and your idea."

There were four such meetings in the shop, one for each shift, and Gennadi Ovchinnikov spoke at all four.

The meeting we attended was one of them. I knew that No. 1 was considered a model shop in every respect, including labor productivity and output. It had new large-capacity furnaces and all sorts of up-to-the-minute equipment. And still a lot of criticism was voiced both by Ovchinnikov, talking about production potentialities, and by the workers. The discussion was pointed and lively. It was obvious that the steelmakers agreed with Ovchinnikov's proposals. All the talk centered on how to produce the additional 100,000 tons of steel faster and at minimal cost.

The only dissenting voice was foreman Vasili Gulenkin's. "I say no to Ovchinnikov's pro-

posal. If we agree to produce 100,000 tons without oxygen, the management will cool off on the idea of putting in an oxygen installation this year."

But he got no seconds.

"We are just as interested as Ovchinnikov or Goncharevsky in turning out an additional 100,000 tons of steel," said a handsome worker with graying hair by the name of Ivan Tarasov. "We'll produce the 100,000 without oxygen. But if there is oxygen (and the management, I'm sure, will do its best to see that there is), we can do even better than that."

"You can be sure," Gennadi Andronov said to me on the way back, "that they'll more than meet the quotas."

Dusk fell quickly; the stars came out. Now and again the plant flared into view, lighted up by the ruddy glow of metal being drawn.

"I'm interested in knowing what happens to all the suggestions the workers make," I remarked.

"Some we use, others we don't," he replied.

"Who decides which to accept and which to reject?" I asked.

In answer Gennadi Andronov told me

The Story of One Directive

"Your question put me in mind of the traditional Directive No. 1," Andronov began, "which for a long time now the director of the plant has been circulating at the beginning of each year, usually January 2 or 3. It indicates the steps that have to be taken to carry out the plan."

"A sort of digest of the suggestions made at the workers' meetings?"

"Right. They are collected by the shops and departments and turned over to the management."

"After they are weeded out, I suppose."

"Yes. By the permanent production conference. PPC's, we call them for short. We have more than 60 in the various shops and departments. They examine, sort out and collate the proposals."

"How is a PPC formed?"

"The various shops elect their PPC's and delegate people to the PPC for the whole mill. Members are usually inventors and idea people and those involved in organizing production."

"How many of the people on the staff are members of shop PPC's?"

"About 3,000."

"How many workers?"

"I don't know the composition of all the conferences, but among the 267 members of the mill PPC about 170 are benchworkers, 90 are engineers, and the rest are office personnel."

"Are you a PPC member yourself?"

"Yes. But getting back to Directive No. 1 and the part the PPC played in drawing it up. First the management went through all the suggestions submitted by the shop PPC's. Then the director reported to the mill PPC on the mill's plan for 1963 and its financial resources. After that he outlined the measures that had to be taken to fulfill the plan. Some had been proposed by the shops, others by the management.

"Then the PPC met in craft groups. Blast furnacemen, miners, steelmakers and rolling mill operators discussed the proposals in terms of their particular jobs. There was no basic disagreement with the plan submitted by the management, but there were changes and additions. The miners' section, for instance, made 19 additional proposals, and the steelmakers eight. We finally agreed on 228 measures for improving production and boosting labor productivity, and these measures were incorporated in Directive No. 1."

"What else does the PPC do besides drawing up Directive No. 1?"

"The chairman of the plant's permanent production conference, Konstantin Belikov, can tell you more about it than I."

A Production Parliament

. . . is what stout, gray-haired Konstantin Belikov called the plant PPC. With all his corpulence, he is a surprisingly energetic person and hence very hard to catch. When I did manage to collar him, though, I found him a very deliberate man.

"The PPC looks into all major problems of production," he told me. "Here are the agendas of our last year's meetings—we meet every quarter: 'Operation of the plant in 1962 and the possibility of higher technical and economic indices,' 'Program for capital construction,' 'Rationalization of production and inventions,' and finally, 'Fulfilling the 1963 plan.' The PPC heard reports by the mill director, his assistants, and the head of the rationalization of production and inventions office. People from the several shops spoke from the floor."

"Could you give me an idea of how the discussion ran, say, around a specific point?"

"Certainly. Let's take the capital construction program."

He paused for a minute to dig out the necessary documents.

"Before I do, let me give you the background. Firstly, we are doing a lot of building. Maybe that's the root of our trouble; we've been trying to do too much at once. Our contractor, Magnitostroi, handles the mill's construction work and just couldn't do the job—didn't have the forces, couldn't carry out its commitments on time. The discussion also revealed other deficiencies—that assembly work was lagging behind building work, that designs and estimates were being held up, and so on and so forth. Assistant director David Falkovsky, chief of our capital construction division, said that the mill itself was largely at fault, that it was not doing an efficient enough job on special orders. On the whole, the discussion was a pretty stormy one, but interesting, and ended with the adoption of a very detailed and very concrete resolution."

"How much of it was carried out?"

"Practically 100 per cent. By decision of the economic council, Magnitostroi was expanded, and capital construction is now focused on the blast furnaces. We're doing a better job on special orders. To put it in a nutshell, the discussion stimulated a lot of activity."

"Who follows through on PPC decisions?"

"The management itself."

"How?"

"After a PPC discussion, the head of the mill sends around a directive incorporating the decisions the meeting came to, so that the proposals adopted by the PPC become official mill policy almost immediately. Practically the next day the director begins to demand progress reports from his subordinates."

"That takes care of management's end. What about the workers?"

"The staff checks on the director to find out how well the proposals are being carried out, or if they are being held up, why."

First fiddle here is played by

The Trade Union

The trade union organization at the mill, as at every other Soviet place of work, is an all-embracing organization, not only because 99 per cent of the mill's workers are members but because it is concerned with literally every aspect of the mill's activity.

Trade union committee chairman Fyodor Ryzhkov, a plain-spoken man, put it this way, "The director can't take a step without the trade union's approval."

This is slightly exaggerated, of course. The union does not do away with one-man management by the director—he has the final word—but its role is very important. Without the consent of the trade union committee, the director cannot spend a single kopeck from the mill fund, fire a single worker or change a production quota. Without its participation not a single square foot of housing built by the mill is distributed.

The controlling instrument is the annual collective agreement with management signed on behalf of the workers by the trade union committee chairman. It's the job of the trade union to keep tabs on how the management carries out its commitments.

One problem the management and trade union are now working on is recreational and cultural facilities. The staff has been sharply critical of management for its failure to provide adequate facilities. In this matter, as well as in all others, a weighty word will be said by

The Party Organization

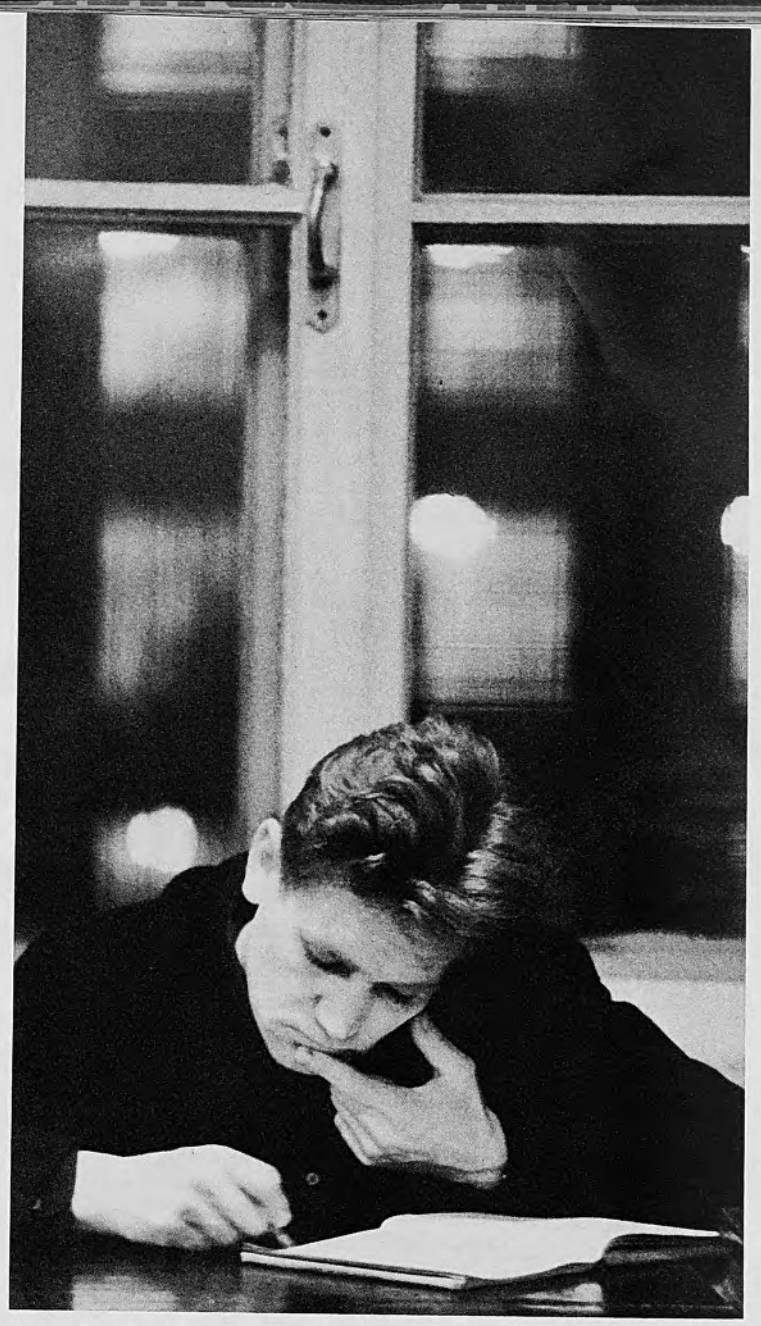
There are 5,600 members of the Communist Party at the mill. Eighty per cent of them are workers. Therefore, when Feodosi Voronov reports on the work of the mill at a general Party meeting, he is accounting to 4,500 workers.

The Communists are the mill's heart. They initiate many important undertakings and always work with enthusiasm. They set an example for the others. The Party organization instills a spirit of comradeship, of mutual assistance in the staff; it teaches them to approach things with an eye to what is best for the people of the whole country.

The Party committee elected by the Communists at the plant enjoys the trust of the entire staff and has broad powers of control over the activity of management. It can call in any shop or section superintendent for a report.

I had a long talk with the secretary of the Party committee, a 32-year-old engineer by the

Management and labor at the Magnitogorsk mill get together for more festive occasions than conferences on production problems, collective agreements and such other serious business. A social gathering for the mold shop.



One of every four Soviet citizens is studying, and the steelworkers are no exception. A big slice of mill profits goes for education. About 120 Magnitogorsk workers study evenings at the Steel Institute.

The mill's Palace of Culture has practically any leisure time activity you can name. The pair rehearsing with the amateur dance group are crane operator Tamara Piskunova and engineer Yuri Zemlyansky.

name of Nikolai Alexeyev. He told me something of what the Party organization had been doing.

"Lately we have been checking on capital construction—the building of blast furnaces, an agglomeration plant and sulphur-recovery installations. The Party committee called the director's attention to the fact that units were not always ready to start operating on schedule and told him the reasons. Magnitostroi had scattered its resources, had not concentrated a sufficient number of workers and machines on the construction of the agglomerator and sulphur-recovery installations, and had not supplied the necessary equipment. There were also delays in financing. In view of all this, the Party committee asked the economic council for help. And we did not stop at that. We devoted one of the very next meetings of the Party committee to the supply of equipment for units about to go into operation. We checked on that a few weeks later and noted marked improvement. Then we turned our attention to the progress on the remodeling of the slabber and the construction of a new blast furnace."

"What else does the Party committee do?"

"We also check on how Directive No. 1 is being carried out."

"How is that actually done?"

"The mill Party committee has various control commissions: one concerned with the quality of output, another with the progress of capital construction, a third with introduction of new machinery and technology, and so on—nine of them. They do the checking. The shop Party organizations also have their control committees. All told, there are about a thousand people on these various control commissions."

Several days later I had the opportunity of seeing how effective they are. One of them—the control commission concerned with checking up on accident prevention—called the management's attention to the fact that the serious-accident coefficient had risen in the shaped-castings shop. The number of accidents per thousand workers (the frequency coefficient) had decreased, but the number of serious accidents had risen.

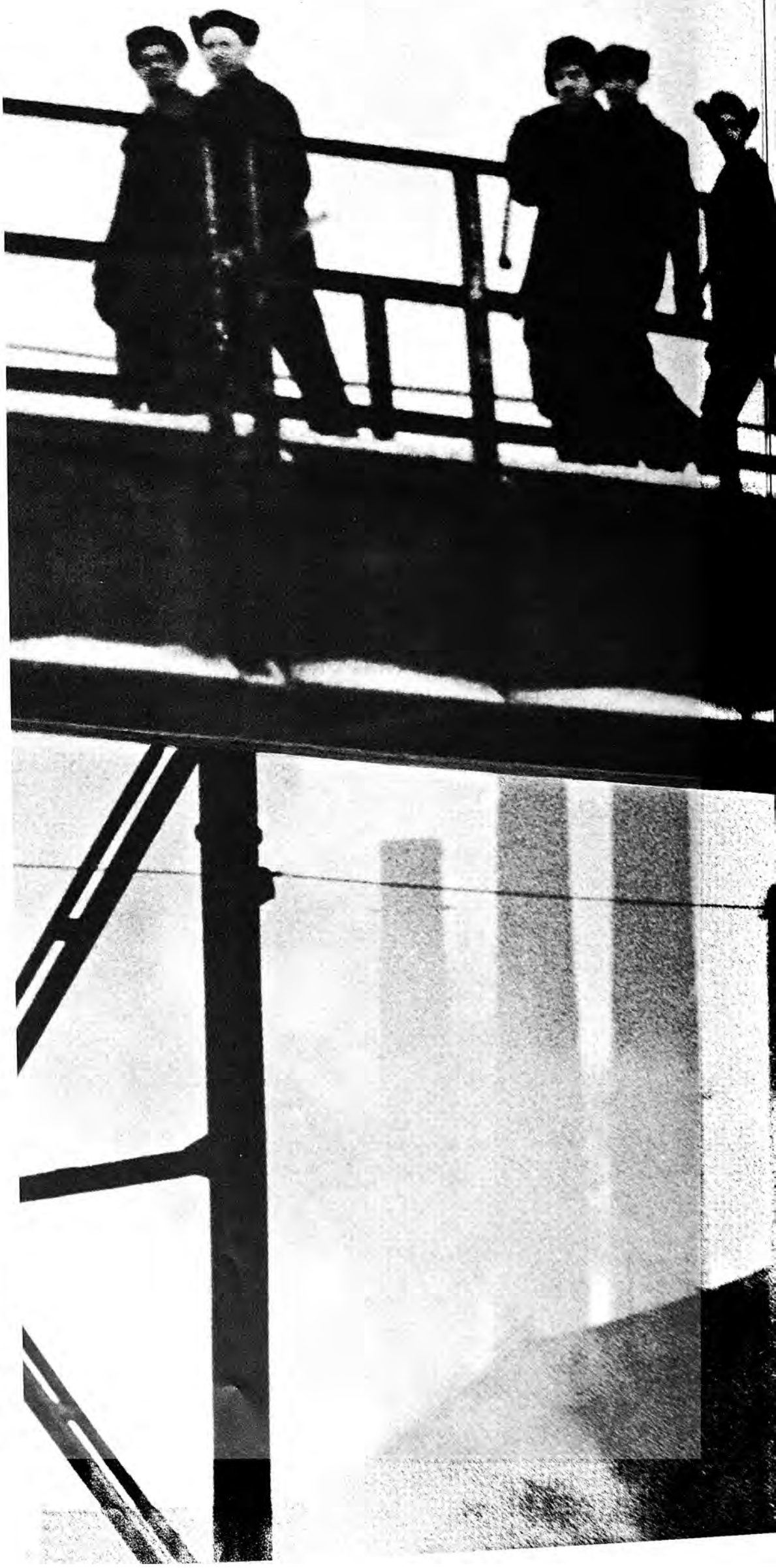
This question was looked into at a special Party committee meeting. Konstantin Pliskonos, assistant to the chief engineer, made a report, and workers, foremen and section superintendents took the floor. The Party control commission had not only prepared the material for discussion but had drawn up concrete measures for improving safety devices and techniques. The Party committee acted on these proposals and worked out decisions that were mandatory for management.

After the meeting, Nikolai Alexeyev asked, "You see the picture?"

I nodded.

"We expect to be forming a production committee at the plant soon," he added.

Those are the committees Nikita Khrushchev spoke of at the plenary meeting of the Central Committee of the CPSU in November 1962. So far they have been set up by way of experiment at only a few of the country's industrial plants. But soon, from the way it looks, they will be organized at all the others. Thus the large circle of workers now directly participating in the management of the Magnitogorsk Iron and Steel Mill will become even larger. ★



The morning shift arrives. Magnitogorsk workers have achieved the highest productivity of any steelworkers in the country.

AROUND *the* COUNTRY

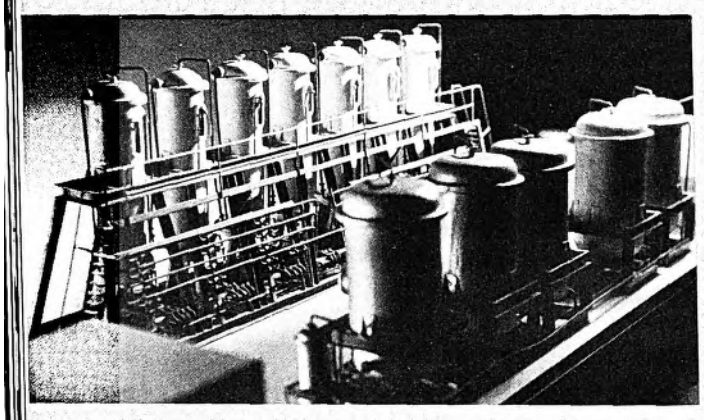
THE FLYING DUTCHMAN

The first Soviet performance of Richard Wagner's *The Flying Dutchman* was recently given at the Bolshoi Theater in Moscow.

"The opera was performed on the eve of Wagner's 150th birthday," said Mikhail Chulaki, Bolshoi director.

"Written when the composer was 28 years old, more than a century ago, *The Flying Dutchman* has all the elements of the change that Wagner brought about when he revolted against the pomposity of opera in his time. It is a musical drama of lofty ideas and passions. The libretto, also by Wagner, is based on an old legend about a phantom ship.

"The staging of this opera, like all of his operas, presents difficulties for the producer and vocalists. This production was a product of the cooperation of Bolshoi artists and artists of the German Democratic Republic—namely, Joachim Herz, who produced the opera in Leipzig (Wagner's birthplace), stage designer Reinhard Zimmerman and costume desginer Elizabeth Selle. It was conducted by Boris Haikin."



NEW REFINERY INSTALLATION

A new installation for refining glycerin has been designed in Voronezh. The ion-exchange resins it uses eliminate the need for distillation and a large shop. This installation can be adopted generally for filtering weak electrolytes—citric, boric and other acids.

NEW DISCOVERIES

Last year there were archeological finds in all the Soviet republics. A unique burial chamber was uncovered in the vicinity of the village of Yudinovo, on the border of Byelorussia and the Russian Federation. It was built with vertically placed bones of mammoths who had lived in this region during the glacial period. The burial chamber is believed to have been built some 20,000 years ago, much earlier than were the tombs of the pharaohs.

The ruins of an ancient temple with paleolithic decorations was discovered in a mountain cave in Abkhazia, an autonomous republic of Georgia. Finds in the Central Asian republics reveal a wide dispersion of ancient civilizations.

Some archeologists, however, had their disappointments. Those who theorized that our planet had once been visited by living beings from another world found their hypothesis disproved, due to the discovery and study of bones of fossil ostriches, hyenas and camels in the Odessa catacombs on the Black Sea coast. The bones are believed to be some one million years old. Scientists have speculated about the origin of the circles and squares carved on them; some thought that they were done by visitors from another planet. But the answer to the riddle is much more prosaic: the circles and squares have been proved to be the work of mollusks.

MOSCOW-WASHINGTON DIRECT LINE

According to an agreement signed this past summer in Geneva, a direct telegraph line connecting the Chairman of the USSR Council of Ministers and the President of the United States will be in operation sometime in September. An underwater cable across the Atlantic will be hooked up to the overland cable of the Moscow-Helsinki-Copenhagen-Stockholm-London line.

The most up-to-date equipment will be installed in Moscow and Washington on a reciprocal basis. At both ends automatic coders and decoders will be used. It will be possible to use the line at any hour of the day or night.

Special texts will be cabled several times a day as a check on the technical state of the line, which will be under constant control.

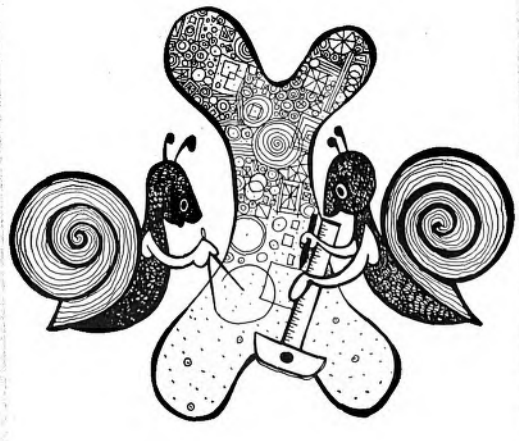
In addition work is under way on the establishment of a second line, via Tangier. Designed for communication between the operators, it can also be used for transmitting messages when necessary between the Kremlin and the White House.

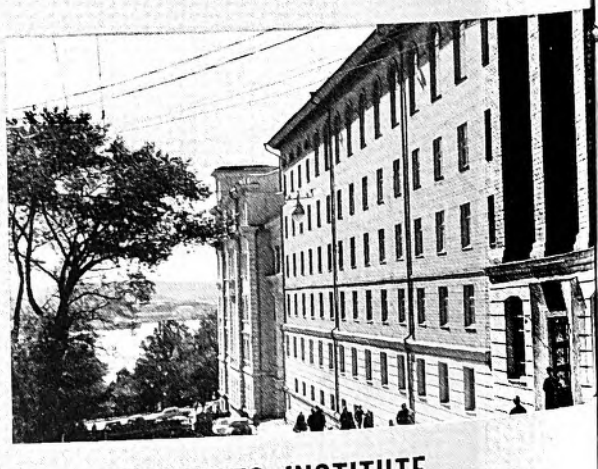
SPUTNIK BALLET STUDIO

Three times a week young men and women from Moscow factories, offices and institutes go to the Bolshoi Theater to study ballet. These pictured are from the Likhachov Auto Works, where the school has organized a dance group called Sputnik.

Instruction is free. Besides dancing, the students attend lectures on choreography and music, Bolshoi Theater rehearsals and performances.

The first group of worker-dancers graduated this year.





NEW ARTS INSTITUTE

Talented young people have been coming from towns and villages in the Far East, Siberia and other parts of the Soviet Union to study at the recently opened Arts Institute in Vladivostok. The new multistory building houses a music conservatory, an art school and a dramatics school, with the necessary concert halls, exhibition rooms and studios.

HELICOPTER RECORD BROKEN

A V-2 helicopter flown by test pilot Boris Anopov and engineer Lyusya Babadzhanova took off from Sheremetyevo Airport soon after dawn on May 14, 1963. On the 62-mile closed circuit flight (Tushino-Istra-Golitsyno-Tushino) it averaged 165 miles an hour—a very high speed for a light helicopter. The world record, set in 1960 by American pilot C. V. Turvey, was 142.217 miles per hour.

SINGLE COMBAT

A shepherd named Olzhatai Shomakov was riding horseback on the Bayan-Aul state farm in Pavlodar Region, when suddenly he was thrown by a heavy blow from behind. "A wolf," flashed through his mind a moment before the beast leaped at him, digging its large, sharp claws into his clothing.

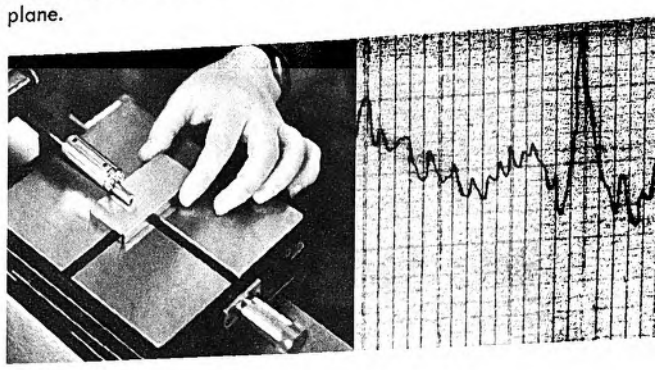
The shepherd tried to catch hold of the beast's throat, but its fangs sank into his hand. He dropped to his knees, but not before he had grabbed hold of the animal's throat. As the two rolled on the ground, Shomakov reached for his knife and struck. The animal lay still. The man got up, wiping the perspiration from his brow. As he did so, the beast lunged at him again.

The shepherd's strength was running out, but in one last effort he stabbed the animal. The steel blade broke, and he was left holding the handle. The broken blade had done its work!

Only then did Shomakov realize that he had been fighting with a lynx. Even very old men cannot recall ever having heard of lynxes in the Bayan-Aul Mountains.

A TENTH OF A MICRON

To the naked eye the surface of a machined part may look perfectly smooth, but the high-precision profilograph built by Moscow engineers shows it as jagged as the top of a mountain range. On a special tape, and amplified, the apparatus registers the most minute variations (to tenths of a micron) from the plane.

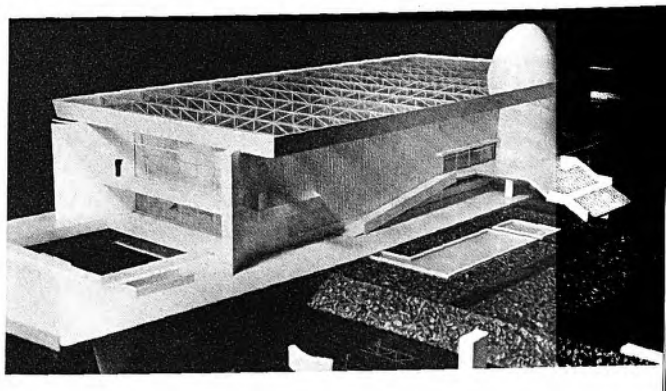


COSMONAUTICS MUSEUM

A cosmonautics museum, to perpetuate the spectacular breakthrough of Soviet science and technology to the stars, will be built in a park on a hill overlooking Kaluga, the birthplace of Konstantin Tsiolkovsky. The cornerstone was laid by Cosmonaut No. 1, Yuri Gagarin, an honorary citizen of Kaluga.

The exhibits will be displayed in two main sections as well as in the entrance hall. The first section will be devoted to Tsiolkovsky, the father of jet propulsion.

In the second section will be exhibited the development of his ideas and the contributions made by the Soviet Union to space exploration. There will be an auditorium for lectures and film showings. A library and reading rooms are also planned.



MEMORIAL TO A HERO

A monument to engineer Lieutenant General Dmitri Karbyshev, Hero of the Soviet Union, was unveiled on May 12, 1963, in what was once the Nazi death camp of Mauthausen (in Austria). The memorial stands at the main entrance—a white marble shaft, 10 feet high, on a low, flat, gray marble base. The partial larger-than-life figure of the defiant hero is shown as though in a block of ice. The inscription reads: "To Dmitri Karbyshev, scientist, soldier and Communist. His life and his death were both a testament to life."

On the bitter cold night of February 17, 1945, the Nazis led the brutally tortured general out into the yard, stripped him, and poured water over him until his body was frozen inside a block of ice.

The unveiling was attended by Karbyshev's daughter Yelena, Soviet Ambassador Avilov and high Austrian government officials.

Thousands of people were present at the ceremony.

AROUND *the* COUNTRY

ROSSIYA WORKS FOR ABUNDANCE

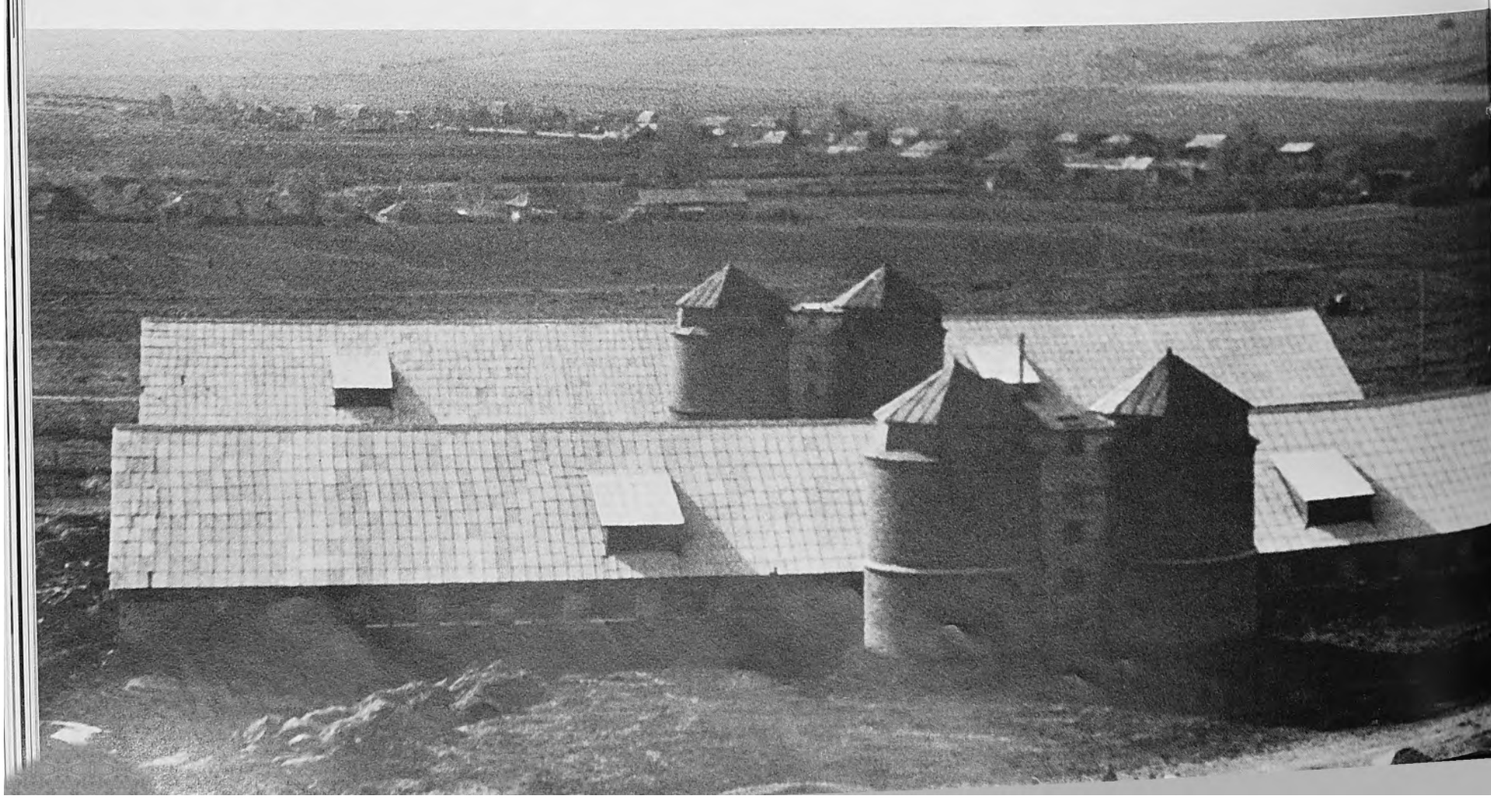


PHOTO STORY BY ANATOLI GARANIN

GEORGI SONIN was 60 when he was elected chairman of the Rossiya Collective Farm which is some 100 miles southwest of Moscow, in Kaluga District. Most people think that they've worked enough for one lifetime when they reach that age. But Sonin thought otherwise; he said he wasn't the retiring kind.

That was in 1961, and the farm was not showing a sizable profit. The new chairman put his whole heart, his professional knowledge as an economist, and his many years of practical experience into the job.

He decided the farm needed large-scale thinking and doing, but that would require large-scale funds. He took a state loan for high-grade seed and fertilizer, bought farm machinery on credit, and negotiated a contract with the procurement agency for the collective farm's future produce that gave him an advance of more than 100,000 rubles.

One of the first steps the chairman took was to pay the farm members regularly for their work. They could either take it all in cash or half in cash and half in kind.

Careful planning and a sound development program have brought sure results. All the loans are now paid off, and the terms of the contracts with the procurement agency have been met in full. The collective farm is now out of the red.

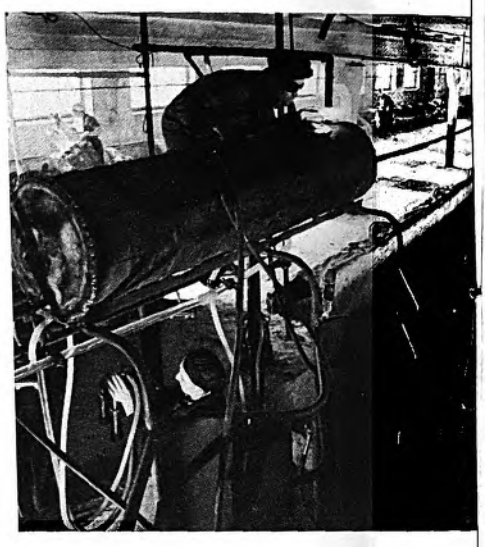
Says Sonin: "This is only the beginning. The farm is on its feet and on its way!"

Courtesy of the magazine Soviet Union

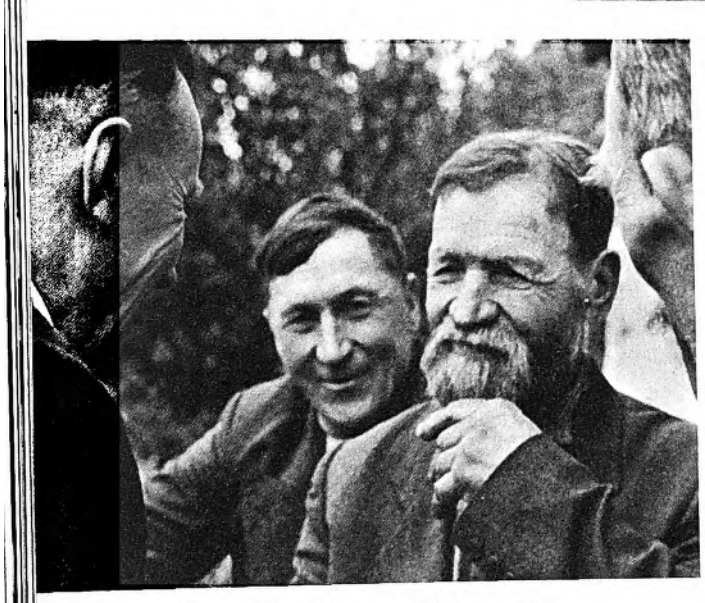
Farm chairman Sonin made livestock breeding one of Rossiya's points of concentration. These new barns (left) are paying off handsomely.

(Right) At his request the Kaluga experimental station sent a group headed by Abram Shilov (in lab coat) to work out fertilizing methods.

Most of Sonin's work is done outside his office. Behind the wheel of a buckwheat harvester. Buckwheat is one of the farm's big money crops.



Balanced feeding and mechanical milking has increased the herd by 40 per cent and milk and meat by 33 and 70 per cent respectively.

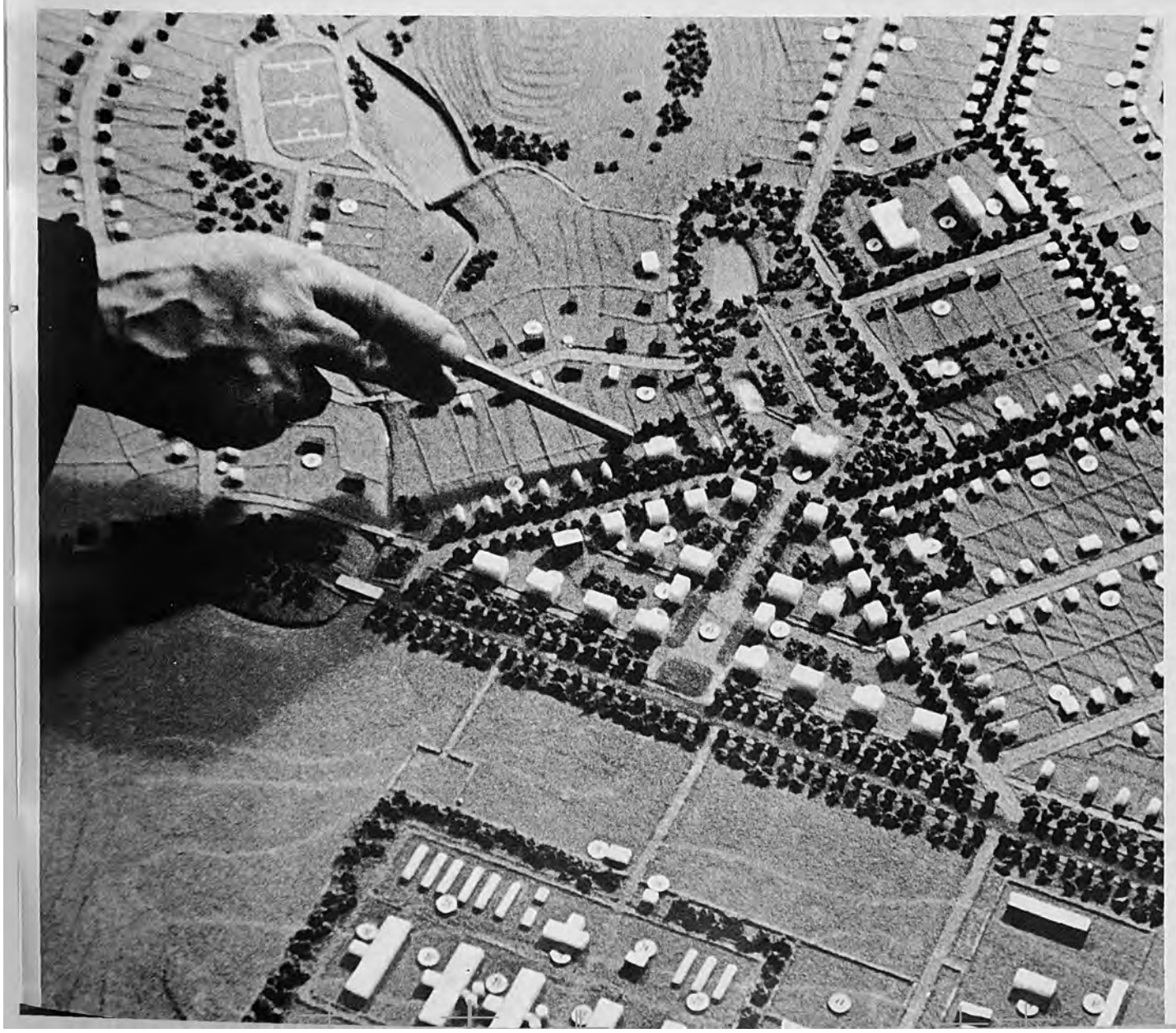


(Above) Sonin has a ready and willing ear for other folk's experience, one of the reasons he has been able to make Rossiya a profitable farm.

The chairman often visits the neighboring First of May Collective Farm to pick up tips on mechanization. This is sugar beet being harvested.

A singing busful of Rossiya farmers headed for a show at the regional theater. And one of the frequent dances at the collective farm club.

Sonin with his younger boy Anatoli. Another son is at agricultural college, one daughter at Moscow University, the other training to teach.



A look into the future. The Rossiya farm in 1965, with a million-ruble income, new housing throughout, a stadium, a new club and a hospital.

Garst thought this latest Kharkov Tractor Plant model, the T-125, made an impressive test run.

IOWA FARMER ON SOVIET AGRICULTURE

BY HANS VLADIMIRSKY

"SINCE my first visit to the Soviet Union, in the fall of 1955, you have made great progress. Not only progress in agriculture but progress in urban areas. I know that progress will continue. What a great country and what fine people!" Roswell Garst, the famous Iowa farmer, was being interviewed in Kiev after a week's tour of the Soviet Union.

One can hardly choose a better time to visit Kiev, in the Ukraine, than in mid-May, when the chestnut trees are in bloom and the graceful lilacs accent the magnificent new buildings of this town raised from ruins after the war.

He spent a day in the nearby countryside, leaving the city at 8 A.M. and returning at about 9 in the evening. "That was the most enjoyable day I had in the Soviet Union," said Mr. Garst.

At the Friendship Collective Farm he had a lively farmer-to-farmer talk with the chairman and specialists, giving welcome advice and frank criticism. "In those areas where the average precipitation is small, more attention has to be paid to irrigation," he noted. He was pleased to find his own books on corn cultivation in the farm's library. He wrote this in the Visitors Book: "I have enjoyed this visit, particularly the museum which shows the extraordinary progress being made . . . typical of the whole Soviet Union. Wonderful!"

After inspecting corn and sugar-beet fields, Mr. Garst said: "From what I have seen, Soviet farm cooperatives are making effective use of insecticides, and it is particularly pleasing to see that the farmers have been cultivating corn over corn for several years with a good yield. When I was here in 1955, the uneconomical grassland system of farming was widespread. Now it is a thing of the past. It is very encouraging to see that the areas sown to corn have increased."

On his visit to the Terezino experimental center for cattle breeding, Mr. Garst was especially interested in the research done on artificial insemination. "We recognize that the Soviet Union leads the world in artificial insemination," he said. When he learned that an experimental plot at the center yielded a harvest of 118 centners of corn per hectare, he remarked: "What you can do on five hectares (12 acres) you can do in a whole region."

Mr. Garst spent a good deal of time on the cattle farm. His remark after seeing the young animals was, "If I were a calf, I would like to be born on this farm."

"I am perfectly aware that the United States and the USSR developed differently. Not everything depends on people; much depends on circumstances. While you were fighting the war and the question was being decided 'to be or not to be,' the United States was developing without disturbances from without. However, I am confident that as soon as you meet your program for greater production of chemical fertilizer, you will be growing as much produce as the United States."

The same day Mr. Garst visited the Ukrainian Machine-testing Center where he was shown new agricultural machines. He was particularly impressed by the Kharkov T-125 tractor. This 130 horsepower machine does 30 kilometers an hour when used for transport. Addressing the staff of the center, Mr. Garst said: "The most important thing is to make more with less expenditure, and I see that you are doing that very well."

This is the fourth visit Mr. Garst has made to the Soviet Union since 1955. A few years ago Nikita Khrushchev was a guest at Garst's farm in Iowa and spoke highly of his growing methods. Ever since that time the American farmer and the Soviet Chairman have been in friendly contact—a model example of international cooperation.

Asked about the long talk he had with Khrushchev on this visit, Mr. Garst said, "The talk was on agriculture, basically. I told him that you were making great progress, and expressed my point of view about the need for greater use of insecticides, chemical fertilizer and simpler sets of farm machines. Mr. Khrushchev said that everything was being done to meet the needs of Soviet farming in these areas. I wish to emphasize that my meetings with Mr. Khrushchev have always been most cordial and marked by unusual frankness."

About the so-called crisis in Soviet agriculture certain Western publications have invented, Mr. Garst said, "I do not believe it is true; I have said as much in the press before and I am prepared to repeat it." One of the main arguments advanced by the manufacturers of this "crisis" is that agriculture cannot be centralized. In Mr. Garst's opinion the best refutation of that is the progress of Soviet agriculture, particularly in recent years.

"I must say that your agriculture has made great advances. I see that you are supplying more electricity, more mechanization and doing still more research. I have no doubt that your agriculture will continue to develop rapidly. When I visited you in 1955, I thought your agriculture was 30 years behind ours. Today I can say that the gap has shrunk to eight years. In other words you have covered 22 years in eight. I always expected you to make this progress. What I see today is a confirmation of my previously formed opinions."

In conclusion Mr. Garst said: "I take pride in the contribution I make to your agriculture. I think of it as a contribution to better understanding between our peoples."

Courtesy of the newspaper Moscow News

MARXISM-LENINISM IS OUR BANNER, OUR FIGHTING WEAPON

Excerpts from the Speech by Nikita S. Khrushchev at the Plenary Meeting of the Central Committee of the Communist Party of the Soviet Union June 21, 1963

THERE have been many different kinds of parties. But the Communist, workers', Marxist-Leninist parties, parties like ours, have a special place among them. Our Party is strong because Communists firmly believe that the great cause of communism will triumph and because our Party is always guided by Marxist-Leninist theory. Peering into the future, the Party reveals to the people scientifically charted routes of progress, fosters enormous energy in the masses and leads the people to great achievements. The enemies of socialism have broken many a tooth in their struggle against our country. They have long realized that the major force which guarantees the correct guidance of the entire building of socialism and communism, which gives it organized, planned and revolutionary scope and ensures all of its successes, is the Communist Party, its scientifically substantiated policy, its revolutionary ideology and revolutionary philosophy—Marxist-Leninist theory. . . .

Marxism-Leninism teaches the working people to understand correctly the processes at play in society today. The peoples realize ever more clearly that the great path drenched in the blood of the fighters for the people's happiness, a path of illustrious victories and temporary setbacks, a path that had to be traversed before communism, once a dream, could become the greatest power of today, a society actually built over vast expanses of the globe, has not been traversed in vain.

The new world not only has been born, but is growing and getting stronger, and it has already rallied behind its banners a third of our planet's population. Surely we can be proud of that, comrades.

For all this there are still people who rise to the bait of bourgeois propaganda and try to disparage the theory and practice of our communist construction. We cannot and must not put up with this, and we should give a decisive rebuff to the attacks and slander of those who would like to undermine the people's trust in the Party.

Incidentally, they often try to undermine it not directly, but by throwing out such apparently innocent slogans as peaceful coexistence in the sphere of ideology.

We have never concurred with such views since we have always approached problems of ideology from the class angle. We fight what is harmful to our cause. Every farmer knows that the worst enemies of his fields are sow thistle, couch grass and other weeds. Therefore, he carefully protects his crops from the weeds. He protects and tends his crops, but he destroys the weeds mercilessly. The same holds true for society. We must tend and protect everything new, everything revolutionary, everything that consolidates the people, and decisively fight whatever interferes with our forward movement, whatever interferes with the solidarity of our people, whatever is directed against our Party and its life-asserting ideology.

I have said that the Marxist-Leninist ideology, the organizational unity of the Party is, to put it figuratively, the cement that binds the Party into a monolithic whole. The opposite of cement is salt. If you throw a handful of salt into a concrete solution, you will have no binding and the concrete will crumble away. Peaceful ideological coexistence is that kind of salt.

Our enemies want to throw this salt into our ideology when they call for peaceful coexistence in the sphere of ideology. . . .

The enemies of communism have been unable to break us in open military conflict. Recall the years of the Civil War and foreign intervention, or the difficult period of the Great Patriotic War. Recall the time when the United States of America had a monopoly on nuclear weapons. These are all stages in our life and struggle, comrades.

Many of you have probably seen the remarkable film *The Russian Miracle*. When one sees the film one thinks, "This is what we were like, and yet we have survived." And we did not merely survive, but we were the first to establish a workers' and peasants' state, the first to build socialism, the first to enter space.

We, the older generation, see the film differently than do the young people, who know the period only from books. In some of them that period probably evokes fear. The fact is that the German film producers, the Thorndykes, used only newsreels without resorting to actors. In those of us who lived through that period, the film evokes respect and pride, since we recall the remarkable people of that day, the heroes of labor and battle. Yes, those were hard times, but the difficulties did not crush us. On the contrary, surmounting these difficulties filled us with enthusiasm and pride, and now, too, all this elevates the spirit of the people and invigorates them.

When one sees the film, one cannot help recalling those who label as "varnishers" the workers in literature and the arts who realistically depict the positive trends in our country's life. Some shots in the film really convey the difficulties and deprivations of those years. And then other shots flash on the screen: Nazi troopers goose-stepping, the Soviet people toiling with spades and wheelbarrows, and then America with its technology. No one would ask: Why is the enemy varnished so while we are shown in such an unseemly manner? *The Russian Miracle* portrays the truth of life. Yes, that is the way we were; yes, we experienced those hardships and trials as we traveled the long path from backwardness to progress. The dark and gloomy side, too, is shown in the film, but it is shown from the correct, true-to-life point of view. In other words, we do not demand that writers and art and film workers varnish and decorate the realities of life. No, we say to them: Show reality as it is, but show it from the point of view of the affirmation of life.

You remember *The Road to Life* by Anton Makarenko. Look at whom and what he wrote about. The people he wrote about horrified the philistine, bourgeois intellectual of the West. But how he described those people, those urchins who numbered among themselves thieves, perhaps even murderers. When you read Makarenko, you have faith in his characters, you believe that these people who found themselves in such a plight as a result of the vestiges of the old system will turn out all right. And they did turn out all right.

Some writers say: Are we then to varnish, to prettify life? No. Write faithfully even about the most sinister and negative aspects of life, but describe them from the positive, true-to-life point of view. But there are some who want to draw on the dustbins, so to speak, for their themes

and to besmirch everything that the Soviet people have accomplished by their labor and through their suffering. And such people want to be applauded. No, that will never happen.

The problem can be put this way: We have attained our present stage and are moving forward. . . .

The imperialists did everything to isolate the socialist countries, to block their economic development. But these calculations of the imperialists came to nothing. They concocted tales about the weakness and poverty of the socialist countries. There are people in the capitalist world who believe these tales. On one occasion I recall a talk I had with an Eastern prince who was sharing his impressions of the Soviet Union. He said:"Mr. Khrushchev, when I was going to Russia, some people tried to dissuade me from the trip, saying that you had communism here. I have come and seen that there is no communism here; communism is in our country, where everybody goes about naked." You see what notions of communism are hammered into people's heads by the ideologists of imperialism!

Our tremendous economic successes shatter the slanderous inventions of imperialism and demonstrate the great advantages of the socialist system. These successes are a confirmation of the correctness of Marxist-Leninist theory, of our ideology, of the advantages of our social system. . . .

True, some comrades have their own individual opinion on this subject, often substituting a national, racial approach for the class approach in estimating social phenomena. But we are speaking the language of our Party, we express the view of our Party, we are talking about what has been written in our Party decisions.

We rejoice and take pride in the fact that our country and the entire socialist community of peoples have reached a position when our enemies have to reckon with us and, I venture to say, fear us.

We consider the Leninist principle of peaceful coexistence of states with different social systems to be the main course of our foreign policy, and we live by this principle consistently. Life has fully confirmed the correctness of the principle of peaceful coexistence. . . .

. . . I have already quoted data on the pace of our development on several occasions, and, you know, when you look at the figures showing the growth of the Soviet economy, you hear, as it were, the resonance of communism, the resonance of the firm step of our movement forward.

Here are some data about the development of the Soviet Union's economy in the postwar years.

In the 18 years since the end of the Great Patriotic War the Soviet people, guided by our Party, have attained outstanding successes. The pace of our growth in a number of key branches of the national economy is characterized by the following increase in production:

steel—from 12.3 million metric tons in 1945 to 76.3 million metric tons in 1962;
pig iron—from 8.8 to 55.3 million metric tons;
rolled metal—from 8.5 to 59.2 million metric tons;
oil—from 19.4 to 186.2 million metric tons;
coal—from 149 to 517 million metric tons;
cement—from 1.8 to 57.3 million metric tons;
electricity—from 43 to 369 billion kilowatt-hours.

These are remarkable figures, comrades, staggering indices!

You remember that soon after the end of the Patriotic War Stalin, in a well-known speech to the electorate, set the task of reaching an annual steel output of 60 million metric tons and an oil output of 60 million metric tons. He considered that a very high level. Now we have exceeded by a considerable margin the development target mentioned in Stalin's speech, but we still have a great deal of work to do to create the conditions for the transition to the communist mode of production and distribution. The transition to communism will require great efforts, the selfless labor of the people.

Some people think, however, that this can be done comparatively easily and quickly. One must not play at communism: there are laws of development of society, and they have to be understood and reckoned with. Those who try to ignore the laws of development will be punished by life itself.

Our Party and the Soviet people organize every aspect of the tremendous task of building communism on the basis of Marxism-Leninism, taking into consideration the actual conditions in the country at every stage of its development. The figures I have quoted testify eloquently to our great successes in economic development. All of us—the Party, the whole people—rejoice at these successes. How can a man who has our common cause at heart say that this joy represents a varnishing of reality?

Yet with all these significant achievements, we still have shortcomings. But attention should be centered not on shortcomings alone—one must see the entire picture of the battle, the picture of the great assault and the victory in this battle. Now, who is the winner and who is the loser in this assault? Our Party and our people are the winner. And who is the loser? The capitalist world!

Recall, comrades, the joy with which Lenin spoke at the Fourth Comintern Congress in 1922 about the first steps in developing our socialist industry. "We have found the resources necessary for putting heavy industry on its feet," Vladimir Ilyich said. "True, the sum we have been able to obtain up to now barely exceeds 20 million gold rubles; but at any rate we have this sum, and it is intended exclusively for the purpose of reviving our heavy industry." What gigantic progress we have made since then! In the first four years of the seven-year plan alone 3,700 new big industrial establishments were built. In these four years state capital investments (centralized and noncentralized) alone amounted to 126 billion rubles. State basic funds increased in this period by 100 billion rubles, or 50 per cent. In four years our basic funds grew by 50 per cent! Is this varnishing, comrades? No, it is the labor and sweat of our people, it is their achievements. The Soviet people know full well that if they do not work selflessly, they will be unable to overcome difficulties, to enter on the bright road of the communist morrow.

I don't know, comrades, perhaps it's a weakness of mine, but when I travel around the country and look at our people, when I visit enterprises and collective and state farms, I am deeply moved and gladdened by everything our people have done in the Soviet years. Everyone coming to us from abroad, even capitalists, cannot help but express surprise at our rapid growth. The American farmer Garst, whom I met again not long ago, said:

"When I first came to the Soviet Union and walked in the streets of Moscow, my suit was better than the suits of others. This time, when I walked in your city, I saw that mine was perhaps the worst suit around." . . .

Our successes in communist construction are the embodiment of the ideas of Marxism-Leninism.

I am not saying that we have already solved all our problems, that we have no shortcomings. I merely want to say that our remarkable successes in communist construction vividly demonstrate that we stand on a life-affirming road. If we have a shortage of something now, we must understand correctly why this is so; we have to see not only what exists today, but also what was yesterday and what will be tomorrow. If what we started with, what we had, is compared with what we have created, what we have now, we will see how confidently and rapidly our country is advancing toward its goal. And this goal will be achieved. This is the main thing! One does not have to be very clever to say that the more goods, the better. But one has to be able to produce more industrial and agricultural goods. If you want to get more than is possible, you may even lose what you already have.

In our Program, for example, we have set a target for economic development, and we have to reach that target in 20 years. Why are we doing it that way? Wouldn't it be better to reach the target not in 20, but, say, in five or ten years? Of course it would. But it is practically impossible to do it in five or ten years. This depends on more than wishing. Mere desire, a subjective approach, is not enough; what is

necessary is an objective and scientifically grounded approach which takes into consideration every realistic possibility. Even a mother giving a sweet to her child warns: "Don't gulp it down or you'll choke." And a mother wishes her child well!

In developing a country's economy one must not set unachievable tasks or undertake more than is practically feasible. If you do, you will overstrain yourself and roll back; life will thrust you aside.

We must move forward at a rapid pace, but the economy must be developed according to plan, without permitting slumps and breakdowns. This demands a sober regard for realistic potentialities and their efficient utilization. . . .

· The Presidium of the Party Central Committee attaches very great importance to drawing up the national economic plan for 1964-1965 and subsequent years and to the proper organization of this work.

It is a fact that we have many shortcomings in planning. They are explained, above all, by the fact that the Party organizations, for the most part, have kept away from this important area, entrusting it entirely to planning bodies. As a result, the plans do not always incorporate what is needed for rapid economic development. . . .

. . . The Party has already criticized the practice of drawing up plans in which planning bodies, on the basis of average figures for production growth in previous years, establish a definite rate of increase in gross output and make estimates for each branch. For example, if in 1963 capital investments in construction and assembly work are fixed at 19.7 billion rubles, these appropriations are allocated by branches on the basis of established growth rates. Thus, capital investments are determined by ratios worked out long ago.

Such planning leaves no funds for new, advanced branches, whose rapid development is dictated by life itself. Moreover, these branches could yield large economic returns in a short time. As a result of such practices everything new and progressive is still developing slowly in our country because the major resources are allocated according to previously established ratios.

I will cite the following example in confirmation of this statement. The Twenty-first Party Congress directed that funds obtained as a result of plan overfulfillment should go primarily for the development of the chemical industry and agriculture and for the construction of factories producing consumer goods. What has actually happened? In the metallurgical industry, for example, the quotas for the seven-year plan are being overfulfilled, while in the chemical industry they are not fulfilled. Why did this happen? Because the cart of the State Planning Committee did not follow the direction we wanted but followed the old rut. . . .

Look at how the situation is shaping up in the manufacture of foodstuffs and consumer goods. The manufacture of foodstuffs is growing uninterruptedly, and we are making efforts to increase the quantity of agricultural produce more rapidly. Foodstuffs in our country are cheaper than in the Western countries, even cheaper than in America, and rent is considerably lower. However, clothing and footwear are as yet somewhat expensive, and the demand for these goods is not being fully met. Can we solve this problem rapidly? Yes, we can. What is required? It is necessary to develop a chemical industry which can produce enough to satisfy all demand for clothing and footwear, as well as for furniture and other household goods. Natural fibers can also be successfully replaced in technical goods by chemical fibers.

I have been informed that enterprises manufacturing synthetic wool pay for themselves within 18 months or two years. Hence, by increasing the manufacture of chemical fibers we will create the conditions for a rapid rise in accumulations. Figuratively speaking, mills manufacturing artificial and synthetic fibers produce money.

By developing chemistry, one of the major branches of heavy industry, we can speed up the fulfillment of the task posed by the Party of supplying the national economy with many valuable materials and goods, as well as of more fully meeting the requirements of the population for consumer goods. The development of the chemical industry will facilitate the mass output of consumer goods, thus making it possible to reduce prices.

At this time I will not go into how we shall do this, although it would be pleasant to. The road to increasing animal husbandry products, to creating an abundance of meat, milk and butter and reducing their prices, also lies through chemistry. To achieve this we must supply our farms with mineral fertilizers. Today we are in a position to do it.

I recently spoke to Roswell Garst, the American farmer. He is a clever man and is friendly to us. He said: "I am convinced, and I will speak about this in America, that within five to seven years you will catch up with us in the output of agricultural produce. What I saw has amazed me."

Comrades, the most serious consideration must be given to the letter of the Party Central Committee and the USSR Council of Ministers that was sent to the Party organizations. It is necessary to study it and participate in a genuine way in drawing up the national economic plan.

Special attention should be devoted to capital construction. The incorrect and antistate practice of dispersing capital investments among many projects has not yet been overcome. Every year capital investments are distributed more or less evenly among projects already begun; the principal projects are not singled out. New projects are often started before those already in construction are completed. Huge funds are thus frozen for many years. As a result, we deprive ourselves of the possibility of putting important projects into operation on schedule, within a short span of time. This is the result of gross errors in planning. . . .

As I have already noted, huge sums are allocated every year for capital construction in the Soviet Union; they run into billions of rubles. What is important for the country, however, is not only how much money is invested in construction but how many production capacities are put into operation every year. The building up of production capacity is measured not only in terms of money invested but also—and this is most important—by the number of factories going into production, the power-generating units put into operation, the new machines added to factory tooling facilities, and so on. . . .

We have to choose the most important construction projects now and concentrate capital investments on them so as to put them into operation within the shortest time technically possible. . . .

I think that if we approach the drawing up of the capital construction plan from this angle, we shall probably be able, with the same capital outlays, to double the production capacity put into operation in 1964 and 1965 as compared with that under the old system. And this is of decisive importance, because the resources we now have—and we possess vast resources—will be more quickly converted into completed factories. They will be returned to the national economy in the form of finished products, enabling us to increase accumulations and raise the country's economic potential even higher. . . .

The Presidium of the Central Committee has instructed me to draw up a report for the next Plenary Meeting of the Central Committee on the development of the chemical industry. We are thinking of preparing more detailed data on the adequacy of our capital investments for that meeting.

The letter of the Party Central Committee and the USSR Council of Ministers has set forth the principles to be followed in drawing up plans. Economic planning is a matter of exceptional importance. The success of communist construction depends to a great degree on how correctly economic development plans are drawn up. Therefore, the Party must also tackle the problems of planning. The State Planning Committee alone cannot cope with this job.

It is necessary to involve the masses of the working people in economic planning. The Party Central Committee and the USSR Council of Ministers are confident that the Party, Soviet, trade union and YCL organizations, all the working people, will take an active part in drawing up the plans and step up their efforts to see that the targets of the seven-year plan are achieved ahead of time. ★

Rock pictures found along an old road to gold mines tell about expeditions the pharaohs sent to Nubia.

FINDS IN THE NUBIAN DESERT

SCIENTISTS from many countries have come to the Nubian Desert to explore the bed of the future Aswan Reservoir. On this site of ancient Nubia, a country that flourished thousands of years ago, the Soviet Union is participating in an international effort to preserve the monuments of that early culture.

Last summer the first Soviet archeological expedition, headed by Boris Piotrovsky, Corresponding Member of the Armenian Academy of Sciences, began working in Egypt. Yakoub Fouad, an Arab archeologist, was his assistant.

The expedition uncovered the ruins of a large settlement of cattle breeders, with tools and household implements that give something of a picture of that ancient culture.

A great many Egyptian inscriptions and drawings were found on rocks along a road that once led to gold mines and quarries. They tell of expeditions dispatched to Nubia by the pharaohs.

Several burial sites were excavated. One dating back to the beginning of the second millennium B.C. is especially interesting. Small stone towers surmount the vault, surrounded with many carved vessels.

Some of the finds were brought to the Soviet Union with the permission of the United Arab Republic. They will enrich the collections of the Leningrad Hermitage and the Moscow Museum of Fine Arts, both of which have sections devoted to ancient Egyptian culture. ★

These vessels were found on burial sites that date back 4,000 years.

THE WORD "tsunami," Japanese for "big wave," does not convey much by itself. But there are few elemental forces of nature more disastrous than a tsunami. Sometimes it brings more tragedy in its wake than the most destructive earthquake or volcanic eruption.

About 70 per cent of all the earth's volcanoes are situated in the Pacific Ocean area. This zone is sometimes called the "fiery ring" of the earth's crust. Some of the recorded permanent earthquake epicenters are under water, close to deep depressions. It is there that the most powerful tsunamis originate.

In a submarine earthquake large sections of the earth's crust are elevated or depressed suddenly. The heavy layer of water, many miles deep, covering this part of the ocean bed leaps sharply upward or sinks downward. The water over the epicenter, in the open sea, does not usually rise much higher than a world champion can jump—six and a half feet. But the potential energy gathered by the giant column of water can be devastating. When such a wave reaches a shallow point, its amplitude increases; right at the shore it stands up like a sheer wall of water, sometimes ten stories high.

It is not likely that we will find ways of preventing these tidal waves in the near future. But through modern science timely warning can be given to the coastal population when one is on its way.

Seismologists determine the epicenter and force of a submarine earthquake by the seismic waves and, knowing the distance to the epicenter and the speed with which the tsunami is moving, they can calculate the time it will take the wave to reach the shore. But this is only half the job. As for the probable height of the wall of water and its force, scientists up to now have only been able to make estimates on the basis of past experience. But each new tsunami has brought its corrections and carried away a new toll in lives.

The problem tackled by seismologists of the Institute of Physics of the Earth was to learn how to detect submarine earthquakes in what seemed to be slight tremors in the underwater parts of the earth's crust.

Another important research job was to elaborate a theory about the tsunamis—from the moment they originate to the time they reach the nearest shallows. Marine Hydrographic Institute researchers worked on this one; State Oceanographic Institute scientists studied the behavior of tsunamis in shallow water. Nearly a dozen other research institutes and laboratories also participated in these studies.

In 1958 a team of scientists at the Far Eastern Hydrometeorological Research Institute began to collate the results. The head of the team, Liya Ikonnikova, and her associates Gennadi Pozdnyakov and Rita Yaroshenya had the task of verifying the whole complex of theories.

Much was already known about the general character of the phenomenon, but clear, practical recommendations concerning the details, particularly where the different theories touched on one another, were required. It was known, for instance, that no matter at what angle a tsunami approached the shore, it turned sharply and hit the entire shore front simultaneously.

The reason for this could be easily explained. A tsunami may be likened to a glider touching down on a mountain slope at an angle. If one of the glider's wings catches at the upper part of the slope, the glider immediately noses toward the mountain. Similarly, tsunamis are retarded most from that flank where the water is at its shallowest. Here the speed is reduced while at the other flank it still remains high. The tsunami then turns its entire front in the direction of the flank whose motion has been retarded.

Was it possible to forecast the behavior and size of these giants waves in bays, straits and the expanses of water between islands? Many problems were involved, all requiring solution.

Late in March 1962 *Pravda* carried a brief description of a tsunami atlas compiled by the Far Eastern Hydrometeorological Institute. The atlas consists of many dozens of identical maps of Kamchatka and the Kuril Islands dotted with the names of towns, villages, bays and capes.

Each map is a sort of charter of immunity for the dwellers of those places indicated. On the map the town or village is shown girdled from the ocean side by a series of semicircles with an ever increasing radius, representing time lines. If the epicenter of the earthquake is recorded on the section of the map intersected by a time line, all one has to do is glance at the number printed next to it to determine how soon the tsunami will reach the given point.

But what is new about the atlas? The time it takes for a tsunami to reach a certain point had been known before.

What the new atlas gives is another, no less important, characteristic of tsunamis—their force. To take appropriate action for safeguarding coastal inhabitants, it is absolutely essential to know the exact height of the tsunami. Will its height, by the time it reaches the shore, be 10 feet or 100 feet? Their destructive force is as different as a fresh breeze is from a typhoon! The atlas provides the answers to this question in a matter of seconds.

A small sheet of paper with graphs is pasted in a corner of each page in the atlas. These give the theoretical calculations and conclusions of Liya Ikonnikova's team gathered from the various scientific bodies who had worked on the study. The graphs show the relief of the sea bottom near the shore and the contours of the coastline, and indicate the characteristics of the tsunami the moment it approaches the shore. The atlas answers not only general questions but gives many details of the microstructure of the sea bottom and shore near populated areas.

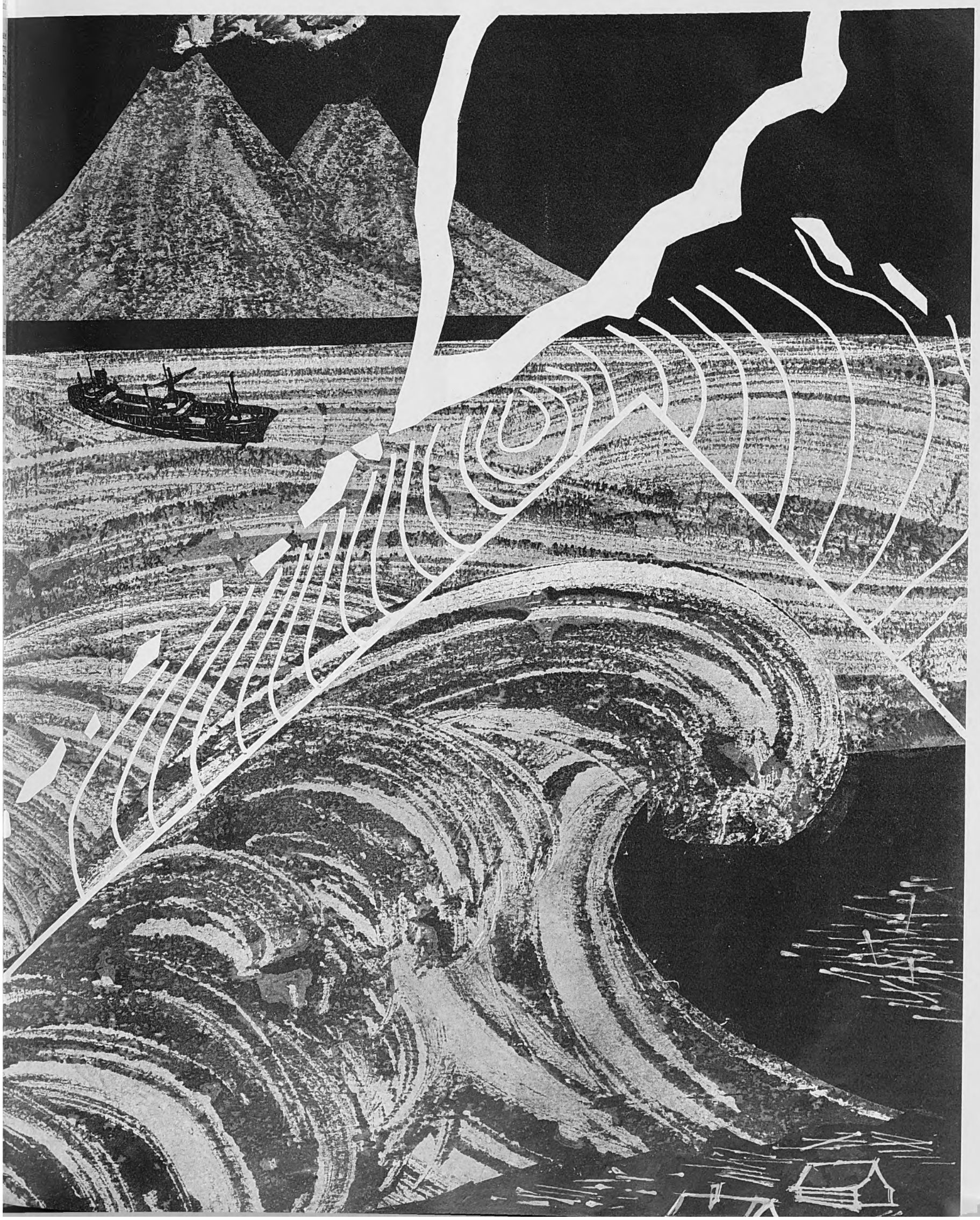
Now that the wave theory has been translated into a graph picture, one need not be an expert to fathom the mysteries of the tsunami. The atlas presents no difficulties whatsoever to the layman; he can read the maps and graphs in a minute or two.

This is certainly the most humane of all atlases; its purpose—to save lives.

Courtesy of the magazine Ogonyok

LIFESAVING ATLAS

BY VALENTIN GUKOV
DRAWING BY VSEVOLOD OSVER



KILL WAR, MEN OF THE EARTH!

REQUIEM is the title Soviet composer Dmitri Kabalevsky has given his latest opus.

"I dreamed for many years of writing a large symphonic work in memory of those who were killed during the Great Patriotic War," he wrote early in 1961. Young Robert Rozhdestvensky, inspired by Kabalesvky's idea, used that theme in a poem that was widely acclaimed by his readers.

"What Rozhdestvensky wrote," said Kabalevsky, "turned out to be a far bigger, richer, bolder idea than the one I had for *Requiem*."

The composer made a few changes in the sequence of the 10 sections of the poem and then asked the poet to add a few more.

Requiem had its first performance in the Grand Hall of the Moscow Conservatory, with the Moscow State Philharmonic Orchestra, the Moscow Regional Chorus, and the children's chorus of the Institute of Arts Education. Valentina Levko and Vladimir Valaitis of the Bolshoi Theater were the soloists, Boris Haikin conducting.

The title, *Requiem*, which has become a synonym for tragicophilosophical music, is most suited to that part of the composition which speaks of bereavement, of the past. The dead speak up. "What do they want with glory, the dead? Even were the whole world of the living to scream, not one of the dead would hear." The theme of suffering and anger is carried by the mournful query of the soprano and the women's chorus, by the classically austere choral episodes, by the lyrical and moving orchestral interludes. The theme is in the old Russian mother's lament, the anguished and desolate "whispers."

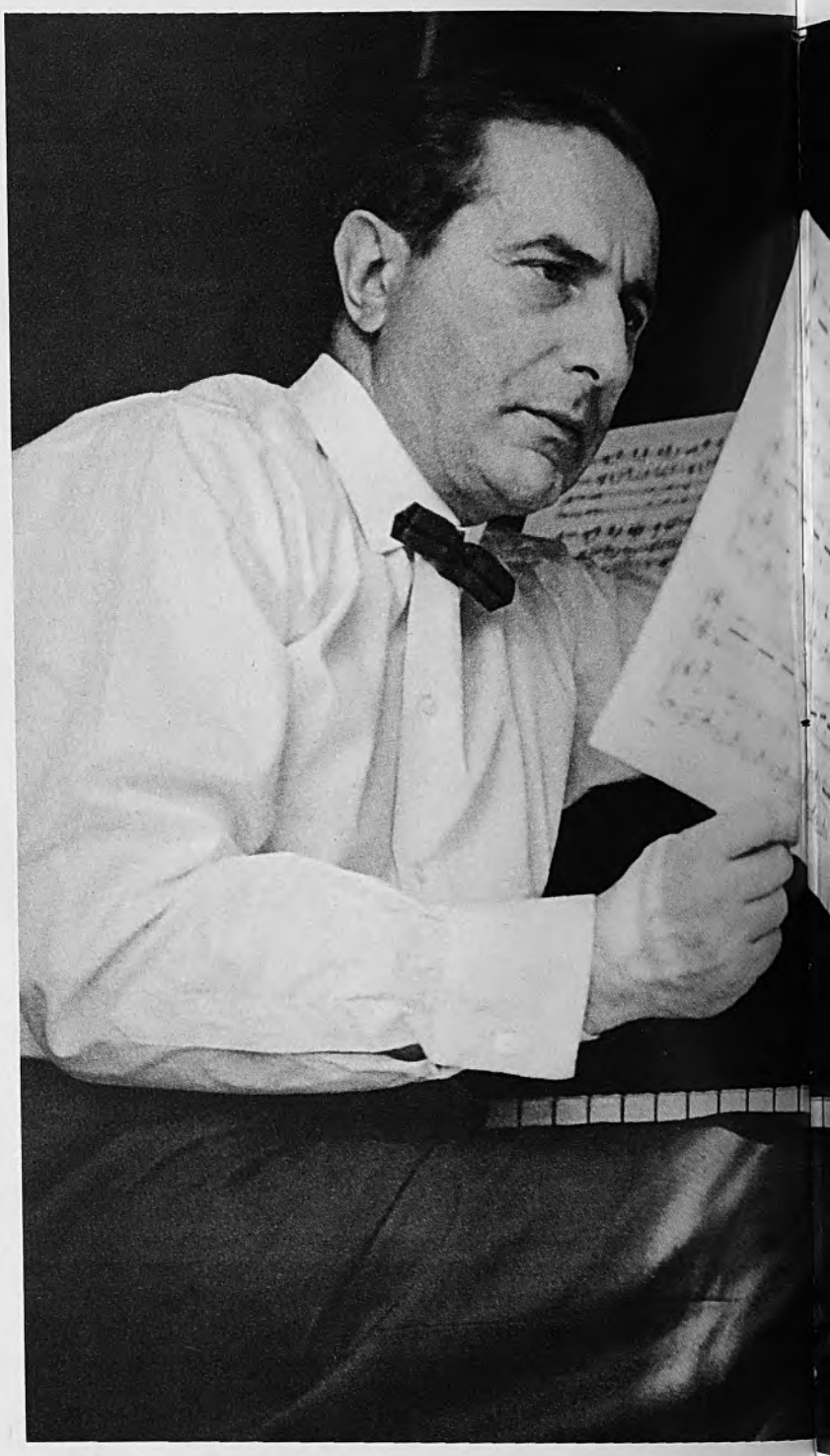
Describing those who "saved everything living without saving themselves," the composer charged his music with tragic images. But there is no hopelessness in the grief. His purpose is not to resurrect the horrors of the past. Sorrow here is wise and courageous. Not a funeral dirge, *Requiem* is a glorification. "Eternal glory to the heroes! Hymns of praise, immortal hymns float solemnly o'er the sleepless planet."

The theme of the past is each time answered and disputed by the theme of the present. "Not the dead, but the living" need to remember what happened. When the dead were faced with the choice of "my country or I," they did not hesitate to sacrifice their lives for their people and for the future. The theme of the future resounds throughout the second half of the work. It is to the future, when there will no longer be wars and children need never cry again, that the oath of the young is sung.

Requiem begins with the refrain: "Remember! Remember those who will never come back to us. Remember!" It recurs throughout the work, the last episode harkening back to the beginning. The musical and ideological culmination is the protest against another war. "Kill war! Curse war, men of the earth!"

Requiem is written in a terse musical idiom, without affectation. In its intonation it is akin to Kabalevsky's opera *The Family of Taras*, also based on a Great Patriotic War theme. With all its austere music, *Requiem* is not so much a monument in music to our dead heroes as it is a passionate appeal to us the living. ★

OUR PREMIERS OUR OUR



YAKOV FLIERE,

BY MIKHAIL ALEXANDROV

YAKOV FLIERE, who will soon be playing for American audiences, is one of the brightest stars in the galaxy of Soviet pianists. His career is an unusually interesting one.

He studied with Konstantin Igumnov, who died in 1948 and who was considered one of the two really great teachers of the piano at the Moscow Conservatory, the other being Genrich Neugaus. Neugaus gave the world the brilliant Emil Gilels and Svyatoslav Rikhter, and Igumnov—such gifted teachers and pianists as Lev Oborin, Maria Grinberg and Yakov Fliere.

Their American tours won Gilels and Rikhter the high regard of both the critics and the audiences. We have every reason to assume that Fliere's brilliant talent will give American music lovers no less pleasure.

Both Igumnov and Neugaus had the inspired teacher's ability of developing a student's talent while still preserving its special quality. Konstantin Igumnov himself was a genuine poet of the piano who made the instrument sing. This gift he passed on to his pupils, and Yakov Fliere is no exception.

Fliere spent his childhood years in the town of Orekhovo-Zuyevo, textile center of Moscow Region. He was the youngest son of a watchmaker, who paid little attention to the boys' musical leanings. During a family visit he heard his cousin, a student at the Moscow Conservatory, play a Haydn sonata. The music impressed him so that he was able to repeat the whole sonata by heart. It was then that his parents sent him to the Orekhovo-

SOVIET PIANIST

Zuyevo Music School. After two years there, he was accepted in a class of gifted children organized by the Moscow Conservatory on the initiative of the venerable Professor Alexander Goldenweiser.

Fliere began studying with Sergei Kozlovsky, who taught him the fundamentals of piano technique and an appreciation of the painstaking work it requires. At the end of the first year Igumnov heard him, immediately discerned his talent and accepted him as a student. From his second year on, through his postgraduate studies, Fliere was the pupil of that eminent pianist and teacher.

It is hard to say what Igumnov emphasized in his teaching. His approach to each student was highly individualized, but to all of them he gave a deep love and wholehearted dedication to music. The "Igumnov school" was synonymous with artistry, the ability to give meaningful interpretation to the works of composers of different periods, nationalities and trends. To all that Yakov Fliere added his own fiery temperament and glowing virtuosity.

In the first period of his career he inclined toward a romantic style. Gradually, however, he acquired a taste for diverse kinds of music and learned to temper his gifts.

At 22, while doing graduate work at the Moscow Conservatory, he won first prize at the 1935 Leningrad national piano competition. The following year he received first prize at the international competition in Vienna, where he gave a striking rendition of Liszt's *Sonata in C Minor*. Emil Sauer, a pupil of Liszt and head of the jury, was impressed with the Soviet pianist's performance.

A prominent French critic wrote: "Liszt himself might have envied Fliere's rendition of the sonata."

Two years later he won the International Eugene Ysaye Piano Competition in Brussels and made a successful tour of Austria, Belgium and France. No other pianist was as popular in the Soviet Union at the time.

In August 1939 violinist David Oistrakh, cellist Daniil Shafran, and Fliere were preparing to leave for New York; on September 1, Hitler started the Second World War, and the American tour was cancelled.

During the war Fliere played for frontline units as well as at induction centers, hospitals, defense plants and concert halls. His music helped to cheer the people, gave them confidence in their strength and in ultimate victory. Art in those years did wonders to lift the heart, refuting Cicero's words that "when guns speak, the Muses are silent."

Especially memorable was Fliere's concert in besieged Leningrad during the winter blockade of 1942. To the accompaniment of fascist artillery, Fliere played Tchaikovsky's First Piano Concerto in the unheated concert hall. His audience sat bundled up in their heavy army coats, caps and felt boots, listening to the formally attired pianist surrounded by electric heaters. Fliere will never forget the eyes of his listeners that evening: cold and grim at the beginning of the concert, they grew soft and moist in the radiant warmth of Tchaikovsky's music.

He also remembers the postwar concerts he gave in ruined Budapest and Vienna. There were people in the audience who cried, recalling peacetime 1936 and Fliere's prize-winning performance at the Vienna competition.

In 1949 he was once again preparing to go abroad as an envoy of Soviet music when fate dealt him a tragic blow. At one concert he felt an acute pain in his right hand. With each successive performance it grew worse. Then one day he could not bend the third finger of the afflicted hand. Thus, at the very summit of his career, he had to give up playing. Courage, the sympathy of his friends, and his own devotion to music helped him to weather those bad times. He concentrated on teaching, which he had begun after finishing his graduate work. At first he was an assistant teacher, and then was given his own class. He was a fine teacher, and it was not long before he rose to the position of assistant professor and then professor.

Many of his pupils won prizes in competitions at home and abroad: Bela Davidovich, first prize at the Fourth Chopin Competition in Warsaw (1949); Lev Vlasenko, first prize at the Liszt Competition in Budapest and second prize at the first International Tchaikovsky Competition in Moscow (1958). Other prize winners were Nina Lelchuk, Irina Zaritskaya, Alisa Mischenko, Yuri Arapetyan, Valeri Kamyshev and Valeri Shatsky. Some of his former pupils were appointed to teaching jobs at various conservatories, including the one in Moscow.

Finally, Fliere decided to undergo surgery, which was done by the noted Professor Veniamin Rosov of Leningrad. The operation was a success. Fliere, gathering up the necessary courage and will power, began working toward a concert stage career again after a lapse of ten years. He knew it would not be easy; he had to regain his technique and mastery.

Few have subjected themselves to so hard a test, and Fliere passed it with flying colors. He returned to the Grand Hall of the Moscow Conservatory for his second debut in October 1959 and received a heart-warming reception. Those who remembered his earlier playing seemed to prefer the new Fliere—mellowed by time and emotional maturity.

In the past four years he has played in all the larger cities of the Soviet Union and toured Czechoslovakia, the German Democratic Republic, Rumania, Japan, Great Britain and Israel. On October 10 he will open his American tour in New York, playing with the New York Philharmonic Symphony Orchestra under the baton of Leonard Bernstein. His programs will include, Bach, Mozart, Brahms, Schumann, Liszt, Chopin, Ravel, Debussy, Tchaikovsky, Moussorgsky, Rachmaninov, Prokofiev, Kabalevsky and Khachaturyan.

To his future American audiences, People's Artist of the Russian Federation Fliere says:

"I know what music can do, coming from the heart of one people to that of another; it can do much more for mutual understanding than we might expect. My concerts in the United States, originally scheduled for that long-past prewar year of 1939, are being given almost 25 years later. I hope they help cement the foundation of our friendship. I look forward to seeing you soon!"

The Soviet pianist Yakov Fliere will play his first concert for American audiences on October 10 with the New York Philharmonic Symphony Orchestra, Leonard Bernstein conducting. After his New York appearance he will tour the United States, giving concerts in the following cities:

New York City	*October 10-13*
Waverly, Iowa	*October 20*
Chicago, Illinois	*October 27*
Jacksonville, Illinois	*October 29*
New York City	*November 6*
Lewisburg, Pennsylvania	*November 8*
Washington, D. C.	*November 9*

WORLD OF ART

BY DMITRI SARABYANOV
ART HISTORIAN

IT WAS IN 1898 that the World of Art society of painters *(Mir Iskusstva)* was founded. It prospered—with on and off periods—till 1924, published a magazine of the same name, and had a large following. Its founders were Alexander Benois, Konstantin Somov, Leon Bakst, Mstislav Dobuzhinsky, Boris Kustodiyev, Yevgeni Lansseré, Anna Ostroumova-Lebedeva, Alexander Golovin and Nikolai Roerich. Almost all the Russian painters of the period were associated with it in one way or another. The eminent Valentin Serov was a member, and Mikhail Vrubel exhibited his last paintings in its galleries. From time to time the society also exhibited works by nonmembers such as Isaac Levitan, Andrei Ryabushkin, Mikhail Nesterov, Konstantin Korovin, Igor Grabar, Kozma Petrov-Vodkin, Pyotr Konchalovsky, Martiros Saryan and Pavel Kuznetsov.

The activities of the World of Art painters were both complex and contradictory. Tending to avoid disturbing aspects of their contemporary period, they sought tranquility in a world of their own—it was they who originated the slogan "art for art's sake." Their work, always of high quality, sometimes smacked of cultivated estheticism. Nevertheless, closer study of their work reveals that a number of these painters did venture beyond the confines of their ivory tower. Many of them, finding it uncomfortable to remain indifferent to the political struggle, angrily attacked czarist reaction in drawings and cartoons.

The society concerned itself with important problems of esthetics and was instrumental in raising the general level of craftsmanship, all the time keeping in touch with the ferment and events of the rest of the European art world. Their efforts in a variety of art forms—stage design and book illustration, for example—enriched Russian art and culture, at the same time releasing it from the confines of the museum and breathing new life into it.

These artists, unusual in their erudition as well as culture, differed in talent, temperament and ideological outlook. But there were two who towered above the others, Mikhail Vrubel and Valentin Serov.

Vrubel's fantasies reflected, in a highly personal way, the prerevolutionary era of struggle, the hopes and premonitions of the time. They expressed man's yearning for happiness and beauty but were purely products of his imagination and did not reflect the life around him.

Valentin Serov, on the other hand, looked deeply below the surface; he had the talent and understanding for revealing the social roots, the reality of life. A pupil of Repin's, he was a portraitist in the main. However, his landscapes were outstanding, and he excelled in genre and historical painting as well as the graphic art of the black and white. All his life he worked to achieve a style modern enough for expressing the ideas of his time. He did not copy nature; he was always recreating it—exaggerating one thing, minimizing another. When he painted a portrait, it was a characterization sincere and illuminating; at the same time it synthesized the personality into a prototype.

His portrait of actress Maria Yermolova, done in 1905, is no mere representation but rather a symbol of creative will, artistic inspiration and social consciousness, a call to struggle for human freedom. It is the culmination of his many years of painting his fellow artists and writers. Creative man was for him the standard of genuine humanism. This is the social, and monumental, theme of *Yermolova*. Her nobility and faith in her ideal come through not only in the face and figure but even in the bold lines of the silhouette and the restrained use of color.

Serov retained his style even in the latter years of his life, when he worked on murals. That he went to antiquity for his themes shows his predilection for the monumental.

The historic paintings of Alexander Benois, the World of Arts' ideologist, are considerably smaller in size. They are distinguished for their refined brushwork and are wonderfully evocative of the atmosphere of the period he depicted.

Benois painted many scenes from the life of Louis XIV, the "Sun King," and was naturally also drawn to eighteenth century Russia. In his historical landscapes, which show his high regard for the formal beauty of Versailles and St. Petersburg, he included figures of men engaged in the most ordinary occupations. Though his paintings are somewhat theatrical, they do convey the unique qualities of the epoch—admirably so in his series of illustrations for Pushkin's *Bronze Horseman* and in his stage designs.

His sets have a remarkable affinity to the character of the stage production, its epoch and style. His décor for Stravinsky's *Petrushka* creates the impression of a gay festival, while his sets for Pushkin's *Feast During the Plague* reflect that play's intense drama.

Another stage designer of the World of Art group, Alexander Golovin, subordinated everything to pictorial effect, weaving decorative patterns of contrasting and blending tones, using color to convey the dynamics of the play's action and mood.

Many of the members of the World of Art were stage designers. Some were also book designers and illustrators, who worked for a unity of all the elements of a book—its story, its illustrations, its design. They tried to tell some of the story, to convey the spirit of the period, to dramatize the author's style in their designs and illustrations.

Yevgeni Lansseré was perhaps the most versatile of the group. His oils reveal a preference for historical paintings in which the past is represented in all its social contradictions. He was also a book designer, and in the early twenties he developed a decidedly personalized style that was classical and austere.

Mstislav Dobuzhinsky's illustrations, however, are more emotional. In his masterly drawings, done in 1922 for Dostoyevsky's *White Nights*, Dobuzhinsky appears to have steeped himself in the author's narrative style, creating a peerless complement to that great writer's prose.

Each World of Art member had a favorite theme. Anna Ostroumova-Lebedeva, the etcher, extolled the classical beauty of St. Petersburg. Nikolai Roerich used his imaginative brush to picture the distant past and the old Slavic tribes. Russian provincial life was the subject of Boris Kustodiyev's paintings and drawings.

Kustodiyev, in fact, stood somewhat apart from the others. He was far removed from the Western cultural influences; his interest was in the Russia of his time, its traditions, its national character. His paintings carry us into a world of village bazaars, tea drinking, Shrovetide festivities, of merchants' wives—painted and powdered, and decked out in all their finery—droshky drivers, provincial dandies, sailors and artisans. It is a world of colorful gaiety, picturesque and beautiful in its own way. Yet although, like the other members of the group, he never failed to include a bit of irony, he believed in Russia, her people and her future.

In the twenties and thirties Kustodiyev, Lansseré, Golovin and Ostroumova-Lebedeva were leading Soviet artists, justifying our conclusion that the World of Art played a highly progressive role in Russian art. ★

Demon *by Mikhail Vrubel*

King's Outing *by Alexander Benois*

Chaliapin as Holofernes
by Alexander Golovin

Portrait of Actress Maria Yermolova *by Valentin Serov*

Gugo Chahan *by Nikolai Roerich*

QUERIES FROM READERS

SOVIET TRADE UNIONS

In their letters to the editor the readers of *USSR* magazine ask how Soviet trade unions function.

QUESTION: What is the structural organization of the Soviet trade unions?

ANSWER: Each factory, office, hospital, school, etc., has its own union local. There are more than 450,000 in the country affiliated in 22 trade unions with a membership of 67 million.

Organization is on an industrial, not a craft, basis. All the employees of a given factory or office, regardless of their trade or whether they work on a machine or at a desk, belong to the same union. Nationally, each union takes in one or several allied branches of industry.

QUESTION: Are there such things as "closed" and "open" shops?

ANSWER: More than 95 per cent of all the country's wage workers belong to a trade union. The number of workers increases each year, and so does the trade union membership. Under these circumstances the idea of "closed" and "open" shops has no relevance.

At Soviet factories and offices about the only ones who are not union members are newcomers who haven't had time to join.

QUESTION: Who directs the union work in a particular factory?

ANSWER: The factory trade union committee. It is elected for a term of one year at a general membership meeting. At large enterprises union committees are also elected in each of the shops with stewards for each of the production sections.

On the national level each union has a Central Committee elected at the congress of the union for a two-year term. The USSR Central Council of Trade Unions directs the work and coordinates the activities of all the country's unions. It is elected by the national congress of trade unions for a four-year term. For more direct guidance of day-to-day work trade union councils are elected in republics, regions and large industrial centers.

All executive bodies, from the bottom up, as well as delegates to conferences and congresses are elected by secret ballot. Only shop stewards are elected by a show of hands. The Union Rules and Regulations require that the composition of each leading body must be renewed by approximately one half at the regular elections; officials, as a rule, may not be elected for more than two successive terms.

Each leading body is accountable to its membership. Leaders who fail to justify the trust of their electorate may be recalled at any time, no matter what post they hold.

QUESTION: What is the procedure at trade union meetings?

ANSWER: The Union Rules and Regulations require the trade union committees at factories and in offices to hold regular general membership meetings.

General meetings elect trade union committees, discuss and approve plans of work drawn up by the union committees, consider and vote on the collective agreements negotiated annually with management, and take up whatever current matters arise. The trade union committee announces in advance the time, place and agenda of the next meeting. This permits the general membership to prepare for and take an active part in the discussion.

The meeting is opened by the chairman of the trade union committee. Then, by a show of hands, it elects a presidium and an editing commission, whose function it will be to draw up the draft resolution. The meeting is chaired by a member of the presidium, and the minutes are taken by a secretary, who is also a member of the presidium. The chairman of the meeting reads the agenda drawn up by the trade union committee. Each member has the right to move amendments or addenda, which are adopted or rejected by a show of hands. The meeting also fixes the time limit for the main report and the discussion from the floor.

A quorum is two-thirds of the membership. All decisions are by simple majority. After a question has been discussed and voted upon, the decision of the majority is binding.

The decisions voted at the meeting form a program of action for the union local, and its leaders are obligated to carry it out and to report on progress at regular membership meetings. This guarantees rank-and-file check on the activities of the union leadership.

QUESTION: Are Soviet trade unions active in politics? What relationship is there between the unions and the Communist Party?

ANSWER: In many countries trade unions take an active part in politics and cooperate with political parties. In Great Britain, for example, the trade unions have close ties with the Labor Party, and, more than that, are collectively its members. In the United States, the AFL-CIO has its political action committees.

Soviet trade unions are also active in politics. Guided by the Communist Party, they mobilize their membership for the construction of communist society.

The Communist Party has won this leading role by reason of the more than half a century of struggle it carried on for the interests of working people. The Russian trade unions were set up at the time of the 1905-1907 Revolution. The Party had already been founded, and as the leader of the country's revolutionary movement it helped to organize the workers into trade unions. The Party thus gained the workers' confidence and widened its area of influence.

That is why from the very outset the Russian trade unions developed as revolutionary organizations. They fought not only for the economic interests of the working class but, together with the Party, bitterly opposed the czarist autocracy and the capitalist system and advocated democratic rights and freedoms. Demands for better working conditions were intertwined with political demands.

The victory of the 1917 Socialist Revolution radically changed the position of the working people and, consequently, the nature of their trade unions. While before the Revolution the unions were schools that taught class struggle, after the Revolution, when the people took over political and economic power, the trade unions became, to use Lenin's expression, schools of administration, schools of management, schools of communism. Now the trade unions perform this same function on an ever growing scale. They play a very active part in every sphere of the country's political, economic and cultural life.

In supporting the policy of the Communist Party and recognizing its guiding role, the trade unions do not surrender any of their own independence. The Party and the trade unions each have their specific jobs to do. What it amounts to is that both on a national and on a factory level the Party advises and helps the trade unions carry through their programs.

All trade union problems are settled by way of democratic discussion and majority vote. There are some eight non-Party people for every member of the Party in the trade unions. This means that the opinion of the Communists will be accepted only if the majority of the non-Party people share it.

QUESTION: Does the state influence the policies of the trade unions?

ANSWER: The Soviet Constitution guarantees each citizen the right to unite in trade unions, and it guarantees the unions unhampered freedom of operation. Soviet trade unions are vested with broad powers for the protection of the rights of working people. Any violation of a trade union's rights and powers or interference with its activities is punishable by law.

The prime function of the state in the Soviet Union is to safeguard the rights of the working people and translate them into law. This being the case, you can say that the trade unions dictate to the state, rather than the other way round. No law relating to working or living conditions is adopted without the participation of the trade unions. Furthermore, the practice is for the unions to draft and propose legislation reflecting the interests of the working people.

The Soviet trade unions are proud of the place they occupy in the country's life. They plan their work so that their part in carrying out the tasks facing the country and the people keeps growing. In the West this is not infrequently interpreted as evidence that the trade unions are being converted into state agencies and the supporting argument advanced that the Soviet trade unions have taken over many of the functions formerly carried out by state agencies.

True enough, more and more functions of various state bodies are being turned over to the Soviet trade unions. But this has nothing to do with converting the trade unions into instruments of the state. The fact is that the rights and powers of the trade unions in the Soviet Union are being constantly broadened so that they can more effectively forward the interests of the working people, on the one hand, and so that greater numbers of working people can be drawn into the management of the country's affairs, on the other. ★

NEKHAMA LIFSHITZ Sings

BY SOLOMON RABINOVICH

IN A *USSR* magazine article three years ago Nekhama Lifshitz was described as a gifted interpreter of Yiddish songs, showing great promise. She has more than lived up to expectations.

The singer lives in Vilnius, the Lithuanian capital. Asked at what age she began to sing, Nekhama answered: "I have been singing for as long as I can remember." It is from her father, a physician and a distinguished Jewish folklorist, that she gets her love for Jewish music.

After graduating from the Vilnius Conservatory, Nekhama began giving song recitals of classical music in the Russian language and was regarded as a singer with a bright future. But it was the music of her own people that she loved best. At her very first concerts of Yiddish songs she won loud acclaim with her moving renditions.

The great Russian critic Belinsky said that an artist is someone who can visualize ideas; for Nekhama's audiences her songs weave living images. An accomplished and sensitive vocalist, she reaches the hearts of her listeners.

Her rich voice does justice to everything in her repertory—classical music, folk melodies, the music of Soviet songwriters. She uses mimicry most effectively to create the characters and story of her songs, her every gesture full of mood and meaning.

I have heard many artists sing "Es Brent," a well-known song about fascist atrocities by Mordecai Gebirtik—but not as she does! Her rendition brands every word on your heart. You almost feel impelled to cry aloud: "No! That must never happen again! We must not let it happen!"

Nekhama's programs are wide-ranging and include dramatic and sentimental songs, gay and sad ones. She used to sing mostly old Yiddish folk songs; now she emphasizes those by contemporary Jewish poets and composers. These new additions invariably evoke a warm response from her audiences.

The ballad "Gei, Antosha!" for example, which the singer introduced to Soviet audiences, is a big hit. Written by Moisei Kulbak, a leading Yiddish poet of the twenties, the music is by Vitautas Barkauskas, a young Lithuanian. Nekhama explains that she likes to sing this ballad because its characters come straight from the people and epitomize their folk wisdom, humor and optimism. The composer has developed a marked interest in Jewish music and has since written several songs for her.

Recently she worked up a new program for Moscow audiences. Their response was a much merited tribute to her talent and artistic maturity. The first part includes such contemporary songs as "Poem Without Words" by Yakov Rosenfeld; "Jewish Lullaby," music by Riva Boyarskaya, words by Evsei Driz; Peretz Markish's "Wind of the Road," with music by Grigori Brook; Samuel Galkin's "Merry Song"; "Song," words by Joseph Lerner and music by Mark Polyansky; and Lev Kvitko's "Mother Rocks Me." The second part of the program is composed entirely of old Yiddish folk songs.

Naturally, Nekhama Lifshitz is very popular with Jewish audiences throughout the country. In addition to her appearances in Moscow, Leningrad, she has sung in the Ukraine, Byelorussia, Moldavia, Latvia, the Urals, Siberia and Uzbekistan. Last year she gave a total of 85 concerts, which were attended by 60,000 persons.

The singer is an attractive, slender, animated woman, very much interested in her work and full of plans for future programs. Tikhon Khrennikov, the well-known composer and People's Artist of the USSR, is setting Peretz Markish's poem "The Toast" to music especially for her. Vilnius composer Feigina is writing music to words by Mark Razumny. Nekhama Lifshitz is now working on several songs appearing in a collection of Yiddish songs by Beregovsky published in Moscow.

When Nekhama was singing in Leningrad some time ago a group of Jewish students called at her hotel. To the accompaniment of a guitar they sang a number of humorous ditties they had composed on outer space. The singer liked the songs and is arranging them for her new program. ★

Ikhil Shraibman has been writing short stories in Yiddish during all 25 years of his literary career. He was born 50 years ago in a small Bessarabian village. The characters of his lyrical stories, often distinguished by a gentle humor, are people he has met, talked with, and made his friends. They are engineers, doctors, chauffeurs, collective farmers and housewives.

Their biographies are essentially his, their lives closely bound with their native country, its growth, its achievements and problems. Shraibman shows how Soviet living has nurtured new thoughts and new dreams.

He is interested only in the good in people—actual and potential. He does not collect examples of human stupidity. He does not try to astonish the reader in any way. On the contrary, he himself is often astonished at the beauty of life, at the nobility of the human soul.

There are writers who try to embrace nature in all its grandeur. Shraibman sees the little things: the first blades of grass making their way through the earth, a child caressing them as living beings. There is an old saying that you can taste the whole sea in one drop. Shraibman gives us that drop.

Soviet publishing houses have issued three of Shraibman's books in Yiddish, four in Russian, and four in the Moldavian language in editions of from 15,000 to 30,000 copies each. His stories have been translated into Armenian, Azerbaijan and Chuvash. A new collection, All The Days of the Week, *was published this year in a 15,000-copy edition. Every week has its ordinary days and its holidays, and every new day brings us something unique, says the author.*

"The Town Bosses" is from this collection.

THE LYRICISM AND HUMOR
OF IKHIL SHRAIBMAN

The Town Bosses

BY IKHIL SHRAIBMAN

ON SUNDAY, after dinner, this couple always went out for a walk. Both were well on in years. He was known to everybody as Lev Isakovich, and she to at least half the town as Esfir Yakovlevna. They had other names for each other, however—especially when they were in a good mood. She called him Laibel and he called her Estherke, exactly as they had done when they were young.

He was employed at a bank. Every day, year after year, he would wet his fingers as he counted the bank notes, clicking the counters of the abacus back and forth, and sitting hunched over his papers. When his figures went wrong, he would push his spectacles back on his forehead, put his head through his small teller's window, and turn his tired eyes absently toward the young girls bustling about in the hall. Clearing his throat once or twice, he would cough; one might have thought he was going to shout at them, reprimand them. Instead, he would always plead with them in an unexpectedly gentle manner.

"Girls! . . . Please! . . . Can't you be a little quieter? . . . Today's pay day! You'll have to pay out the money!"

As for her, she had been wearing an oilcloth apron over her white smock for more than 20 years now, sometimes for a whole 24 hours at a stretch. In the maternity hospital where she worked she always wore a protective gauze mask.

She would relieve the pain of expectant mothers with the Pavlov method, but also by telling them stories, joking, and by simply looking cheerful.

She would hoist the tiny bundles for the benefit of the fathers behind the visitors' window. As the newborn infant licked its lips with its tiny tongue, she would hold it up for Papa to see and loudly proclaim through the double window that the creature was his "spitting" image. When Papa, beaming outside but unable to hear her, would cup his ear, rising on his toes to get closer to the window, she would put her finger on the rudimentary nose of the infant and then stab at Papa's nose through the glass, grinning all the while.

"Can't you see? It's your nose! Exactly the same!"

On Sundays Lev Isakovich would get into his old pants and go into the yard to shake out the carpets. Soon thereafter Esfir Yakovlevna would return from the market. The kettle on the gas stove in their little kitchen hissed away all morning.

While she was slicing a cabbage, he sat behind her reading aloud from the newspaper. While he wiped the dust from the books, she wiped the glassware on the buffet. Both were forever putting on and taking off their eyeglasses. It was not easy to keep talking while their hands were busy. They stared at each other through their glasses to drive home this or that point, their eyes sometimes flashing, as though—God forbid! —they were having a quarrel.

The house was still topsy-turvy, the pillows still being aired on the window sill, and the broom leaning expectantly over a pile of dust. What if somebody came in? They would die of shame! Both got down on their hands and knees with sopping brushes to scrub the floor, but just then something, alas, had run over on the gas stove. That is why she had to jump up and throw the window wide open. She was always making something on that stove. Pretty soon he was laying the carpets, grunting gently because his joints creaked a little when he bent over and again when he straightened up. The house was clean at last, and would stay so for several days perhaps.

The little kitchen was a delight to see. Esfir Yakovlevna was setting the table now, while Lev Isakovich sat, freshly shaven and in a clean shirt, tapping a bottle with his fingers in time to music over the radio. Esfir was proudly regarding her starched tablecloth—it was a joy to see—almost inhaling cleanliness and comfort from every corner of the room.

She sat down too, reached for a fork, and allowed herself to muse for an instant: How nice it would have been to have had a daughter sitting at the table, a son over there, perhaps even a daughter-in-law and a grandchild beside him! But things hadn't turned out that way. When they were young, they had been reluctant about tying themselves down with children. When the war came, he went into the army and she was evacuated. After the war, first one child died and then another. And then it was too late.

How she would have liked to talk about it! It would be quite a relief. But Laibel would not tolerate such words as "loneliness" and "old age" in the house. By the way he was sitting there and humming one tune while the radio played another, she could tell that he had the same thoughts, and there was no point in disturbing an old wound.

Dinner over, they set out for a walk. They came out on the avenue through the dusty alleys that would soon be making way for a new street.

The rows of saplings on both sides and in the middle of the boulevard seemed to have sprung up overnight. A breeze was rustling through their sun-speckled leaves as they turned from golden yellow to dark green and then suddenly into silvery scales.

The boulevard was crowded and there was a hubbub of voices. People sat on the benches overhung with vines; baby carriages stood around the flower beds. Esfir Yakovlevna was holding Lev Isakovich's hand. She was glad for the sun, glad that he was calling her Estherke again. Then she moved away, for only a moment, to speak to some acquaintances, while he strolled slowly on, hands behind his back, examining the new houses.

He liked to stop on the steps of the monument

a little further on and look back over the whole avenue, viewing it from this slight elevation. How strange that he never tired of doing the same thing! But that was just what she liked about him; and she squeezed his arm as if in response to the words he was about to repeat for perhaps the hundredth time.

"Lovely street. . . . Isn't it, Estherke?"

They walked on a stretch of new sidewalk. It was still wet and a little soft. Lev Isakovich tried to step gently, as though fearful of marking it. But then his step grew firm, as though he were testing its strength.

"It's a good sidewalk," he granted.

How many times he had pointed to the wooden fence with the two tower cranes looming behind it: "See? That's where they're building the wide-screen movie. . . . It's going to be a fine place, believe me!"

"The town is growing," she agreed.

"Those little painted balconies aren't bad, are they? And look, there goes a new trolleybus!"

He kept pointing everything out, as if she couldn't see these things for herself. But she pressed closer to him, found his hand in his pocket and wove her fingers through his.

"My dear town boss!" she jested affectionately.

Much the same thing happened further on, though a little differently.

Near one of the new houses they gingerly walked across a board placed over a freshly dug ditch. Broken bits of asphalt were strewn about, the pebbles in them showing. Lev Isakovich, of course, clicked his tongue.

"Couldn't they figure things out before they started? They've just fixed this street, and now they're tearing it up again. The foreman ought to be raked over the coals! What kind of work is this?" Esfir Yakovlevna held his arm as always. She felt like telling him that he was getting worked up over nothing. What did it matter to him, after all? But she kept quiet and patted his hand instead. In a way, she was glad he could be stirred by the doings of others. That was just like him!

She pressed closer to him, almost hanging on his arm, and taunted coquettishly:

"Town boss!"

Someone called to Esfir Yakovlevna just then, and she left Lev Isakovich for a moment. He was used to that and was not surprised when he saw his wife stop in the middle of the street to hug and kiss two women he had never met.

He seemed to remember the older of the two, she sometimes used to nod to him from afar. The other was very young, a rosy-cheeked girl in a broad shawl, right now looking as shy and confused as a schoolgirl. He couldn't hear a word they were saying, but he knew their conversation by heart nonetheless. The older woman was probably the mother, and the younger one her daughter. Or rather: the older one was a grandmother, and the younger the mother. Now the older one was about to give Estherke a photograph of her grandchild. . . . And Estherke would tell them both at least 20 times that the child should be kept out in the fresh air as much as possible. She always said the same thing: "In the fresh air as much as possible!"

Estherke said good-by and waved to them as she joined her husband, shouting once more: "In the fresh air as much as possible!" As he expected, she came back holding a photograph. He laughed until his sides shook.

"What's the matter with you?" she asked, taking his arm. "Take a look at this picture. It seems like only yesterday that young girl was a tiny tot. They told her that they had 'bought' her from me. It won't be long before *she* comes to me as a customer! How time flies. . . . Here, put it in your pocket."

But Lev Isakovich kept on laughing, unable to catch his breath. Holding on to the little photo, he kept laughing and coughing, waving it at Esfir Yakovlevna:

"The sixth album! She's begun her sixth album! . . . Half the town 'bought' their children from her, and she calls *me* the town boss!"

Esfir Yakovlevna grew a little concerned about him. "Stop laughing, will you!" But then she began to laugh herself.

Passers-by stopped to stare: these two were both gray and wrinkled, but there they were, arm in arm, laughing like any giddy young couple! ★

BASIS AND S

A MODERN BUILDING must have a foundation for its tall, heavy, often complex superstructure to rest upon.

Human society has a certain resemblance to a building. It, too, must have a "foundation," or, as Marxists put it, a basis—the economic relations which necessarily evolve between people in the process of producing material values.

Thus, the term "basis of society" refers to the relations of production between people, the economic structure of their society. This structure or basis makes it possible for us to determine who owns the means of production (the raw materials and implements of labor)—society as a whole or a particular group of people, what relationship (cooperation or domination) exists between the people in this society, how the material values are shared.

It is this basis also that determines the society's superstructure—the sum total of its ideas, theories, attitudes and its related ideological (political, legal, moral, cultural, religious and other) institutions and organizations.

Marxists think of the history of human society as a process of development and consecutive replacement of five socioeconomic orders: primitive-communal, slave, feudal, capitalist and socialist. Each of these societies had its particular economic structure, its basis or "foundation" upon which it built a corresponding superstructure.

Let us take primitive communal society—"the childhood of the human race," Engels called it in his book *The Origin of the Family, Private Property and the State.* With his primitive tools and weapons (club, stone, spear, bow) early man could not cope with a rigorous nature if he lived alone. Joint hunting, fishing, building of shelters, etc., made for cooperation of a kind and even a certain division of labor—that between men and women. Everything such communities gathered was distributed equally among its members.

So we see that it was communal (social) property upon which the production relations (basis) of primitive society were founded. There was no exploitation of man by man in that society and, consequently, its superstructure—its system of attitudes, theories and institutions—could do without instruments of compulsion, that is to say, without a state.

With the appearance of metal tools and weapons and a division of labor which led to the exchange of agricultural, livestock and handicraft products, some members of society, generally the tribal chieftains, began to acquire private property. Classes emerged—the rich and the poor, the slaveowners and the slaves—and an entirely new type of society developed. Thus, the primitive-communal society with common ownership of property was replaced by a slave society with private property. The new relations of production, or basis, as we call it, gave birth to new ideas and institutions, to a superstructure suited to these new relations. Notice that this superstructure safeguarded the slaveowners' rule over their slaves. That was not simply coincidence. The slaveowners—the wealthy class in that society—owned the means of production, and, as Marx put it, the class that is the dominating economic force of a society is also its dominating ideological force.

Similarly, the basis and superstructure were replaced when society moved from the slave to the feudal system and from the feudal to the capitalist system. In spite of the enormous difference between these three socioeconomic orders as regards the level of development of their productive forces, their production relations were all based on private property and reflected the opposition of class interests, the antagonism between the oppressed and the oppressors.

It could not have been otherwise. Not when the life of the propertied classes—the slaveowners, feudal lords and capitalists—was as different from the life of the classes that had been deprived of the ownership of the means of production—the slaves, serf-peasants and workers—whose labor had created all of the society's material values, as heaven is from earth. And naturally, there was a corresponding difference in their class views on life, on society and the state, on the rights and duties of man, on good and bad, justice, honor, etc.

Thus the antagonism in a society's production relations is always reflected in its superstructure, in other words, the superstructure always conforms to the basis.

Interaction of Basis and Superstructure

Economic relations are important not only because they determine the development of the ideas and institutions of society but because changes in these relations produce corresponding changes in the social superstructure. The development of society and the changes it undergoes are a continuous process. But the changes in the superstructure run especially deep when

A SUPERSTRUCTURE OF SOCIETY

BY VICTOR AFANASYEV

one type of production relations is replaced by another through social revolutions. Marx called social revolutions the "locomotives of history," and Lenin designated them "holidays of the oppressed and exploited."

In the course of revolutionary changes, the political domination of the old class is ended and the rule of a new class established. The old state machinery is replaced by a new system of political and legal institutions. People's thinking changes then much faster than it usually does—old ideas and views are discarded for new ones that conform to the new economic relations. Lenin wrote that in a revolutionary epoch the "old" superstructure explodes and a new one is created by the self-activity of various social forces.

However, while Marxism maintains that all superstructures depend on the economic "foundation," it does recognize that they have a certain independence.

This independence is manifest in the continuity of many ideas and conceptions even after the old basis is replaced by a new one. However, the old superstructure, as an entity, as a system of ideas and institutions, ceases to exist when its basis is destroyed.

Only those elements of the old superstructure that conform to and serve the interests of the new ruling class are carried over to the superstructure of the new society. For instance, every newly formed society in which the means of production remain private property holds on to the ideas, concepts and the relevant political and legal institutions that preserve the exploitation of man by man. The superstructure of a society may also retain certain elements which time cannot destroy—great works of art and literature, for example.

The relative independence of the superstructure is also evident in the fact that, having originated from a given economic foundation, the superstructure actively influences the development of that economic basis. The ideas, theories and attitudes, reflecting the changes that are continuously taking place in the basis, shape the activities of people and thus influence the direction in which society moves.

Take for illustration as significant an event in the history of mankind as the Great October 1917 Socialist Revolution. Was it the result simply of a certain level of development of Russia's productive forces? No, of course not. The Revolution would never have triumphed if Russia's working class had not accumulated the political experience it did, had not gone through the hard school of revolutionary struggle, and had not made the poorest peasantry its ally. Neither can we imagine the victory of this Revolution without the Communist Party—its leader and militant general staff.

Of course, in the final analysis the Great October Revolution was the expression of economic necessity, but this necessity manifested itself both in the political struggle of the opposing classes and in the activities of the Communist Party, which had been waging uncompromising war against the Russian bourgeoisie and all varieties of opportunists. In short, the development of society is the interaction of economics with politics, ideology, and every other aspect of social life. However, it is the economic basis which is fundamental here and which sets the pattern for the development of society.

How Is the Structure of Socialism Built?

The socialist mode of production is based on public property. It could not then have existed under capitalism, where private property is sovereign.

The experience of the Soviet Union and of other socialist countries has demonstrated the political rule of the working class to be an indispensable condition for creating a socialist society. Once it controls all the basic means of production, the proletarian state organizes the planned construction of a socialist economy in town and countryside. We see then that the new basis does not arise spontaneously, but is steadily built to a plan drafted by the socialist state.

With the victory of socialism and the establishment of a socialist basis, the process of forming a socialist superstructure is completed. It should be noted, however, that some of the elements of the socialist superstructure (unlike the basis) can already be seen under capitalism. Indeed, Marxist-Leninist theory, the party of the working class, the Soviets of Workers' Deputies, trade unions, proletarian ethics, progressive literature and art came into being when the capitalist basis was still dominant in Russia. These superstructural phenomena developed, of course, not in response to, but in spite of the wish of the ruling classes. The very existence of these elements of a socialist superstructure demonstrated the profound contradictions of the capitalist production relations in Russia.

After the Great October Socialist Revolution, these elements, together with the achievements of world science, culture and philosophy of all the foregoing social epochs, were incorporated into the superstructure of the socialist society.

Let us now trace the origin and development of the superstructure of Soviet society. The basic means of production were nationalized in the very first months of Soviet power, and a proletarian state was founded at the same time.

The Council of People's Commissars—the first Soviet Government—headed by Lenin, the leader of the revolution, was formed in the first hours of the Revolution (October 26, 1917). A month and a half later an All-Russian Extraordinary Commission for Fighting Counterrevolution and Sabotage was founded. On January 15, 1918, a decree setting up the Workers' and Peasants' Red Army was signed, and a month later the decree forming a Red Navy. New organs of people's rule—Soviets of Workers' and Peasants' Deputies, which had their origin in the First Russian Revolution of 1905—were set up throughout the country. In the thirties came the peaceful transition from individual farming to the socialist collective-farm system.

The formation of a comprehensive system of socialist ideas and institutions took several decades. The completion of this system of political, legal, esthetic, ethical, scientific and philosophic concepts and its relevant institutions—the socialist state, the Communist Party, trade unions, Young Communist League, cultural, educational, sports and other organizations—marks the victory of socialism.

Communism and Self-government

How will the socialist superstructure evolve as Soviet society continues to develop? As the USSR progresses toward communism—a classless social order—the superstructure of ideas and institutions will gradually lose its class character and assume a nationwide character.

Take the Soviet state as an example. It originated as a state of the working class, as a dictatorship of the proletariat. Its mission accomplished—the building of socialism—the working class has reorganized its state of proletarian dictatorship into the state of the whole people, of workers, peasants and intellectuals.

The further evolution of the people's state in the USSR presumes a continuous expansion of democracy, the involvement of ever greater numbers of working people in managing society.

As time goes on, state administrative bodies will gradually lose their political character. The Soviets of Working People's Deputies, merged with mass public organizations, will become self-government bodies through which all the members of society, without exception, will take turns managing the country's economic and cultural life. Relations between people will be regulated not by legislation but by ethical standards and the force of public opinion.

To that end, as the country's economy has grown, we have radically reorganized the management of industry and construction, have set up a system of economic councils, have repatterned the management of collective farms, have brought the Soviets of Working People's Deputies, the trade unions and other public organizations in closer contact with industrial and farm production.

Soviet people and the public organizations that unite them have been increasingly active in solving major state and community problems. Tens of millions of people help to administer state bodies. The Soviets, trade unions, Communist youth organizations, cooperative and other public organizations play an ever larger role in government.

Some of the functions previously exercised by state agencies are now carried out by public bodies. The trade unions, for instance, handle all social insurance matters, supervise the health resorts and rest homes, and are in charge of physical culture and sports. People's public order squads, comrades' courts and public control committees help the militia, the courts and the procurator's office to enforce the law.

In the very near future places of entertainment, libraries, clubs and other cultural establishments are to be administered by public organizations.

Further changes in the superstructure will be taking place as the material and technical basis of communism is built up, as socialist production relations are transformed into communist production relations, and as the people's communist consciousness is further developed. We see then that the transition from socialism to communism does not require the elimination of the socialist basis and superstructure, but the development of both to a higher level. This is what Marx predicted 120 years ago when he wrote that under communism "social evolutions will no longer be political revolutions."

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SEVENTY DAYS OF ONE YEAR

This actually happened to a junior investigator working in a Moscow research institute on the effects of radiation on polymers. Tatyana Korneyeva was subjected to a dose of radiation considered fatal. What followed is told in this article. Tatyana is a pseudonym; she and the others involved asked that their real names be withheld.

BY VALERI GORDEYEV

TANYA walked into the laboratory. Nothing had changed in the few minutes she had been gone. The instruments, tables and chairs were all in their usual places, and technicians Nadya and Misha were still talking to each other in low tones.

Tanya went to her desk, stood looking down at it for a moment, then turned slowly around to face the other two.

"I'm afraid I've had an overdose of radiation."

She said it calmly, her voice slightly hollow. And she smiled in her usual way, with just a shade of uncertainty.

Nothing had changed yet. She heard the sound of her own voice, but it seemed to belong to someone else. She was still Tatyana Korneyeva, the young and "promising" physicist, as they called her at the institute. But she was no longer the same Tatyana.

She looked at Nadya and Misha. Nadya's eyes had frozen in an expression of undisguised horror. Misha's face had become ashen.

Tanya sat down at her desk and began to write. The sheet in front of her was soon filled with neat columns of figures. Those were the results. Yes, and this was the end.

Misha rushed out of the room.

"He's gone for the Labor Protection Officer," thought Tanya. "What's the use—now?"

She had to tell Yekaterina Andreyevna. But how could she look the famous physicist in the face? It was her own fault. She had no business forgetting where she was. . . . Now they'd start investigating and cause Yekaterina Lavrentyeva no end of trouble.

Still, Tanya had to tell her. Right away, while she was still able to.

The door opened and engineer Kulikovsky strode into the room. Misha's face loomed gray behind him.

"How much?"

She handed the engineer the sheet of figures. He glanced at it and rushed her out of the room.

"Hurry up, hop into the car, quick!"

"But I've got to let Lavrentyeva know . . ." Tanya tried to tell him.

"Afterward, afterward," Kulikovsky snapped.

They drove at top speed. When the car stopped at a traffic signal, Kulikovsky swore under his breath and darted a worried look at Tanya.

She sat with her head against the back of the seat, and stared indifferently at the city sweeping by. She looked as though she were dozing. But she wasn't. She was thinking hard.

All this would go on. The people crowding at the street corners. The houses. The snow. But she'd be gone. In a month or two the trees would bud. But she'd be gone.

. . . Her blood would undergo a sharp change, the number of leucocytes would drop from five or eight thousand to a tenth that number, and the red corpuscles would die. With her immunity system broken down she would probably get blood poisoning.

The walls of the blood vessels would become fragile and brittle and let the blood seep through. That would mean a hemorrhage.

The cells of the marrow would decompose, and it would stop producing blood.

Her hair would fall out.

Her burns would not heal.

She would have splitting headaches.

Lose her memory.

Lose her eyesight.

Grow apathetic.

And die inch by inch.

Tanya had read about all that, never imagining that it could happen to her, that she was fated to go through all those stages of hell. . . .

The car pulled up at the entrance to an old building. It was where Dr. Irina Melnikova—her neighbor Ira—worked. That very morning they had discussed a new film, the weather, spring. Now they would meet as doctor and patient.

Dr. Melnikova almost ran to the reception room when she was told that a patient suffering from an acute case of radiation sickness had been brought in. She stared at Tanya lying on the cot.

"What are you doing here?"

The tense silence gave her the answer.

The most experienced physicians from the radiology department looked after Tanya. Assistant Director Viknrova and Dr. Lavrentyeva arrived from the institute.

Radiation sickness—that sword of Damocles hanging over humanity. . . . So much, and yet so little, was known about it. Each new case was a problem with an infinite number of unknowns. Each new case was a human being at the brink of death—where Tanya was now.

She did not have a latent period. The disease set in in its acute form from the very outset.

Her blood signaled the danger first. The number of leucocytes fell at a catastrophic rate. The analyses dispassionately registered 1,500 units per cubic millimeter, then 1,200, 800, 600. . . .

The doctors held consultation after consultation. The best physicians and the most celebrated scientists were called in. Back in their offices they would relax and wipe the tortured smiles from their faces and call things by their right names: "A lethal dose." "Advanced leukemia."

There was little hope of saving her. That was the opinion of Nikolai Korobkov, Corresponding Member of the Academy of Medical Sciences, who supervised Tanya's treatment. It was also the opinion of Professor Pyotr Minayev, his assistant, and of internist Nina Petrova and of hematologist Inna Fetisova. But they still went on searching.

After one of the many consultations it was decided to do a transplantation. Not in three weeks, as in the case of the Yugoslav physicists in Paris, but much earlier. Not intravenously either, but on the breastbone.

"Will transplantation help? It's very risky."

"It is. But what else can we do?"

"What about the donors? Can we find the right people at such short notice?"

"We'll call the institute. They asked us to let them know at once if they could do anything."

That the doctors had their doubts was not surprising. There was very little information on the effects of transplanting a donor's marrow to the bone of a patient suffering from acute radiation sickness. Experiments showed that the

Seventy days of one year

method was worth looking into, but they were only experiments after all. Few operations had been done in the field, and the doctors had little or no experience with it.

Nevertheless, they decided to take the chance. Tanya's marrow could no longer cope with its job of making blood. It had to be assisted.

What made things worse was the fact that hers was a rare blood group, it had no Rhesus factor. She was one of the 15 per cent of mankind referred to as Rh negative. Her donors, therefore, not only had to be in the same blood group but had to have the same Rh factor.

As many as 1,500 people volunteered—scientists, engineers, Moscow University students, relatives of Tanya's institute colleagues, her friends, friends of people she knew, and friends of people she did not know. Three donor stations had to be opened in addition to the one at the institute to handle the large numbers of people who wanted to help.

The operation was set for Monday, but Tanya's condition suddenly took a turn for the worse Saturday night, and the doctors thought they might have to operate on Sunday.

The only donor they could get hold of right away was Vera Pronina, Tanya's girl friend at the institute.

Lavrentyeva called her up just as she was about to leave her house.

"Whatever you do, don't go away. We may need you tomorrow. Wait for our call, and keep your chin up."

Vera replaced the receiver, dropped her hands in her lap and stared at the window.

. . . What was the matter with her? Why did she feel so terrified after Lavrentyeva's call? She'd had all the analyses made on the very first day and was calm enough when they told her about the operation.

Should she refuse now? Nobody would damn her for it. But would she ever forgive herself?

She would not tell her mother the operation was due so soon. Why upset her too?

On Monday, Vera Pronina, Master of Science (Chemistry), was late to work for the first time. She walked into the laboratory ten minutes past the hour. Somebody tried to joke about her drawn face, but nobody laughed. Vera, who always smiled easily, paid no attention to the joker. Did he think waiting two days for a telephone call—that telephone call—was so funny? It wasn't a movie date she had been waiting for.

The operation had been postponed. Nobody knew till when. She went to the hospital to find out. They told her it was scheduled that same day.

"Sit on that stool, please." In the oversized pajamas she looked like a boy.

Everybody in the room was busy shifting instruments, scrubbing up, preparing bandages.

When Vera saw Dr. Samuel Grigoryan roll his sleeves up and pull cloth boots on in a matter-of-fact way, she suddenly broke down and began to sob like a baby.

"Now, now, take it easy. Korneyeva will be wheeled in at any moment; you don't want her to see you crying," one of the nurses said, patting her shoulder. Choking off a sob, Vera turned a smiling face to the door.

. . . Tanya lay on the wheeled stretcher staring fixedly at one point. Her head ached, her cheeks were hot and her eyes smarted. Her sight had weakened a great deal in the past few days.

"Here's your donor, Tanya," said a nurse.

Tanya turned herself with difficulty and saw Vera's smiling face.

"Is that you, Vera?" she murmured.

"It's me, all right," said Vera brightly. She smiled at Tanya.

. . . Vera lay on a white table and looked at the white ceiling. She no longer felt like crying. She felt sleepy. The needle startled her. . . .

She came to several hours later in a hospital room. Somebody was standing at her bedside smiling down at her.

"Well, how do you feel? Hungry?"

Vera nodded.

Then somebody else came up and asked her whether she wanted to eat. Vera nodded again, a little angrily this time. When a third doctor came up and asked the same question, she really got mad.

"What's the idea of asking me a hundred times whether I want to eat? I said I did, but nobody brings me anything!"

The doctors chuckled and placed a tray of food in front of her.

Vera and Tanya lay in the same room, opposite each other. Vera's cheeks had regained their color, and Tanya's face was not as feverish. Her eyes did not smart so much either. Both were excited and talkative. On their chests were identical patches of bandage.

"Oh, Vera, what an experience it was!" Tanya was saying. "You dropped off at once, but I saw everything. They gave me a local anesthetic because they said it was better for me. . . . Dr. Grigoryan stuck a big syringe into your breastbone and began to draw a liquid into it. Then he handed the syringe to Dr. Grebeshkov, and I got what was in it. They did that several times. You didn't stir once."

"I only know that I woke up ravenous, and they kept asking me whether I wanted to eat," rejoined Vera.

"They just wanted to find out whether you were nauseous after the anesthetic. How are things at the institute? Your experiment? Any good films playing? They say it's warm outside. Is spring really here at last?"

Vera went home the next day, to be attacked by the lab assistants. They came in a big group, with flowers, candy and lots of noise.

Vera's mother Sofya Arkadievna was almost intoxicated with happiness.

"Now, children, not so loud," she kept repeating. "My Vera's still very weak. . . ."

"She'll pick up in no time. Didn't you hear? The institute's sending her to a sanatorium."

"She'll get a neat sum of money besides. You'll be able to feed her on bird's milk from now on. . . ." somebody joked.

Vera raised her eyebrows. "Money? For this?"

"Why not? Donors are paid for their blood, and you've given the very marrow of your bone! Tanya's not paying you, silly. You're being paid by the state!"

"Oh, no!" Vera lifted her hands in protest. "I'm superstitious. If I take money, Tanya won't get well."

There was no arguing away that superstition of hers.

There were more jokes and laughter, and then somebody asked:

"Will she have to have any more operations?"

"I'm afraid so," Vera told them.

As soon as Alim Kaminsky and three other Moscow University seniors read the announcement, they left for the hospital at once. In the waiting room Alim turned the pages of his textbook, but he'd never been so indifferent to physics as he was at that moment.

His blood analyses showed that he had the same Rh factor as Korneyeva.

Dressed in hospital pajamas, Alim sat waiting. He had a book, but he didn't feel like reading and soon dozed off.

Alim paid Tanya a visit. He stood at the door of her room for a few moments to compose himself, knocked and went in.

"How do you do? I'm your donor."

They studied each other, concealing their mutual interest under the guise of commonplace phrases.

Alim was a stocky dark-haired young man with prominent cheekbones. Light, almost transparent eyes gazed out at Tanya from under thick broad eyebrows. He spoke in clipped sentences, without the least shyness, to the point. Tanya liked people like that.

"Don't be afraid, it won't be so bad," she said to bolster his courage.

"If I were afraid, I wouldn't have come here," he said simply.

Tanya said: "They cut my hair. . . . You know, I think I am much better now. I realized it when I began to hope that my hair wouldn't fall out. The doctors say it will grow back again and might even curl!" She caught her breath after this long speech.

They talked until the doctors came for Alim.

A few hours after the operation, he was sitting at Tanya's bedside again. Looking down at Tanya's pale face, he thought: "Poor kid, all these operations."

"Now you're my brother," said Tanya with a wan smile.

"Sure, sister," said Alim. "But you better rest now. I'll see you later."

The director of the research institute was notified daily of Tanya's condition. The doctors still did not hold out much hope for her.

In the first days of her illness, Tanya had not wanted to see or speak to anybody. She was irritated by noise, light, and people telling her she would get well.

"Don't tell me that. I'm not a child," she said angrily.

"What should we tell her to make her believe she has a chance?" Dr. Lukhovitsky, the head of the department whose patient Tanya was, kept asking himself. "You can't fool her—she's a physicist. Better talk about the unevenness of irradiation. It's really so, anyway. Some sections of the marrow have not been affected and the blood-making process might start again.

The confident voice and eyes of this very busy and tired man gave Tanya a glimmer of hope. What if he were really telling the truth?

Gradually her mood changed and she began to believe she would get well. And now she could not stand any expression of pity or doubt. Her head whirled at the very idea that she might one day get up, walk, lose herself in the crowds.

Meanwhile her condition, even after the transplantations, was very serious. She was the only one who did not know that.

"Perhaps we've slipped up somewhere?" Dr. Nikolai Bessonov worried, as he studied Tanya's case history. "She's had intravenous injections, antibiotics, transfusions of blood and plasma, injection of white and red corpuscle masses and blood substitutes, special diet, vitamins. No, it doesn't look as though we'd missed a thing. But we've got to do more. All this should have a positive reaction. It should. . . ."

The doctors visited Tanya at all hours. Dr. Bessonov talked to her about his little daughter Galka. Dr. Grebeshkov told her of his student days in old Kazan.

There was one other person fighting to keep Tanya alive, Dr. Anastasia Voronkova. She visited every morning, even though she had to cross the whole city to get to her institute afterward. Tanya was not her patient, but that did not matter in the least. She brought a smell of spring every time she sat down at Tanya's bedside. And Tanya was enormously grateful for the older woman's kindness.

On Sundays Dr. Voronkova came with Dr. Grebeshkov. Their after-dinner talks in the bright hospital room with its pots and vases of flowers were as important for the patient as medical treatment.

Tanya's friends brought her fruit and sweets. The people at the institute were delighted when Anya Levina told them that "Tanya said she enjoyed her glass of fruit juice today," or "She liked the pineapple a lot."

When Tanya tried to refuse these gifts, Dr. Voronkova shook her head reproachfully.

"You ought to eat a little of everything. It's good for you, and it will please your friends too. Don't try to stop them. You'll only hurt their feelings."

Time passed, and the third and most critical stage of the disease set in. The doctors expected burns to appear at any moment. To prepare Tanya for them, Dr. Grebeshkov kept asking her:

"Well, where are those burns anyway? Time they showed up!"

And Dr. Bessonov would add: "They are certainly taking their time coming. The sooner they come and go, the better."

On the twentieth day, Tanya's face, shoulders and wrists broke out in blisters. Days and nights of torment followed. She could hardly smother her groans—and she had been so amazingly stoical all the time! Her left hand hurt the most.

"Will we have to amputate?" Dr. Grebeshkov worried after examining the hand. "Now, when there's a glimmer of hope? Her blood's better, and her nervous system too. But that hand of hers is in a very bad way. . . ."

He paced his office, filled his ash tray with stubs.

He took care of Tanya himself, cutting away the peeling skin, bandaging the burns, trying to make her more comfortable. His gentle ministrations seemed to ease the pain.

Day followed day, and week followed week. Then Tanya began to show signs of recovery. The analyses told the doctors that. She let herself dream of the day she would be up and walking around.

But the doctors were in no hurry.

For 34 days they had given the same answer to the questions of Tanya's relatives and friends: "We are doing all we can. . . . We're hoping."

For 34 days Dr. Igor Grebeshkov had stayed at home after work to be sure he was on hand should Tanya get worse.

After those 34 days they would not risk letting her get up too soon.

But the long-awaited day finally came. Tall in her too short robe, her hair cropped short, and her skin pink and unscarred, she stood in the middle of her room, taking step after step. Her legs were shaky, but that was a trifle after being born again!

Tanya left the hospital on a lovely day in May. She was met by her mother, Zoya, Anya, Nadya and Misha—the very Nadya and Misha whom she had told "I'm afraid I've had an overdose of radiation."

Everybody wondered how she would weather the moment. There were no tears nor any speeches, and that made the meeting easier for them all.

Tanya was brimming over with questions, as though she hadn't seen her friends for years. They told her everything she wanted to know, and asked no questions. They didn't have to—she was there with them, and that was enough.

A few days later she left for a sanatorium in the suburbs of Moscow. Soon she was playing ping-pong and badminton, and walking in the woods.

Then, when she had become accustomed to her renewed contact with nature and life, she wanted her work again. The need for work was as strong as the pangs of hunger.

"Korneyeva's head over heels in work and has been getting fine results," says Yekaterina Lavrentyeva happily. "But that will make another story."

Courtesy of the magazine Smena

September 2, 1945. Japan signed the act of unconditional surrender. The Soviet Union made a considerable contribution toward ending the Second World War in the Far East. Loyal to the commitments it had undertaken at the Yalta Conference in 1945 and in the Potsdam Declaration of 1945, the Soviet Union joined the war in the Far East after the defeat of Nazi Germany.

In Manchuria, Soviet troops routed 22 divisions of the Kwantun Army, the main military force of fascist Japan. This hastened the surrender of Japan and the end of the war in the Far East. On September 8, 1951 a separate peace treaty was signed with Japan without the Soviet Union, although the Potsdam Agreement of 1945 had stated explicitly that such treaties were to be signed by all the Allied Powers.

September 8, 1917. On this date, the eve of the October Revolution, Lenin's work *The State and Revolution* was published.

What will the workers' state have to be like? "The state in this period," Lenin wrote, "will have to be democratic in a new way—for the proletarians and the propertyless classes in general, and dictatorial in a new way—against the bourgeoisie."

By September 1917 the revolutionary proletariat of Russia had evolved a new form of political power, the Soviets of Workers' and Peasants' Deputies. "Soviet power," Lenin declared, "is a road to socialism discovered by the working people, and therefore the correct, therefore the invincible, road."

But Lenin believed the dictatorship of the proletariat would be transitory, since it was a necessity engendered by the violent resistence of the overthrown classes and their allies. After the victory of socialism in the Soviet Union the working class transformed the state of the proletarian dictatorship into a state of all the people. Today tens of millions of people participate in running the country.

September 14, 1959. A second Soviet space rocket reached the lunar surface. This was the first space flight from the earth to another celestial body. The rocket delivered pennants to the moon bearing the Soviet emblem and the inscription "Union of Soviet Socialist Republics. September, 1959."

September 18, 1959. While on an official visit to the United States, **Chairman Khrushchev, on behalf of the Soviet Government, submitted to the Fourteenth Session of the UN General Assembly a Declaration on General and Complete Disarmament.** It contained proposals for complete disarmament within a four-year period, to be supervised by an international control body.

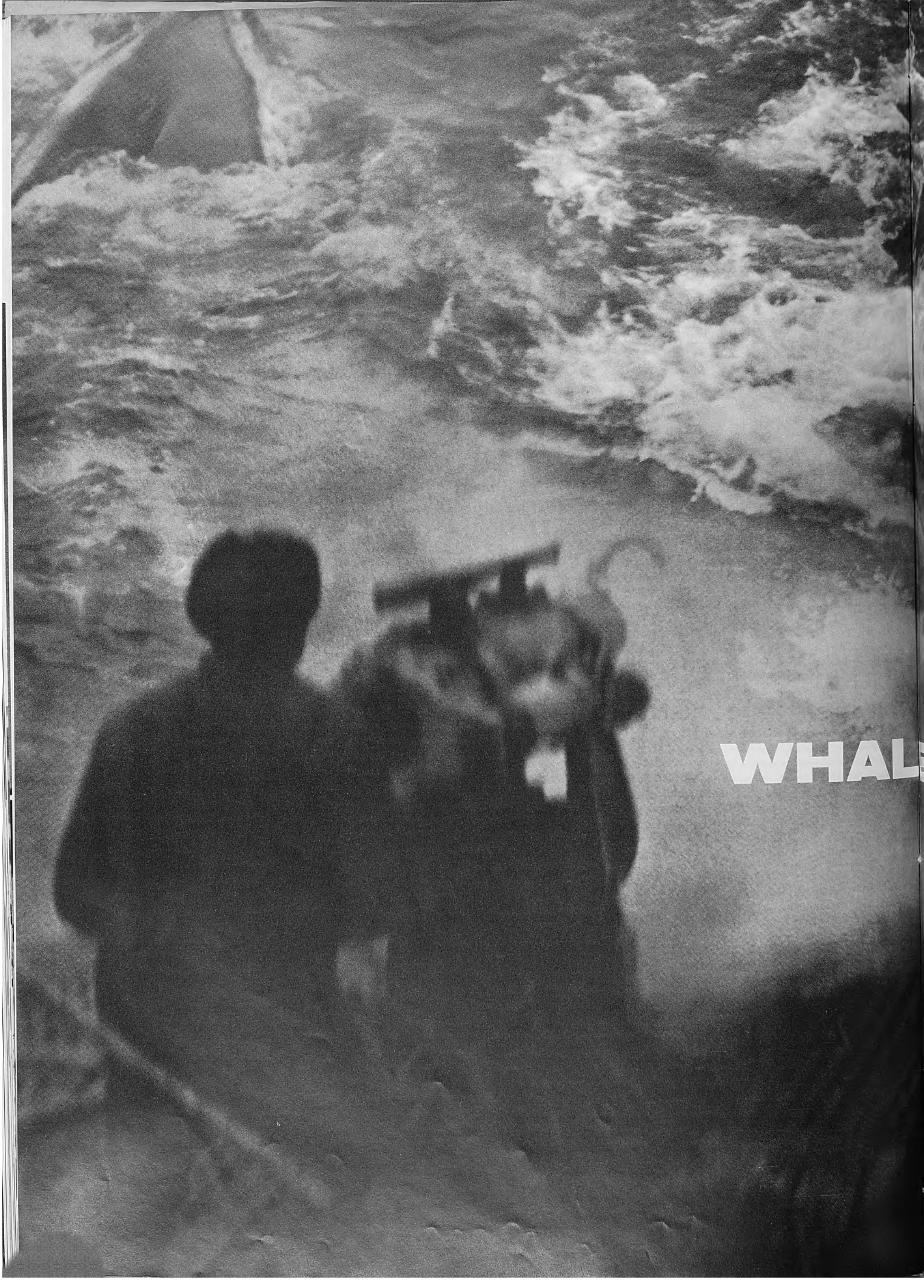
The UN General Assembly formed a committee to draw up a draft treaty on disarmament. This committee, representing five socialist and five capitalist countries, was subsequently enlarged by the UN General Assembly to an 18-nation committee.

September 25, 1883. Eighty years ago the first Marxist organization, the Emancipation of Labor, was set up in Russia. Headed by 26-year-old Georgi Plekhanov, it consisted of five people. At the time the working-class movement in Russia was taking its first steps and needed a progressive theory. The Russian revolutionaries found that theory in the teachings of Karl Marx.

The members of the group translated and distributed the major writings of Karl Marx and Frederick Engels —*The Communist Manifesto; Socialism, Utopian and Scientific; Wage-Labor and Capital*, etc.

"The final goal of the proletariat," wrote the members of the group, "is the replacement of the old social system by a new one—communism. The preliminary condition for this is the creation of a revolutionary workers' party, the overthrow of czarist autocracy, and the seizure by the proletariat of political power." Developments in Russia confirmed that this goal was right and realizable. More than a third of mankind is now advancing along the road of building communism. ★

our calendar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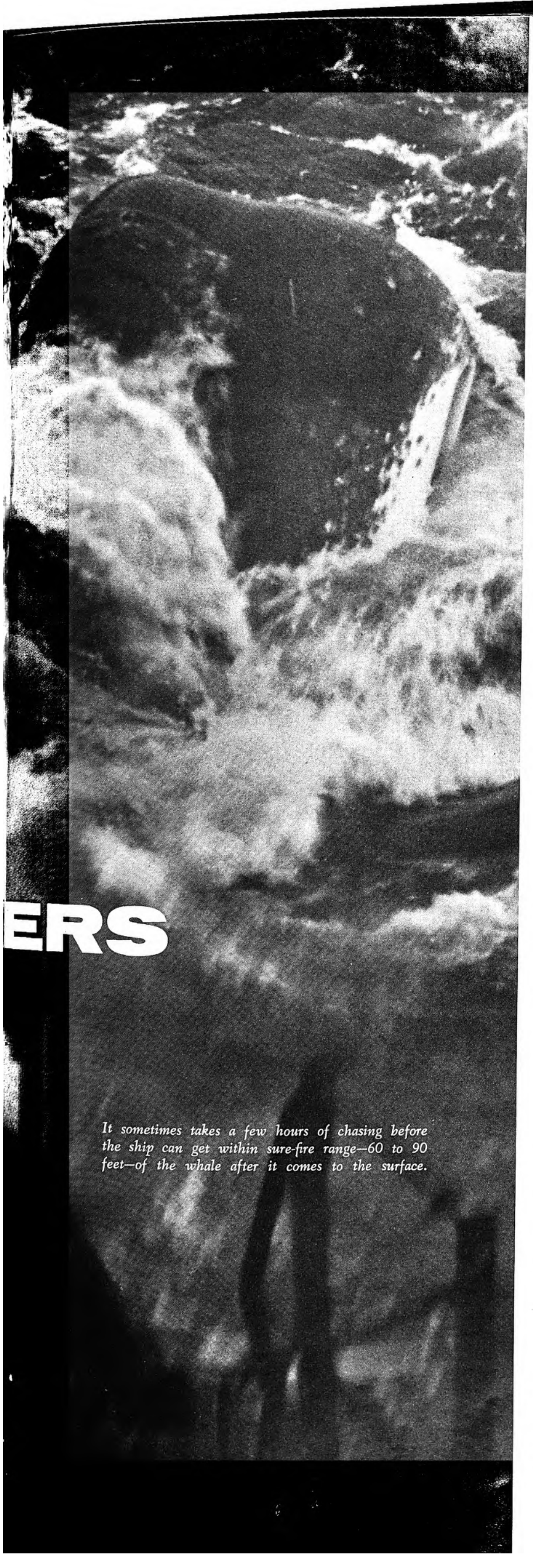


It sometimes takes a few hours of chasing before the ship can get within sure-fire range—60 to 90 feet—of the whale after it comes to the surface.

STORY AND PICTURES BY VADIM GIPPENREITER

I BOARDED the boat with my knapsack and cameras. The craft had just brought a whalebone whale to the Skalisty (Rocky) factory on the Simushir Island in the Far East and was about to return to the whaler *Shkval (Squall),* riding anchor in the roadstead, its raised nose and harpoon gun visible a long way off.

I was told that the oldest man in the *Shkval's* youthful crew was the skipper, 32-year-old Georgi Kremnyov.

The first one I talked to on deck was harpooner Vladimir Lozitsky, a stocky chap who came from a family of Far Eastern tiger hunters. He told me that the whale just towed to Skalisty was the first caught in a month. The *Shkval* and the other whalers in the fleet had prowled the ocean for a long time with very little to show for it.

As the *Shkval* put out to sea again, the crew wondered if their bad luck would hold. Dusk fell, the vessel cut through the waves, and a cold wind kicked up the briny water. There were no signs of the sea mammals anywhere. The sky darkened, and I turned in. . . .

The cry "Whales off port!" sent me flying out of my bunk early the next morning. I grabbed my cameras and dashed out on deck. The men peered at the horizon.

Wide awake now, I peered with them. The *Shkval* headed swiftly for the small clouds of spray raised by the sperm whales. They stayed on the surface and cut across our course, paying no attention to the vessel.

I used the time to go over my small stock of information on whales. There were 30 species, I remembered—22 toothed whales and 8 whalebone —many too small to be of industrial value. Also, it was against the law to catch blue, Greenland, gray and some other species that had been almost killed off by indiscriminate hunting. Also that these Far Eastern waters were chiefly inhabited by finbacks and sperm whales, the latter being the basis of our whaling industry.

In the meantime, Lozitsky aimed his 150-pound harpoon at the largest of the spotted sperm whales. I hardly had time to look back at the target when the shot rang out. A second later the whale and the harpoon line nose-dived out of sight. The winch revolved crazily.

"Full speed astern!" Kremnyov commanded.

The skipper was being careful. I remembered hearing that several years ago another Soviet whaler, *Entuziast (Enthusiast),* harpooned a 55-foot sperm whale off Komandorskie Islands. It dived under and then struck the stern headfirst, snapping the propeller shaft and screw and twisting the steering gear.

The *Shkval* winch rewound the line, and the dead whale broke the surface. Air was pumped into it so it would stay afloat and a pennant buoy secured to it.

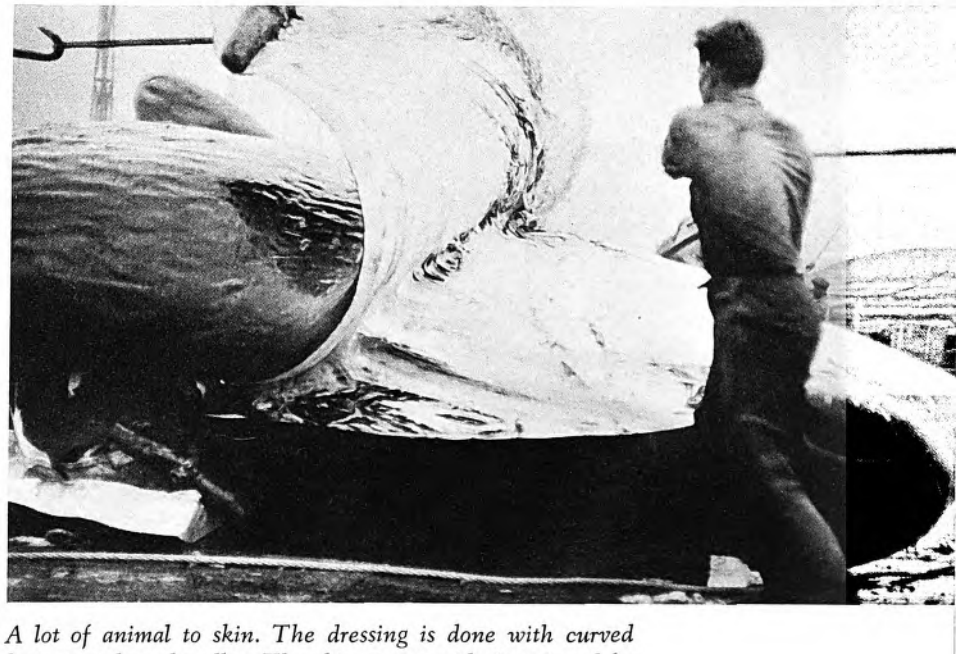
The harpoon gun was readied for another shot as the *Shkval* chased after the school. Ordinarily they swim in single file, but now, frightened by the first shot, they scattered and dived off in different directions. Whales have no sense of smell at all and poor eyesight, but their hearing is sharp. They remain submerged for periods of from 15 to 45 minutes, and in some cases stay down for an hour and a half or two hours.

The second shot from the *Shkval* hit another whale. It tried to struggle free but was subdued by a second harpoon, this one loaded with a grenade.

The chase and firing went on till dark. Later that night the *Shkval* radar picked up the pennanted trophies—a lucky (or unlucky) 13, depending on whether you are a whale or a whaler. Chained to the *Shkval's* sides, the great carcasses cut the ship's speed by almost half. Skalisty hove into sight only early the next morning.

The catch was towed to the shore, and the processing began at once. All the work is mechanized. With the aid of winches, saws and cranes, a few men can cut up a whole whale carcass in a little less than half an hour. Modern processing methods make it possible to utilize the whole animal. Every ounce is turned into canned food, leather, guano, oil (from 15 to 20 tons per whale), Vitamin A (from the liver, sometimes weighing a ton), spermaceti or ambergris.

Skalisty is busy from morning to night converting rich whale catches into these many kinds of products. ★

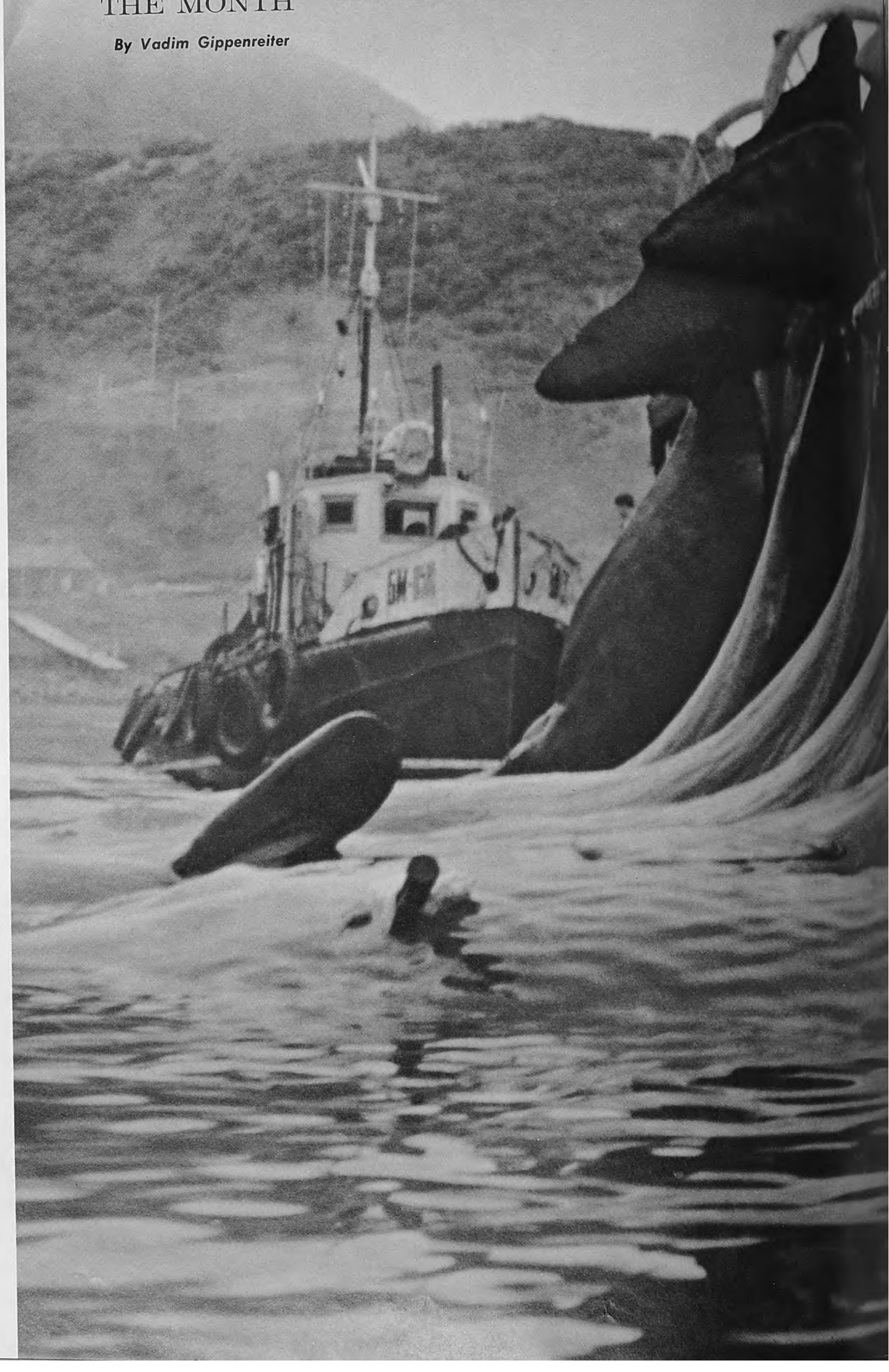


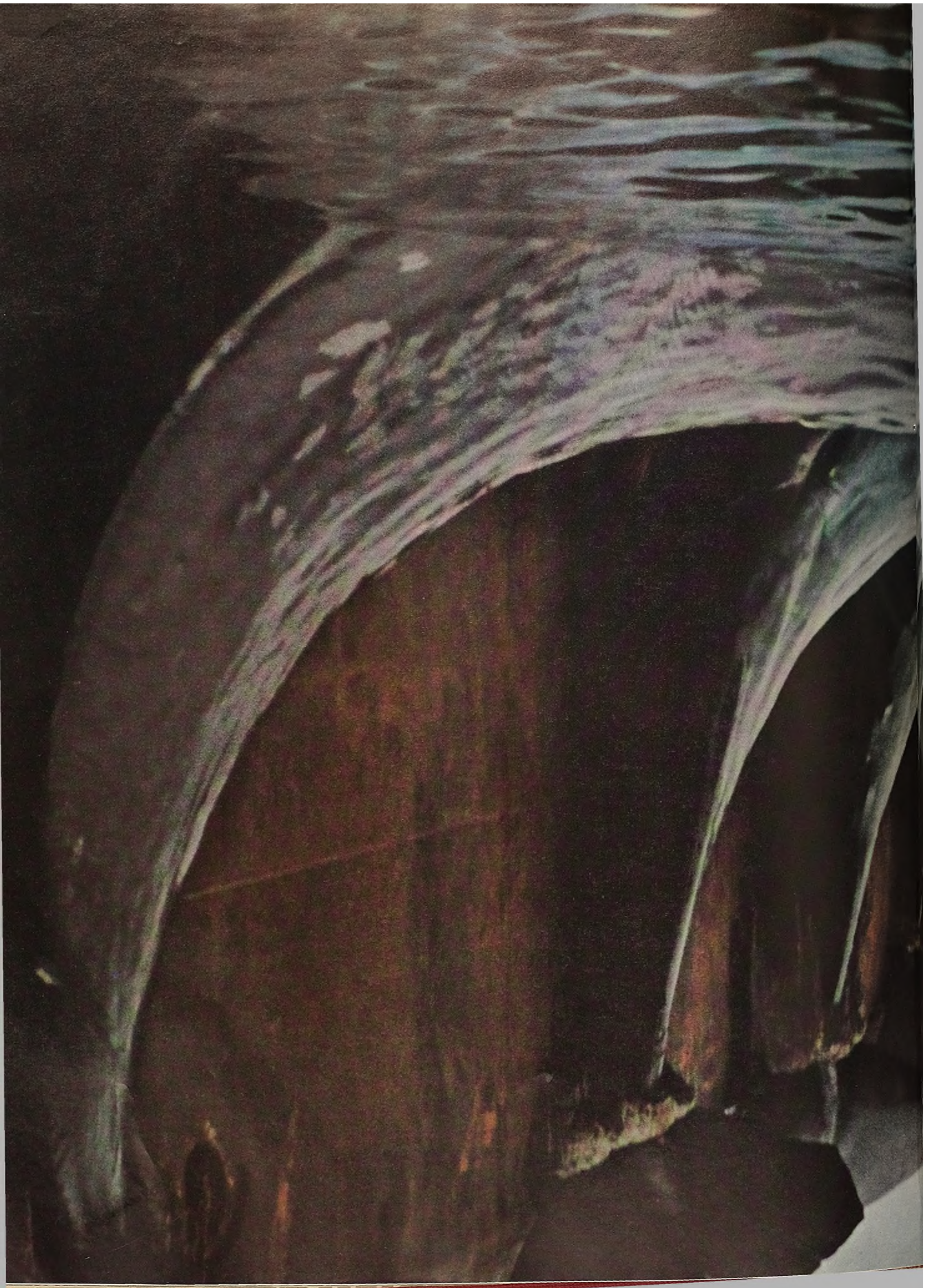
A lot of animal to skin. The dressing is done with curved knives on long handles. The skin on one side is stripped by a winch, the whale is turned over and the process repeated.

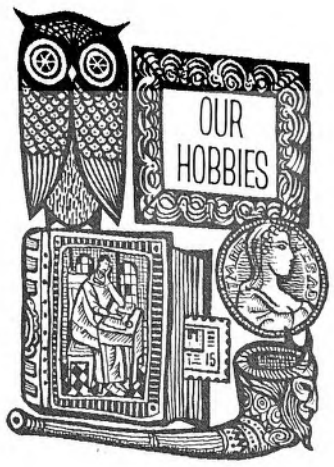
PHOTO OF THE MONTH

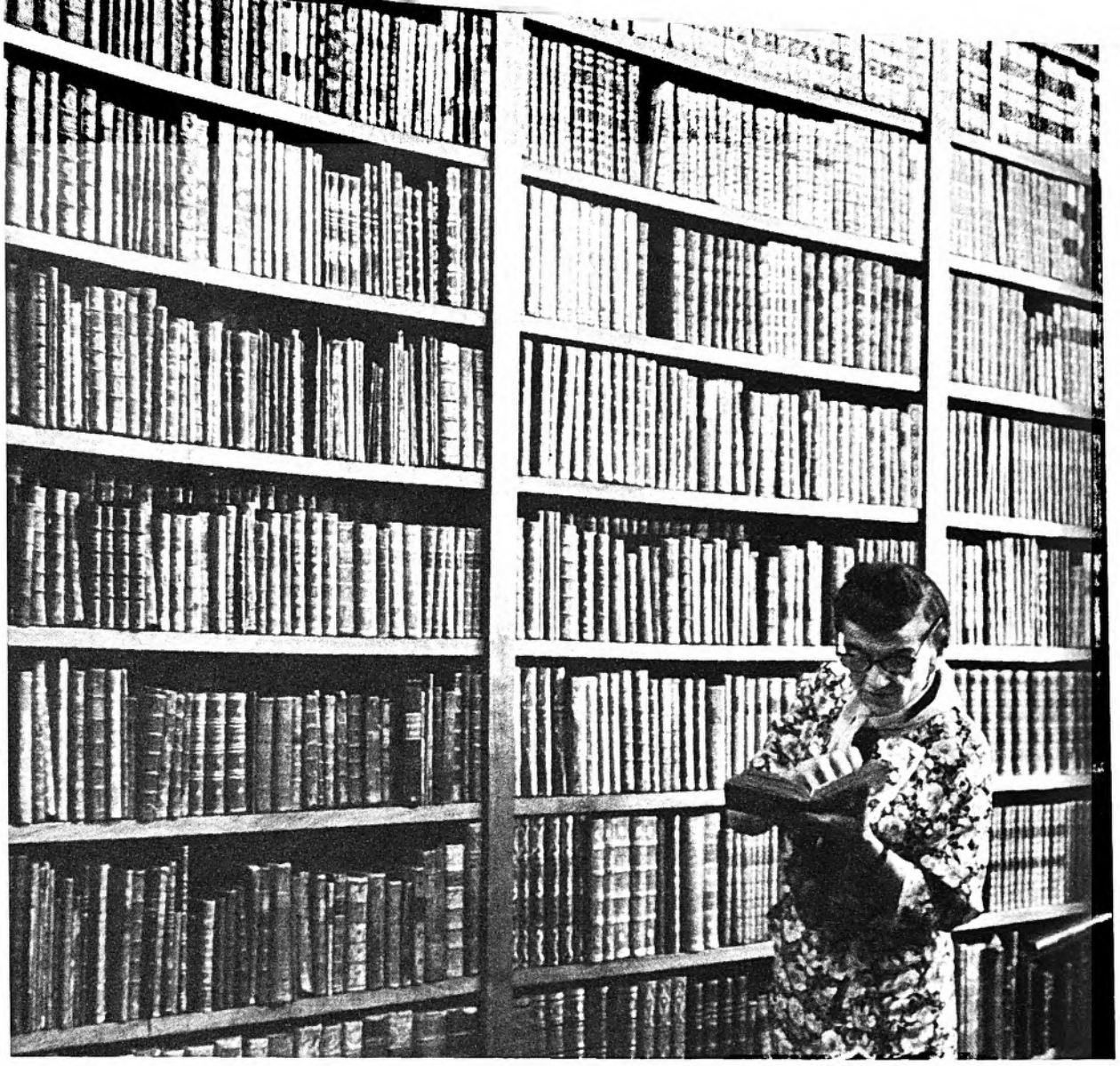
By *Vadim Gippenreiter*

The single-deck whaler *Shkval* carries a 90-mm. harpoon gun aft. The giant catch is pumped full of air, chained to the ship's side and towed to shore.









SMIRNOV-SOKOLSKY'S LIBRARY

BY TATYANA TOPILINA

IF THE TASK of drawing up a map of Moscow had been entrusted to Nikolai Smirnov-Sokolsky, he most likely would have first marked all the secondhand bookshops in the city, and only afterward filled in the rest of the details.

The clerks in these shops can immediately spot the uninitiated, by the way he snubs plain bindings and old-fashioned print, just as they can spot a real collector. He can have the run of the place—is allowed to choose from all that is on the shelves. The connoisseur quickly finds his bearings in this mass of literature, carefully selecting one book, then another, then a third. Soon he is "lost to the world."

"Kolya, what would you like for dinner?" Smirnov-Sokolsky's wife called to him one day, a little louder than usual, to catch his attention.

"My dear Sofia," he said with annoyance as he put down the book he was holding, "I was just speaking with Pushkin when you went and interrupted us with your talk about dinner!"

Sofia was now recalling the details of her life with her deceased husband. We were seated in his study at a large table. In the past it had nicely suited the burly frame of Smirnov-Sokolsky, whose unconstrained energy and capacity for work had been remarkable. From floor to ceiling the walls were lined with bookshelves, each with a double row of books. There were 20,000 volumes in all in his study—and every other room in the apartment.

What kind of a man was he who had collected these books? A topical satirist? He had received a standing ovation at the Moscow Circus after his first performance. A famous actor? He had appeared on the professional stage when barely 17, and stayed there for the rest of his life. He had been well known everywhere in the Soviet Union as a master of ceremonies and a storyteller. A scientist or bibliographer? He had been a member of the Lenin Public Library's Learned Council. A writer? He had authored some scientific papers. Smirnov-Sokolsky was all of these things and enjoyed the respect of literary scholars as well. And without benefit of formal higher education!

He had been a hard worker, getting up at six every morning in the summer (seven, in the winter), working without apparent effort, joyfully, often until midnight. This man had possessed a surprising range of interests and—what is most important—the integrity and the ability to finish practically everything he started.

His greatest passion had been books, which he treasured. This remarkable scholar had begun collecting in the mid-twenties. Like a patient gold prospector, he had sought precious grains in the mounds of literature. Like a cunning detective, he had tracked down a particular copy, ready to go anywhere, even to the ends of the earth, for what he was seeking.

These thousands of books, as well as magazines, anthologies and first editions of works by some of the foremost writers, all dealt with matters Russian—folklore, history, etc., all had been read and studied by Smirnov-Sokolsky.

Each book has a story. A card file in the adjoining room explains where and how the books were obtained and also bears such remarks as "easily obtainable," "a rare book," "just average," "a rare edition," "priceless."

Books sometimes have an exciting history. The most banned Russian book was Radishchev's *Journal from St. Petersburg to Moscow*. The author of this seditious book was first sentenced to death, but later the sentence was changed to banishment to Siberia. At the end of the eighteenth century he had dared to write lines full of despair, bitterness and sarcasm, lines which lashed out at the autocracy, heart-rending lines about the oppression of the ordinary people.

This dangerous and famous book, symbolizing the love for freedom, was published by businessmen for the sake of profit, by rebels in protest, and also simply by hotheads. It was banned and confiscated each time it appeared, and so there were very few copies around.

Other works by Radishchev also had a trying time. Obtaining all of them—those published and those banned—was incredibly difficult, at times almost impossible. Experienced Russian bibliophiles told this to Smirnov-Sokolsky when he set out on his quest. That his collection lacks only two of Radishchev's rarest works is truly extraordinary.

Scanning the shelves, I saw titles both familiar and otherwise. Here were books published in Peter the Great's time; Pushkin first editions; a collection of fairy tales; anthologies; a history of Russian journalism; magazines and newspapers from the eighteenth century to our time.

Sofia listened every evening as Nikolai read aloud what he had written during the day. He wrote a great deal, including *Stories About Books*, an entertaining narrative about people, their lives, and their search for books; a bibliographical reference book on symposiums and anthologies pertaining to the eighteenth and nineteenth centuries in Russia; and a book on the works of Pushkin published during the poet's lifetime. Unfortunately, Smirnov-Sokolsky died before the last-mentioned could be published.

Though the original owner of this treasure has passed away, activity in his private library continues. Sofia works on his papers; she indexes, she files. As before, there are cigarette stubs in the ash trays and the phone rings frequently. The Smirnov-Sokolsky apartment is visited by graduate students, scientists, writers—everyone who can find a reason to use this unique library. ★

STUDY AND SOCIAL PROGRESS

BY SERGEI GURYANOV

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TECHNOLOGICAL PROGRESS brings its own problems. With large-scale automation and machines replacing many of the hand skills, we have a rising percentage of engineering and technical personnel. But even under these conditions our planned economy makes it possible to guarantee full employment.

A certain redistribution of manpower as a result of automation is inevitable. But the Soviet worker has no need to fear that he will be jobless, either in the near or in the distant future, since the state has made adequate provisions for retraining and relocating all displaced workers.

The new techniques call for workers with higher qualifications and better general vocational backgrounds. About 40 per cent of our workers and 23 per cent of our farmers already have a college or a special secondary education. About 60 million people, more than a fourth of the population, are studying.

To see how a worker's study relates to the job he holds, I went to the Lenin Electrical Engineering Plant in Moscow.

From the files I chose at random the personnel record of every sixth man until I had a thousand. I checked their job promotions from 1951 to 1961. With few exceptions, practically all had been unskilled when they came to work at the plant. During the ten years, 295 of them had become engineers or technicians, 680 had qualified for highly skilled jobs and only 25 remained at medium skilled jobs.

Of the 34 foundry workers whose records I had, 14 had either earned their engineers' or technicians' certificates or been upgraded to foremen's jobs. Klavdia Dogadina, who started working at the plant as an unskilled worker, had become an engineer-economist. Alexei Medvedev had been a molder and is now a foreman at the die section. Boris Zhuravlev had become a senior foreman. The other 20 workers had either qualified for jobs that required more skill or had learned an additional trade.

The versatile man who has mastered several skills or trades is very much in demand. Many workers prefer that to qualifying as engineers. Earnings are not always a factor since a highly skilled worker can make as much or more than an engineer. A man's status in our country depends upon how much he contributes to the general welfare. The more society gets from the worker, the more it gives him in earnings and in respect, whether he is a plain benchworker or an engineer.

Here are a few examples. In the tool-making shop there are 37 workers making punches. Four of the five planers have learned two or three skills, and three are studying at the technical school of the plant. Two of the four lathe operators are also studying, and three of them have moved up to better jobs since 1959.

When Boris Magerov started, he worked on only the very simple parts. He studied after work, began to take on more complicated jobs and now he can handle every type of lathe work. When I asked Magerov about his plans for the future, he said that he intended to go on studying at a polytechnic institute.

Out of five men on the boring machines in the same shop, two are studying—Vladimir Davydov at the plant's polytechnic institute and Afanasi Mishin at an electrical engineering school.

Anton Chernykov had seven years of schooling when he started as a lathe operator. While working, he went through high school and then an institute, after which he was promoted to forge shop superintendent. Now he is the head of the plant's production department.

Vadim Bogdanovsky was a seven-year school graduate when he began working on a lathe. He moved from adjuster, to foreman, to technologist, to shop superintendent, to chief engineer, and now he directs the plant's rationalization bureau. In the interim he graduated from a secondary school, the Moscow Institute of Economics and a two-year advanced engineering course.

Lathe operator Mikhail Bulykin knew the production process so well that he was appointed foreman. Then he became a senior foreman, and now he is a shop superintendent.

It is noteworthy that the overwhelming majority of the 846 engineers and technicians started as benchworkers at this very plant.

Since 1956, 66 benchworkers have become engineers or technicians. The majority are going on with their studies.

Our society gives every person the same opportunity to study and learn. Although this is a mass process of education, nevertheless the individual is not lost in the shuffle. A man's personal qualities determine his progress on the job. It is not unusual for a benchworker with ability to be promoted to a key job in his plant that would ordinarily be held by a certified engineer. But today's complicated and fast changing production processes require that every worker, particularly the man who has been promoted to a key job, keep up with developments in his field. He has to keep studying not to fall behind.

I asked where the workers of the plant were studying and was told that 262 were studying by correspondence at the USSR Polytechnic Institute, which has a branch at the plant; 278 were at the Moscow Electrical Engineering Technical School, which also has a branch at the plant; 468 workers were at a school for working youth, and 138 were taking preparatory courses for entering an institute.

Besides formal classes, there are a number of study circles led by highly skilled workers and engineers. They are well attended—258 workers are studying technology and advanced methods of work; 195, economics; and 550, social sciences.

Looking ahead, what it means is that between 1961 and 1971 every tenth worker at the plant will become an engineer, and every ninth a technician (this if we consider only those who graduate from the plant's institute and technical school and if the number of worker-students remains at the 1961-1962 level). But the number of workers who are studying keeps growing all the time, and many of them are taking courses at schools not affiliated with the plant.

Preference is given to workers applying for entrance to colleges and secondary schools. Nationally, they make up half the student body, with the percentage growing. In the 1957-1958 academic year, 28 per cent of the college students had work experience; by 1960-1961 the figure had climbed to 57 per cent.

The combination of work and study makes not only for a better worker but for a more roundly developed citizen. The society obviously must be one that provides its citizens with the opportunity to work and study and develop. In the Soviet Union the citizen is guaranteed a job, free schooling (as much of it as he chooses to take) and a living standard that becomes progressively higher. In the past year Soviet citizens have received 28.4 billion rubles for education, health, pensions and various grants and benefits from public consumption funds. This is how our society makes it possible for the individual to develop.

The job records of these workers at the Lenin Electrical Engineering Plant show how Soviet people take advantage of the opportunities their society offers them. The process is interacting. By his labor the Soviet worker builds a better society and in the process is himself developing. The interests of the society and the citizen are in complete harmony. ★

THE SOVIET WORKER

THE primary concern of the Soviet trade unions is the working and living conditions of the country's workers. This solicitude, however, requires neither fighting for concessions from management when collective agreements are negotiated nor resorting to strikes to win demands. Our workers and management have no differences reflecting class contradictions, for the Soviet Union has no private industry; all industry belongs to the people, to the country.

Soviet law protects the interests of the working man. All legislation regulating labor and living conditions is drafted with the participation of the trade unions. Indeed, many of these laws are proposed by the unions. The collective agreement in each case merely applies the law to the particular situation.

Does this mean that management and trade union always work in complete harmony? It does not. Misunderstandings are inevitable, even in the friendliest of families.

When there are differences between trade union and management, however, they do not arise from a clash of diametrically opposed interests, as in private enterprise, but from mistakes made by one party or the other, from differing interpretations of the law, of fact, and such other fortuitous causes. Also, of course, differences develop when a manager abuses the confidence vested in him by the state and violates the rights of the workers.

Soviet law gives the trade unions wide powers to defend the interests of working people. Decisions reached by the factory trade union committee in a labor dispute are binding on management and can be contested only in the courts. The trade union can recommend the dismissal of an official who disregards the just demands of the workers. Under these conditions it is unlikely that the opinion of the trade union would be ignored, which is why major conflicts that threaten to evolve into strikes do not arise.

Pay and working hours are a case in point. The way these questions are handled illustrates how completely government policy, aimed constantly at bettering living standards, coincides with the aims of the trade unions.

In the past few years the workday was reduced by law to seven hours, and to six hours for those working underground or under other such difficult conditions. The program adopted by the Communist Party in 1961 foresees further cuts in the workday. The transition to the six-hour day with one day off a week or to a 35-hour week with two days off will be made in this decade (1961-1970). Those doing particularly hard work will have a five-day or 30-hour week. The decade following (1971-1980) will introduce an even shorter work week. All this without pay cuts, needless to say.

The 20-year plan calls for continuous pay raises during the period, as well as longer paid vacations. The annual paid vacation guaranteed all factory and office workers by law now averages 19 workdays. Those doing particularly hard work and those working under difficult climatic conditions have longer vacations. All vacations will gradually be extended to a month.

The plans for a shorter workday were made with the direct participation and the complete agreement of the unions, and now it is the job of the trade unions to see that they are duly implemented. The changeover to a shorter workday must be made, as was the one from an eight- to the present seven-hour day, without affecting production. And it will be the union's responsibility, as it was then, to see to it that the shorter workday does not mean a thinner pay envelope for the worker.

The trade union committees of the various enterprises keep a sharp eye out for violations of the wage schedules set by law.

Here is an example. When schools with the practical work training program now required of all students were set up in the rural districts of Georgia, the republic's Ministry of Education made some changes in the pay schedules for teachers. These changes, made without the consent of the trade unions, somewhat reduced the pay of rural teachers. Whereupon the Teachers Trade Union protested the Ministry's decision, and the change was declared illegal. The teachers were compensated in full for the entire period the change had been in effect. The new rules, worked out with the participation of the trade unions, guarantee teachers in these new schools the same pay as those in all the other schools of the republic.

Nor can management change work quotas and rates for piecework without the consent of the trade union. The trade unions organize training courses to raise the skills of the workers and see to it that workers who complete these courses receive the better jobs and the higher pay that the new skills entitle them to.

The trade unions are assured of the complete support of the government in their efforts to improve the living conditions of working people. This is only to be expected, since the main goal of the economic plans of our people's state is the continuously rising standard of living for all sections of the population, especially workers and collective farmers. Its ever-present motto has been: "Everything for man, for his well-being." How well the Soviet Union has succeeded may be judged from the fact that the real earnings of factory and office workers increased by 18 per cent in the first four years of the current seven-year plan (1959-1965).

Raising the standard of living means proper housing, an acute problem in the Soviet Union, the country that suffered most from fascist destruction in the Second World War. In 1957 the government adopted a special decree to accelerate housing construction. During the six years that have since elapsed, city people received 12 million new apartments, and 3.8 million houses were built in farm areas. This has given 75 million people, a third of the population of the country, better housing.

One of the responsibilities of the Soviet trade unions has been to keep house building constantly in the public eye. They help draft plans and see to it that they are carried out. They check on the expenditure of funds allocated for housing in the national budget or directly by the factory. They also help to distribute new space and make sure that the new apartments go to those who need them most.

The powers of the trade unions are wide-ranging. They are vested with the enforcement of labor laws and safety and health regulations at industrial enterprises, on construction sites and in all office buildings. On their instructions management is required to stop work in a shop or even close down the entire plant if the safety regulations have been broken or ignored and the health and lives of workers endangered. Union inspectors have the right to look through every part of a factory and to fine management if it breaks the labor laws or allows them to be broken. No new enterprise, shop or any other production unit may begin operating without the approval of the technical inspectors.

Soviet law guarantees the trade unions complete freedom of action on the national as well as on the local level. Trade unions do not require the authorization of the government or any of its economic agencies, and any interference with their activities designed to prevent the exercise of their rights is punishable by law.

The trade unions make all their decisions independently. Their latitude is attested by the fact that all officers are elected democratically by majority vote of the membership and closed ballot and can be removed only by the union. All trade union problems are settled on a

AND HIS UNION

BY VICTOR GRISHIN

CHAIRMAN, USSR CENTRAL COUNCIL OF TRADE UNIONS

fully democratic basis through wide discussion that decides the majority opinion.

A frequent question people in the West ask is how this independence of the Soviet trade unions can be reconciled with their collaboration with the Communist Party, the government, and the management of industrial enterprises. Actually there is no contradiction here since they all have the same goal. Each one works in its own sphere and complements the other.

The task of the Soviet trade unions is to draw working people into the active management of the social, political, economic, and cultural life of their country, to develop in them a sense of responsibility for its destiny, and thereby to mold the new man and citizen. The molding of the new man really began with the Socialist Revolution of 1917. As the new life was being built in the country, the new man was shaped in the process.

As the master of the country, of its industry, the worker has a major interest in its successes. It is this interest that explains why the Soviet trade unions work so actively for greater productivity, which in our country is the only way to raise living standards.

The trade unions are directly involved in planning production in each enterprise as well as on a nationwide scale. The drafts of all annual economic plans are submitted to the USSR Central Council of Trade Unions for consideration before they are approved by the Government and the USSR Supreme Soviet. Trade union representatives are always included in the state committees that make a final review of those plans. Their job is to see that along with solving general problems facing the country, the specific interests and problems of the working people are taken care of. Automation is one example.

Unemployment was abolished in the Soviet Union more than 30 years ago, and, even with automation, its return is ruled out by the socialist planned economy. The food industry is a present case in point. Between 1959 and 1965 about 430,000 workers will be released by this industry because of automation. Will these people be unemployed? Nothing of the sort. Some 2,000 additional food enterprises are to be built during the same period, and they will need more than 300,000 workers. Aside from this, many of the present enterprises will be expanded and will be clamoring for man power. Replacements will also be needed for workers reaching retirement age and those who move to other industries. As a consequence, the food industry will require a great deal more man power than the number released by automation.

The Soviet economy has been growing from year to year without crises or depressions. The annual increase in industrial output averages 10 per cent. This continuous expansion of production has been accompanied by an expansion in the labor force. The number of factory and office workers increased by nearly 12 million in the first four years of the seven-year plan.

Championing the rights and interests of the workers when decisions of production expansion are being adopted, the trade union, like management, is vitally concerned that the enterprise operate more efficiently —produce more goods, improve their quality and cut production costs. Here the trade unions rely on the initiative of the workers, who frequently submit ideas and suggestions for expediting the national plans for economic development. These plans, it should be noted, foresee not only greater production but also a corresponding rise in the worker's living standards, higher real earnings, a shorter workday, longer vacations, more public services, higher pensions, more sanatoriums, nurseries and kindergartens, larger student stipends, etc.

The working people are consequently very much interested in the production progress of their enterprise. Permanent production conferences, organized on the initiative of workers, are now becoming the rule in industrial plants. These bodies, elected by the staff to serve for a year, are guided by the local trade unions. The conferences meet at regular intervals to discuss production problems with management. The ideas and suggestions that grow out of these conferences make for more efficient operation. In addition to the elected members, millions of workers take part in the proceedings of these permanent production conferences.

The various types of socialist competition between individual workers, team and factories is another concrete manifestation of the worker's interest in seeing that his factory does the best possible job. The highest form of this competition is the communist work movement, in which more than 23 million workers now participate. They pledge not only to be the best workers but also to raise their cultural and technical level and to lead model public and private lives.

The inventors and innovators movement has been gaining momentum from year to year. The ideas and inventions of workers and engineers in Soviet plants saved the country more than six billion rubles in the past four years. Such technical creativity is, of course, substantially rewarded by the state. But it is the moral factor that more and more becomes the motivating force in this movement. The new titles of Honored Inventor and Honored Innovator were suggested by the trade unions. The creators and designers of new machines and processes are decorated by the government. They are highly respected men and women. Many of them have been elected deputies to the USSR Supreme Soviet and to the local Soviets. Technical creativity has become a compelling interest for millions of working people, their favorite leisure-time occupation.

The Thirteenth Congress of the Soviet Trade Unions, to open in Moscow at the end of October, will summarize the work done in the four years since the last congress and outline plans for the future. These plans are now being discussed in all trade union organizations and in the columns of the trade union press. Trade union executives on the local and republic levels are presently reporting to their membership, and delegates to the forthcoming congress are being elected.

The labor of the Soviet people is laying the foundation of communist society, the society that will most fully satify the cultural and material needs of the truly free man.

Our trade unions are exercising many functions previously performed by state agencies—the administration of the state social insurance fund, the supervision of labor laws, the management of sanatoriums and resorts, among others. The trade unions maintain thousands of clubs and palaces of culture, tourist camps and sports centers. More and more of the functions now exercised by various state agencies are to devolve on the trade unions and other mass organizations in the future. That is why we have every reason to say that our trade unions constitute a school of management, a school of communism.

Our country is gradually approaching the self-government that under communism will eventually replace the present state apparatus. The process of the withering away of the state, however, will encompass an entire historical epoch. It will be completed only when all the conditions are at hand for the distribution of society's material and cultural values among people according to their needs, when all the conditions are at hand for the implementation of self-government. We are certain that the present generation of Soviet people will live in the new society whose banners will carry the message: "Peace, Labor, Freedom, Equality, Fraternity, and Happiness for all Nations!" ★

The Trade Unions and The Law

BY FYODOR MEDVEDEV
ASSISTANT EDITOR, *SOVIET TRADE UNIONS* MAGAZINE

THE LAW and the trade unions. In many Western countries this implies that the rights and the area of activity of trade unions are fixed by laws which the unions had no part in legislating. In the Soviet Union it means that legislation is drafted and proposed by the trade unions themselves.

Among the earliest of the laws sponsored by the unions were the Regulations on Collective Agreements approved by the Soviet Government on August 2, 1918. The regulations authorized trade union committees representing the personnel to negotiate collective agreements with management and empowered them to check on whether management carried out its commitments under the agreement.

The Statute on Factory Trade Union Committees, a very important piece of legislation, was also drafted by the unions for action by the Soviet parliament. The origin of this statute is typical. There were complaints that certain factory managers disregarded the opinions of their trade union committees on production, labor and living conditions. The USSR Central Council of Trade Unions verified the complaints and appointed a commission to draft appropriate legislation. The draft was circulated and discussed in detail at factories throughout the country and important amendments made. Ural workers, for instance, suggested that trade unions should have the right to examine the designs of industrial projects beforehand; to examine and discuss plans for new shops, laboratories and equipment and suggest amendments. Thus originated clause 9 of the statute, which empowers the unions to see that labor laws are observed. For this purpose the trade unions appoint special technical inspection commissions composed of engineers, technicians and skilled workers who examine building plans and inspect work on construction sites.

Another clause in this statute developed out of a proposal by miners to regulate overtime work in the pits. Some mine executives who were pushing hard to get their quotas fulfilled in good time insisted that the men put in overtime on their days off. This was not dictated by the vital needs of production but was the result of poor organization and mismanagement. The trade unions entered an objection to overtime of this kind. When they were discussing the draft statute, the miners of the Donetz coal basin proposed that a clause be inserted requiring the consent of the trade union committee for overtime and other changes in the normal workday. That proposal is now a law.

Under the statute the trade union must endorse the plan for the year ahead, work quotas, wage rates and the level of work productivity. It is authorized to check on the medical services provided by the factory to workers and their families. The union committee fixes the payments for temporary disability and maternity leave. If a worker is convalescing or needs special treatment or rest, the trade union provides him with a pass for accommodations at a health resort.

The trade union committee helps assign jobs and improve skills. The management must have its consent to fire a worker. All these rights are embodied in the laws the trade unions themselves helped to frame.

The unions played a prominent part in drafting a law to cut working hours. Their participation was essential because the purpose of the measure was to shorten the workday without reducing output, cutting wages or lowering living standards.

The shorter day was a product of worker initiative. The joint sponsors of the draft law were the trade unions and the State Labor and Wages Committee. The chairman of the USSR Central Council of Trade Unions reported to the USSR Supreme Soviet, which discussed and adopted the law reducing the workday from eight to seven hours (six for certain jobs) without reduction in pay.

The trade unions also helped iron out inequities in the wage system. Over the years many new industries developed—the machine-tool, chemical and construction industries among them. Since they were run by different government ministries, they set different work quotas and wages, with the result that a lathe operator at a machine-tool factory earned less than a lathe operator with the same qualifications working for a railroad.

With the State Labor and Wages Committee the trade unions evolved a standard wage scale for workers in all industries based on the amount and the quality of work. It was drafted into law. Simultaneously the wages of workers at the low end of the scale were substantially raised.

A great deal was done by trade unions to regulate the wages of farm workers—theirs is the biggest union in the country, with a membership of more than nine million. Last year the government passed a law—drafted with the participation of the trade unions—aimed at giving state farm workers a larger personal incentive in increasing production. Payment by the piece and a bonus system were introduced, with higher rates for above-quota production. Farm workers welcomed this measure and another—also sponsored by the trade unions—that provided for extensive construction in farm regions and better housing and living conditions for virgin land pioneers.

The list of laws and decrees adopted by the government and the USSR Supreme Soviet on the initiative of trade unions is a long one. Among them we have the regulations on labor disputes (which give the union the last word in most cases), the law transferring the supervision of social insurance to the unions, and the statute on production conferences.

As Soviet society moves ahead to communism, the rights and duties of the trade unions are expanding. They are taking over more and more functions hitherto exercised by state agencies. ★

TRADE UNION COMMITTEE CHAIRMAN

BY PYOTR GODLEVSKY
PHOTOS BY IGOR VINOGRADOV

EVERY YEAR, in late January or early February, a trade union conference is held in Volgograd at the Krasny Oktyabr steel mill's House of Culture. On the agenda are two items—a report on the fulfillment of last year's collective agreement and negotiations for a new one.

Mill director Paruyr Matevosyan, as a rule, makes the opening report. He checks off which of its commitments management has fulfilled and where labor has fallen short. After that Victor Vasilenko, the trade union committee chairman, reports on how the workers have met their obligations and where management has not.

In the collective agreement for 1962, the workers at Krasny Oktyabr pledged to meet their plan production quota before it was due, to turn out more than three million rubles' worth of goods above plan, and to raise labor productivity 2.8 per cent above the 1961 level.

Reasonable goals, but they took a lot of doing from both management and labor. Management had to renovate certain sections of shops, install new equipment, mechanize and automate some processes, and train 3,900 workers for new jobs and higher qualifications.

It was Vasilenko's job as chairman and the job of the union's production commission to see that the management followed through on all that. On the other hand it was also the trade union committee's function to educate the workers to do a better job and produce more, to further develop their sense of responsibility. It called on every union member to consider himself responsible not only for his own quota but for that of the worker beside him.

Another of the union's obligations is to popularize the techniques the best and most experienced workers have developed. For that purpose it organized special courses where these production leaders pass on to the others their experience with new machine tools and combination units.

At the trade union conference Victor Vasilenko mentioned all this very briefly, simply saying that socialist competition had been promoted among individual workers, brigades and shifts. As for results, he reported, the state plan was being fulfilled from month to month, the state received 3.5 million rubles' worth of steel above plan, labor productivity increased 4.8 per cent, and the qualifications of 6,400 workers was raised.

Every morning a note on the desk of the trade union committee chairman gives him the figures of the mill's steel output, the amount of rolled steel, the progress being made in the construction of apartments, kindergarten facilities, etc.

There is a very direct connection between the plant's fulfillment of the state plan and its own construction program. If the mill meets its quota, there is additional money for new construction. If it does not, the mill receives only what the city authorities allocate for that purpose according to the state budget. Every year since the war Krasny Oktyabr has surpassed its quota of smelted steel and rolled metal. For every ton of metal smelted above plan, the state transfers to the plant's bank account certain sums to be used for modernizing equipment, for housing construction, schools, etc. Last year the sum was 1.4 million rubles. Not a single ruble was spent without the consent of the trade union committee and its chairman.

We pay a visit to a construction site, where the mill is putting up 10 new apartment buildings alongside blocks of tenanted ones. Finishing touches are being put on some, others have only recently been roofed over, still others have only risen to the fourth floor. In the center of the project is a low building with large, almost wall-length windows. This is one of the combined nursery-kindergartens also being built with the mill fund. It will accommodate children, ranging in age from a few months to seven years, while their parents are at work in the plant.

"In last year's collective agreement the management agreed to build 100,000 square feet of housing," Vasilenko explains, "three nursery-kindergartens and a new highway through the mill district. All of it was done."

"Tell me frankly," I ask Vasilenko, "doesn't the mill management object to all these expenditures?"

Shop chairman Alexei Korotkov (right) discusses the draft collective agreement with the men.

Another of Vasilenko's responsibilities is the quality of food and service in the cafeteria.

"No, and for good reason. The director understands that to do a good job, a man has to have a decent place to live, clubs, libraries, and all the rest. If he doesn't have these things, he'll look for a mill that provides them. No problem about getting another job. The management knows that very well, hence the reason for our director taking personal charge of housing and other welfare construction."

"But you do have workers leaving, don't you?"

"Yes. Last year 818 workers left—736 of them on their own, 82 were fired. That's my biggest concern," he admitted. "When a man quits to go somewhere else, that's bad. It means we union officials haven't done a good enough job, that we've missed out so far as he's concerned. When a man's fired, of course, that's a more complicated matter."

According to regulations on Soviet trade union rights approved by the USSR Supreme Soviet, a worker cannot be fired without the consent of the trade union committee at his place of work.

Vasili Smirnov's was a recent case. He had been known as a quiet, diligent man. But then one day he came to work late, and drunk. When he was taken to task, he told the shop foreman what he could do, and in no uncertain terms. The foreman asked the personnel office to fire Smirnov, and was supported by the plant's assistant manager of personnel and welfare. The worker was completely sober by then and came to the trade union committee to ask that we support his case.

The committee called a meeting of the men in Smirnov's shop. The general feeling was that he was an excellent worker with a good record, and that since this was his first offense and he had promised it would be the last, that he ought to be reprimanded rather than discharged. The trade union committee thereupon went to the management on his behalf.

The decision was no mistake. Smirnov is now one of the best and most disciplined men in his shop.

The trade union committee chairman cited another recent case. Because he had supposedly let cars stand idle, Anatoli Iyegovsky, a worker in open-hearth shop No. 1, was denied his bonus. He complained to the union. The trade union committee investigated, found that he was not at fault, and recommended that he get his bonus. He did, the very next day.

"But how about the 82 you spoke of. What were they fired for?"

"For repeatedly violating work rules and regulations."

"Didn't the trade union intercede?"

"No, because we activists had talked to these persons several times, and yet we couldn't persuade them to change their ways. Several men were fired at the request of workers' groups. We can sometimes tolerate people who drink, but there are violations where we have to put our foot down—cases where people's lives and health are involved."

Victor Vasilenko's face reflects his compassion for people, his kindliness. Perhaps it is because he himself has suffered much. His father died when Victor was only six, and the family would have experienced great difficulty were it not for the help received from others, from the state—who helped raise him and his siblings and gave them a higher education. Yet although Vasilenko has such kindness and love for people, there are times when he is justifiably angered by them.

Take the following, for example.

Union chairman Victor Vasilenko on one of his periodic tours of the mill's nursery facitities.

Sergei Kondourov (standing, right) argues for management at union-management conference.

Vasilenko and construction superintendent David Sklyar check the mill's newest housing project.

There had been a mishap in one of the rolling mill shops due to a safety rule violation. Nobody was hurt but someone might have been. A commission representing the trade union and management was sent post haste to the shop. Vasilenko called the trade union committee together. Shop foreman Ivan Fadeyev, who had not complied with the safety regulations, was fined 50 rubles; chief engineer Semyon Sorokin was reprimanded and warned that if anything like it happened again anywhere in the plant his dismissal would be recommended to the Volgograd Economic Council.

In another case mechanic Gennadi Kiselev, who had also violated the safety regulations, was demoted, and foremen Vasili Pchelintsev and Victor Kiselev were discharged at the trade union committee's request. In 1962 alone 284,000 rubles were spent at the Krasny Oktyabr plant for accident prevention, better shop ventilation and other health measures.

The cultural life at Krasny Oktyabr is also flourishing. The trade union and management spend 50,000 rubles a year for cultural and recreational activities.

Last year 253 workers spent their vacations at sanatoriums and resorts entirely at the union's expense, and more than 2,000 others vacationed and traveled, with the union footing 75 per cent of their bills.

The mill maintains a summer camp for the children of its workers. Last year several groups of youngsters vacationed at Sochi, one of the most popular of the country's resort areas. Next summer they plan to send the kindergarten children to summer at the Black Sea coast.

The gratifying things about his job, says Vasilenko, are the respect of the workers and the results that are seen in the everyday life of the plant.

When its own seven-year plan was being drawn up at the Krasny Oktyabr, and the potential output and the equipment necessary to produce it were being estimated, a commission was organized at the trade union committee's initiative to plan worker education. New equipment was to be installed during this seven-year period and highly skilled people would be needed to operate it. The members of the commission —among them prominent engineers and skilled workers—came to the conclusion that all smelters and rolling press workers, for example, should acquire during that time at least a secondary school education besides their vocational qualifications. Educational background requirements for other specialties were likewise set up.

The commission did more than plan, it organized. The network of general educational schools where workers could get a secondary education after working hours was expanded. The plant's vocational training courses and its technical college were improved. Closer ties were arranged with all the city's higher educational institutions. More than 140 short-term schools for advanced work methods alone were organized.

Better than 5,000 Krasny Oktyabr workers are now studying at either general or technical schools. Results? A creditable number of steel workers like Igor Slabozhaninov and Victor Tarasyuk with engineering diplomas. Truly an achievement! For Victor Vasilenko, trade union committee chairman and one of the program's initiators, it is the source of his greatest joy.

★

OUR READERS WRITE THE PAPER

BY VALENTIN ANTONOV
TRUD EDITORIAL BOARD MEMBER

Trud (Labor) is the newspaper of the Soviet trade unions. Its first issue appeared 42 years ago, on February 19, 1921. Today _Trud_ is one of the most popular dailies in the country, with an edition of more than 1,700,000 copies.

A SPECIAL characteristic of our newspaper is that so many of the articles originate with readers' letters. They raise a multiplicity of questions, some of serious concern to many people, others that are likely to interest only a small group of people or exclusively those persons who write them. But we answer them all.

Here is how one article came into being. Some time ago the paper received a letter from a workers' community in Kostroma Region. It was brief, written on a page out of a notebook. Alexei Yushchenko, a mechanic at the local power station, was writing to complain that the station's management had raised the price of fuel without warning or explanation.

In the Soviet Union management, in accordance with the collective agreement it negotiates with its employees, is required to supply them with coal, wood or other fuel at minimum prices if they live where no gas is available. Practically speaking, it means that the factory must sell its people fuel at cost, and sometimes even below cost.

Thereupon the paper's editorial board phoned the director of the power station. He explained that it was not his idea, that he had merely followed instructions from the higher-ups. Meanwhile the editorial board was receiving letters from such far-removed parts of the country as Lipetsk and Nikolayev Regions, with the same complaint: the price of fuel had gone up 200-300 per cent. Something had to be done about it, and quickly.

An so two *Trud* correspondents were dispatched. One of the letters contained a clue which led to the office of the Deputy Minister of Finance of the USSR. As a result of several days of investigation, a sharp article appeared in *Trud,* entitled "Facts Turned Upside Down," in which the Ministry of Finance was taken to task.

The newspaper's comments did not remain unnoticed. It was discussed in the Ministry of Finance, where it was admitted that their decision had been a wrong one. The USSR Central Council of Trade Unions, of which *Trud* is the organ, supported the paper's position. Shortly thereafter *Trud* printed a statement by the USSR Council of Ministers and the trade union council on the matter. In a word, justice had triumphed. The worker-correspondents wrote in to say that coal and wood were once again being sold to them at the prices set by the collective agreement.

I can cite many other instances—about matters large and small—of justice triumphant, and in each case much of the credit belongs to the readers. Another article, "Boris Petrovich Likes Comfort," was based on a letter from a group of workers. It came from a small town in Kalinin Region which bore the same name as the newspaper, Trud. The letter writers complained that the management of the local glass works had violated several provisions of their collective agreement.

The workers, supported by the trade union, had asked the plant management to open a service center where they could have a suit custom made, a pair of shoes repaired, a radio or clock fixed, or clothes cleaned at reduced prices.

The management agreed, and not long afterward the town had a beautiful brand new building. But to everyone's great surprise, the sign above the door read "Management of the Glass Works." A very indignant group of people wrote to inform *Trud* that the new building was occupied by the offices of factory manager Boris Medovnik and chief engineer Mikhail Sandrigailo. It was these men's suggestion that the old plant office building, which was really unsuitable, be used as the service center.

Trud sent a correspondent to the town. His article, "Boris Petrovich Likes Comfort," illustrated with a very pointed cartoon, had a sobering effect on the management. They hastened to vacate the premises they had unlawfully occupied. Later the local economic council informed the paper that the service center had been opened, as provided for by the collective agreement, and that the manager and chief engineer of the glass works had been reprimanded.

Our readers make the paper. In an almost literal sense they are its editors. At times *Trud* is positively flooded with letters from readers; last year we received about 310,000. This is quite aside from the many news items readers phone in. This means that *Trud* receives a written comment, complaint, reaction, suggestion and/or criticism from one out of every five of its readers. There are days when the editorial office receives as many as 2,000 letters. Our readers want us to share their satisfaction with the good job their factory is doing or their plain-spoken displeasure with sloppy work or mismanagement. Some 2,000 worker-correspondents write to the paper regularly.

The Soviet people cannot reconcile themselves to shortcomings that are reflected in the work at enterprises, construction projects, etc. And when they cannot correct the situation themselves, they turn to the newspapers. Almost every factory has its *Trud* worker-correspondents, who report things that go wrong. But they do not only pinpoint shortcomings. Metal workers from Beloretsk write us about what they think of current events in Iraq; Donbas miners give their reactions to abstract painting. The day's mail might include a letter about a factory meeting, a book written by a worker-poet or essayist, about a fishing club being organized, factory athletics, an amateur film festival, an exhibition by worker-artists and sculptors, a housewarming party, and just about anything else that is part of the daily scene.

A number of the letters we receive are addressed to the paper's legal staff. We have a free legal consultation bureau for those who want advice on matters that have to do with labor. We publish the questions that are of most general interest, with the lawyers' answers.

Trud runs a "Readers' Queries" page once a week, usually on Thursday. The queries range the whole spectrum of human endeavor and are answered by scientists, engineers, writers and authorities in various fields: "Who is the author of 'The Lay of the Host of Igor'?" (A Russian epic of the eleventh century), "Why does the Siberian larch lose its needles in the autumn?" "Is there life on the moon?" "Why has a German peace treaty not yet been signed?" etc.

Every Tuesday the whole second page is given over to readers' letters—also about everything under the sun. We usually reserve a part of the page for letters sent in to our feuilleton department. These are usually short satirical sketches of workers who soldier on the job, bribetakers, people who are spongers, and other such representatives of the dead past that we still come across occasionally. Every day one can find letters from readers on any page of the paper.

From time to time, in response to a specific letter, an editorial office representative sets forth on a long journey. In due time the newspaper publishes his report under the caption: "The Editorial Office Received a Letter." Frequently such assignments are given to so-called social correspondents (not on the regular staff) who supply material as good as that of their professional colleagues.

Besides its regular news staff *Trud* has correspondents in 30 of the country's largest industrial centers. Each correspondent has a volunteer staff of worker-correspondents who go over letters from readers, discuss and edit articles submitted, talk to visitors, and prepare background material for special assignments.

For a good many years now we have been running what we call "Tuesdays" in a number of cities. These are meetings to which we invite people in the same trade—steel smelters, bricklayers, weavers, bus drivers, and so on—to share their job experience and methods for improving their work. Naturally these meetings get coverage in the paper.

Thus our paper unites the Soviet trade unions, aquaints their members with the life of their counterparts in other sections of the country, and helps them with advice and support. ★

SUMMER VACATIONS AND TRADE UNIONS

BY PAVEL VOLIN

WHEN'S THE BEST time to vacation? Where's the best place to go? What's the best thing to do? Let's take the "when" first. Some of our people like winter for skiing, skating and ice fishing. For others, spring or fall have their special lure. Most of us, however, choose the summer months, particularly we who live in the northern part of the country and grow very weary of the four- to six-month-long winters.

Having settled the "when," let's get on to the "where" and "what." Trying something new every year is a tradition with many families. Last year, for instance, my wife and I spent our vacation at Sochi, the Black Sea resort. This past summer we decided to go to the Baltic coast, near Riga. Our two children went to the Young Pioneer camp near Moscow, as usual.

Wherever a person lives and whatever his tastes, he will have no problem finding a suitable place, for there are sanatoriums, rest homes and resort hotels nearly everywhere in the USSR.

Every worker receives at least two weeks' paid vacation annually. Many get three and four weeks. Those with especially demanding jobs get even longer vacations. Workers in the Far North and Far East, for instance, have up to two months.

Most people's vacation pay is enough to cover a two- to four-week resort stay. Not that that meets the actual cost of the room, board, facilities, etc. The major part of the cost is paid for by the trade union out of the state social insurance fund. This fund is made up entirely from contributions by management; the worker contributes nothing. It is administered by the trade unions and part of it is budgeted for resort accommodations—about 300 million rubles this year.

Accommodations—they are called passes—are distributed at places of employment by the trade unions. Most of the passes are either cut-rate, only 30 per cent of the actual cost, or entirely free. Apart from the trade union's passes there are those paid for directly by the enterprises and offices. These too are distributed among the workers at reduced rates with the participation of the trade unions.

Three years ago the state transferred the management of its sanatoriums and rest homes to the trade unions. Besides those run by the trade unions, there are resorts owned by cooperative organizations; the unions of writers, artists and composers; and by some large plants and institutions as well. The Ministry of Public Health, which previously ran the resorts, now has jurisdiction over only those sanatoriums offering specialized treatment—as for tuberculars, for instance.

Though they supervise nearly all resort services, the trade unions have nothing to do with financing the construction and equipment of sanatoriums and other health centers. This is still done out of state funds. In the past three years the accommodations in trade union sanatoriums and rest homes increased by 51,000, with 14,000 more added this year alone. The trade unions' 450 sanatoriums can now accommodate about 120,000 people at a time; and the 600 rest homes, 160,000.

A long-term plan for expanded resort services was approved late last year. Part of the over-all program for building communism, the plan calls for increasing the number of resort and sanatorium accommodations to two million. Resorts now in operation are to be enlarged, and scores of new ones are to be built, particularly in the eastern part of the country.

What are rest homes like? Each one is suited to its particular setting—in the woods, on a mountain top, on the edge of a river or lake, or beside the sea. The vacationers usually live in cottages, with a clubhouse and facilities for sports and entertainment on the premises. Sanatoriums have the same conveniences as rest homes, but besides sports and recreation they offer their guests preventive and remedial treatment of various kinds. The sanatoriums have the best available medical equipment, each with its own staff of doctors. Consequently they are somewhat more expensive than rest homes.

More than five million people vacationed at trade union sanatoriums and rest homes last year.

Touring and mountain climbing are both very popular, increasingly so. About 12 million people went on hiking trips and excursions last year, six times as many as in the three preceding years. The trade unions run more than 300 permanent tourist bases. In addition the trade union committees of many factories, offices and institutions set up their own summer tourist camps, nearly 1,200 of them in 1962. The trade union sports societies, besides, have about 20 mountain camps located in the most scenic parts of the Caucasus, the Pamirs and other mountainous regions of the USSR.

The unions give much attention to the vacation facilities of their members' children. Nearly 4.5 million children spent the summer in 7,700 Young Pioneer camps last year.

These camps were built and financed by enterprises and institutions, and are maintained largely with money from the state social insurance fund. Part of the maintenance comes from trade union funds and part from fees paid by the parents, the latter a comparatively small part. The parents, for instance, pay no more than 30 per cent of the cost of a pass to a Young Pioneer camp, and every tenth pass issued is free.

For a closer look at the work done by the trade unions to give workers and their families memorable vacations, let us see what a typical plant does.

Last year 3,145 workers at the Moscow Compact Car Works got passes to sanatoriums and resorts. Most of them received either the 30 per cent cut-rate passes from the trade union or paid nothing at all. Passes for the rest were bought by the management, and most of these too were cut-rate—some 30 to 50 per cent—others were free.

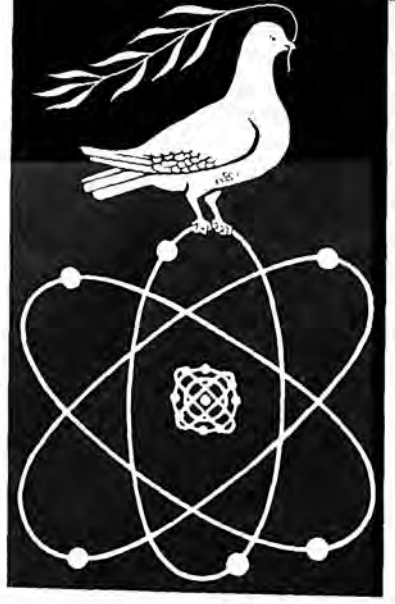
The plant also has a good many vacation travelers. More than 140 industrial and office workers toured the Black Sea and Baltic coasts, the mountains of the Transcarpathians and the Caucasus last year. Not one of them had to pay the full cost of his trip; from 30 to 50 per cent was covered by the trade union from the state social insurance fund.

Between vacations outings to the countryside around Moscow are arranged by the union. Whole families set off early on a summer Sunday—also in the spring and fall, traveling by bus or boat to the woods or the banks of a river and coming back to town in the evening. Last year more than 5,000 plant workers went on such outings, no one paying so much as a kopeck. The trade union's budget allows for such cultural activities and others.

The plant has built a recreation center for the children of its workers in a picturesque spot some 55 miles out of Moscow. That is where the plant's seven kindergartens move for the summer. A Young Pioneer camp nearby accommodated more than 1,500 school children last year. Most of the parents paid only 30 per cent of the cost, while 150 children vacationed there free of charge.

Like those at any Soviet enterprise, the Moscow Compact Car workers have plenty of places to go on vacation. So do their children. All they need worry about is the weather.

★



Atom for Peace
by Yuri Vasiliev

Soviet Graphic Arts

For the Opening of the Soviet Graphic Arts Exhibition in the United States

The Fir Tree—Queen of the Grass Snakes
by Albina Makunaite

Little Shepherds
by Birute Demkute

NO FIELD of Soviet art has had such consistency in development as, perhaps, the graphic arts. Of course, there were some difficulties and contradictions of growth, clashes of different trends, alternating periods of tempestuous development and comparative quiet in this field as well. But the main line of the creative process of the Soviet graphic arts has remained quite distinct and clear-cut throughout all of their almost-half-century-long history.

Realism, in the broadest and most apperceptive meaning of the word, has always been the basis of the methods and principles of Soviet graphic artists. No matter what genre we take—easel works on themes from modern life, illustrations for the classics, or works of an "applied" nature (book designs, advertisements, postage stamps, trade marks, etc.)—invariably the artistic solutions are attempts to apprehend and picture the meaning of life, its moral and esthetic principles, its concept of the beautiful and the whole.

Our graphic artists are not equivocal in their feelings; they either love or hate. Look at the works of the masters of the older generation, the famous Soviet poster artists Dmitri Moor and Victor Deni, or Boris Prorokov's antiwar series. Studies of contemporary themes follow in a well-established tradition. They are not conspicuous for their striking subject matter. They show the modern scene through a sharp and knowing eye, clear, well-defined, each one conveying a particular mood. The late Nikolai Kupriyanov, merited masters Yuri Pimenov, Vitali Goryayev, Leonid Soifertis, Orest Vereisky and others have worked in this genre.

In book illustration, the most developed of Soviet graphic arts, we could list a hundred fine artists. If we had to choose one who is representative of the best qualities of the group, it would be Vladimir Favorsky.*

Favorsky's illustrations are amazing for their profound and inspired sense of history. His is

*An illustrated article on Vladimir Favorsky appeared in the August 1962 issue of *USSR*.

A Soviet Exhibition of Children's Books was held in three American cities during the summer of 1961. The book illustrations were especially admired. The questions of visitors demonstrated a marked interest in Soviet graphic arts that the limited scope of that exhibition could not hope to satisfy. That will be the aim of a large Exhibition of Soviet Graphic Arts soon to be shown in the United States.

a magic art, a precise and poetic reconstruction not only of the outer aspect of bygone times but also of their spirit, color, emotional climate. He creates a graphic complement to the text that gives the story new dimensions. He clothes the book's characters in flesh, recreates the setting and the events in visible images. Yet when he does so, Favorsky manages somehow to convey his own idea of these characters and events together with the imprint of the times in which he, the artist, lives. Favorsky's illustrations and the various elements of the book's design are always in perfect harmony with the book itself.

In the easel genre our young artists have undoubtedly developed to the utmost the tradition of the short story told in pictures. The range of subjects is very wide—scenes from urban and rural life, people at work, and familiar landscapes. But these are not casual sketches of transient sights and places. Besides having a common lyric quality, they are thoughtful and reflective, with roots deep in Soviet reality. In the graphic works of our young artists—so varied in mood, subject and style—the image of the huge, light-flooded world they live in is always present.

Our book illustrators, devoted to historic truth, use the traditional graphic forms to heighten and give fuller meaning to contemporary characters and events. But they do not restrict themselves to the traditional values. They experiment with new forms that will give their illustrations a sharper focus, a wider and deeper emotional appeal. They have made the illustration an organic component of a book rather than an appendage.

The younger generation of graphic artists works boldly and successfully both in the field of easel graphic art and book illustrations, relying on the tested traditions of realism and developing them. The quest of the young is not an easy one and not always successful. But on the whole they are progressing in the right direction. Our time—its passions, hopes, memories and dreams—lives in their pictorial achievements.

Chapayev and His Men
by Andrei Livanov

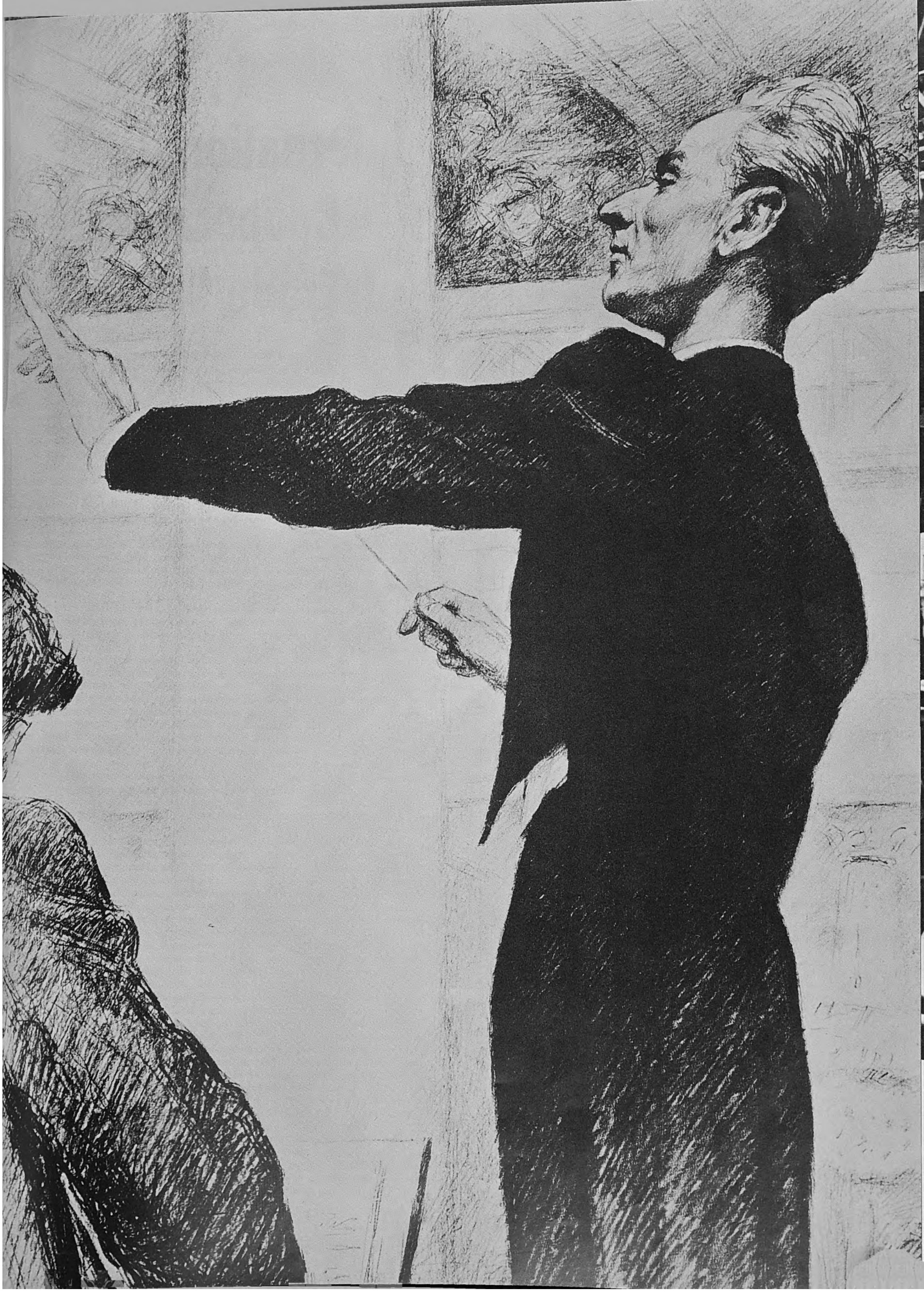
Two Mothers
by Anatoli Borodin

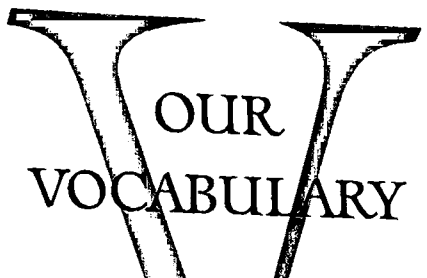
Soviet Graphic Arts

Family Portrait
by Orest Vereisky

Conductor Yevgeni Mravinsky
by Orest Vereisky

In the Subway
by Leonid Soifertis





Union membership. The Soviet trade unions are organizations of industrial and professional workers. They are entirely voluntary, workers are free to join or not to join. Union membership is not required for employment anywhere.

Applicants are voted in by a general membership meeting of the local organization. The initiation fee is one per cent of monthly earnings. Monthly dues range from 0.5 per cent of monthly earnings for the lower brackets to one per cent. The initiation fee and dues scale are the same for all unions.

Union activist is a trade union member who gives a considerable amount of his free time to work on the executive committee, and its various committees, of his union local: production, wages, working conditions, social security, cultural services, housing, child welfare, etc.

More than 23 million activists carry the brunt of trade union activity. Paid union staffs are being steadily reduced at all levels. On the factory level, for instance, only 4 out of every 100 local organizations have full-time paid officials.

Election of union officials in the USSR follows the usual democratic procedure. Every member, without exception, has the right to elect and be elected to any post in any union body. He also has the right to nominate a candidate and to criticize and challenge the other candidates. A candidate is considered elected if he receives a majority of the votes of those present.

The right to work is guaranteed every citizen by the USSR Constitution. All citizens are guaranteed equal pay for equal work, irrespective of sex, age, nationality or race. Management cannot dismiss a worker without the trade union's consent.

The socialist economy, immune from depression and crisis, assures a steady expansion of production, which in turn requires a growing labor force. Thus the legally guaranteed right to work is based on a solid foundation. In the Soviet Union the job looks for the man, not the man for the job, with equal work opportunity open to every citizen.

Collective agreement is negotiated between management and the union local committee at every Soviet enterprise once a year. The agreement lists in detail the commitments of both labor and management with regard to production and working conditions.

Soviet labor laws contain detailed provisions on such major matters as hours, wages, work quotas, labor safety, medical services, children facilities, social security, pensions and housing. Therefore in negotiating a collective agreement, labor and management have only to apply the laws to their specific place of work. Hence trade unions do not have to fight management for the rights of their members.

Union funds come from various sources, each fund being used for a specific purpose. The largest is the social insurance fund, which, strictly speaking, is not a union fund since it is made up wholly of contributions from factories and other enterprises to the national budget. But the state turns this fund over to the trade unions for such welfare items as sick and maternity benefits, free or reduced-rate health and vacation resort accommodations, free or reduced-rate accommodations for the workers' children at summer Young Pioneer camps, and the other benefits and allowances that every family receives in some form or other. The state social security system provides for old-age and disability pensions, paid not by the trade unions, however, but by special state welfare agencies. Generally speaking, the Soviet system of social security takes care of the citizen "from the cradle to the grave."

Another of the union's funds is made up of initiation fees, dues, admissions from paid functions held in union clubhouses, Palaces of Culture and stadiums, and from publications. This fund is used mainly to finance amateur drama, art, choral and other such activities, libraries, sports, excursions, and the various other cultural services the unions provide.

Together with management the union local's committees participate in allocating the so-called fund of the enterprise. This fund is contributed by the management out of the enterprise's profits and is used to improve the working and living conditions of its workers. In addition the management of each enterprise is required to contribute 0.51 per cent of its pay roll for cultural and athletic facilities. The money is disbursed by the union local's committee. ★

International Cooperation of Trade Unions

BY BORIS AVERIANOV

HEAD OF THE INTERNATIONAL DEPARTMENT
USSR CENTRAL COUNCIL OF TRADE UNIONS

"WHEN a man sees things with his own eyes, he understands and believes them," said Herbert Christie, member of the Executive Committee of the Federation of Government Workers Unions of Ceylon, after his tour of the Soviet Union. "We saw socialism in actual practice. We pledged ourselves to tell the truth about this country when we came back home. . . . Not only will we thereby repay to some extent the hospitality shown us, but we will be doing our duty, making our contribution toward mutual understanding and working class unity."

And this is what Inajosa Maldonado, a member of the trade union delegation of Bolivian factory workers, who also visited our country, had to say:

"Before coming to the USSR, like most young Bolivians, I had been influenced by anti-Soviet propaganda, and I did not really know what the Soviet Union was like. But now I know that it has achieved major successes in all economic and scientific spheres and that Soviet workers lead a happy life."

Dozens of similar statements could be cited. People from various countries visit our land, and they view the events taking place differently. Many of them change their opinions of our life, which are often colored by misinformation and old prejudices.

The Soviet trade unions are always glad to help people see and understand our country. We now have friendly relations with trade unions and labor organizations in more than 90 countries, and our contacts keep expanding. In 1961, 273 trade union and workers' delegations from 61 countries visited the USSR at the invitation of Soviet trade unions; last year we welcomed 301 delegations from 72 countries. This year we expect an even greater influx of guests. For the May Day celebrations of international working-class solidarity alone we were host to 65 delegations from 57 countries on all the continents.

People coming here from abroad are given an opportunity to see every aspect of our life and activity, to acquaint themselves with our plans and both our successes and problems in building a new society. We do not hide our difficulties and shortcomings. Therefore any unbiased observer is able to correctly evaluate how the Soviet people live, how the different regions and republics of our multinational state have developed. Last year our foreign guests toured 70 cities in all the 15 union republics. They visited 700 factories and plants, construction sites, mines, collective and state farms. They saw workers' clubs and Palaces of Culture, trade union resorts and sanatoriums, kindergartens, nurseries and summer camps for the children of working people. And this is something that visitors have stressed repeatedly—there was not the slightest restriction on their meeting rank-and-file Soviet people anywhere—in factories, streets, stadiums and parks, in workers' apartments and in the homes of collective farmers. They had no problem getting the answers to any question they asked to find out how Soviet people felt about things that concern workers everywhere.

Our cooperation with the trade unions of the socialist countries is based on full equality, fraternal friendship and mutual assistance. We exchange dozens of trade union and workers' delegations annually. This firsthand acquaintance with factories and trade union organizations helps us learn from each other. The rapidly expanding exchange of factory delegations is likewise mutually helpful. Their skilled workers and ours exchange techniques and improved work methods. This kind of fraternal exchange, without any hiding of "production secrets," helps every socialist country develop its national economy.

Long-standing and traditional friendship binds us with the working people and trade unions of many West European countries. Our ties with the French and Italian organizations are especially strong and many-sided. Although there is no direct contact as yet between the General Council of the British Trade Union Congress and the USSR Central Council of Trade Unions and we belong to different international trade union federations, the friendship between the working people of the Soviet Union and

Great Britain grows stronger all the time. We have very good relations with many British trade unions as well as with a large number of city and county trade union councils. Last year, for instance, 16 delegations from different British trade unions visited our country. An equal number of Soviet workers' delegations were the guests of our British friends.

The friendship and cooperation of Soviet workers with their counterparts in Austria, Belgium, the Netherlands, Luxemburg and the Scandinavian countries is a matter of great satisfaction. Our only regret is that there are some union leaders who do not help to foster mutual understanding and fraternal unity—the trade unions of West Germany, Sweden, Denmark and Norway have no direct ties with the Soviet trade unions to this very day. Unfortunately we also have no contacts with the trade unions of the United States. There are still American trade union leaders who come out against any direct ties between the working people of our countries, a stand that we Soviet people find difficult to comprehend. Why set up artificial barriers between the working people of the USSR and the USA when talks between the West and the East have been resumed by their governments, when even leading representatives of American capitalism talk about the need for peaceful coexistence? To whose advantage is it? The lack of contact and firsthand knowledge with the way working people live in the Soviet Union leads to erroneous and distorted information about our trade unions. Is there any need to belabor the point that mutual understanding and cooperation between the working people of the USA and the USSR and their trade union organizations would be an important contribution to the solution of the most vital problems of our day?

The ties between the Soviet trade unions and the Trade Union Federation of Finland can serve as an example of successful cooperation between the trade unions of a socialist and a capitalist country. Our relations are based on full equality and mutual respect. For a number of years now the representatives of the trade unions of the two countries have been holding regular meetings at which the results of their joint activities for the past year are summed up and a program for the next year worked out. It usually provides for the exchange not only of union delegations but of trade union athletic groups, lecturers and press information. All this is certainly conducive to better understanding, cooperation and good-neighbor relations between the peoples of Finland and the Soviet Union.

The Soviet people have always supported the struggle of the peoples of Asia, Africa and Latin America for freedom and independence, for democratic rights and decent living and working conditions. Now, when the majority of the former colonies and semicolonies are developing independently, the ties between our trade unions and the workers' organizations of the new, young states are developing rapidly.

The stable and long-standing contacts between our trade unions and the workers' organizations of Southeast Asia and Oceania are growing. We have diversified ties with the trade unions of Japan, India, Indonesia and Ceylon, and our relations with the workers' organizations of Argentina, Brazil, Chile, Uruguay, Ecuador, Peru, Bolivia, Venezuela and other Latin American countries are developing.

We are lending fraternal aid to the trade unions of the African continent. We have good relations with the trade unions of Algeria, Morocco, the United Arab Republic, Syria, Lebanon and Aden and with the trade unions of Ghana, Mali, Guinea, Tanganyika, Northern Rhodesia, the Congo, Nigeria, the South African Republic, Zanzibar, Mauritius and other countries.

The Soviet trade unions wish the African peoples every success in their efforts to build a free, happy life, an abundant national economy and a rich culture. We support the struggle waged by the working people of Africa against the vestiges of colonialism, against neocolonialism, against any attempt at their economic and political re-enslavement, and against the resurrection of inhuman apartheid and racist policies.

Aware of the great prestige the trade unions command and what a power they can be for world peace, the Soviet trade unions are working toward mutual understanding and businesslike cooperation with the working-class organizations of all countries. In October 1963 the Thirteenth Congress of Soviet Trade Unions will open in Moscow, and 4,000 delegates representing more than 6 million members will gather to review the work done by the trade unions and to draw up a new program.

We have already sent invitations to the trade union organizations of 98 countries, as well as to various international organizations. Messages of acceptance we have already received from many foreign labor organizations make it evident that the most eminent leaders of the international trade union movement will gather in Moscow for the occasion. Many of them will represent unions that are affiliated with or adhere to the International Confederation of Free Trade Unions (ICFTU). There will also be representatives present from unaffiliated organizations in Africa, Asia, Latin America and Europe. The Soviet working people applaud this heartening evidence of trade union cooperation and are ready to extend a warm welcome to their fellow trade unionists from abroad. ★

IN THE NEXT ISSUE

This first-grader from Riga feels very important in her school uniform. The October front cover symbolizes the theme of the issue—the Soviet public education system. Teaching methods, curriculums, ethical training and the shaping of the harmoniously developed individual are discussed, as well as the vocational orientation of the school and job placement of pupils. The issue will include material on how Soviet pupils study foreign languages and what they are taught about the United States.

In September 1959, about the time the seven-year plan was launched, *USSR* acquainted its readers with the USSR Exhibition of Economic Achievements in Moscow. What changes have taken place in the country in the four years that have passed since then? How does the exhibition reflect those changes? The answers to these questions will be found in the picture story entitled **People's Experience in Focus.**

This is Mikhail Nesterov's portrait of the world-famous physiologist Ivan Pavlov, one of the illustrations for **Russian Painting in the Early Twenties.** The article, which reviews the contributions of Mikhail Nesterov, Konstantin Yuon, Igor Grabar and Vasili Baksheyev, is illustrated with full-color reproductions of their most outstanding works. This brings *USSR* magazine's art series up to our contemporaries.

Did Columbus really discover America? The Soviet explorer David Tsukernik presents new hypotheses based on a re-examination of certain well-known historical facts and documents. The scientist suggests that Columbus was not the first explorer to reach America, that he had information on the new lands which he did not reveal. From the material of the sixteenth century Spanish chroniclers, which had been dismissed as insignificant, the Russian geographer arrives at some surprising conclusions.

Some of the other articles in the October issue are:
A Ride in Moscow, about the public transportation system servicing more than six million people; **The Town Had Two Mayors That Day,** on the work of the chairman of the Vladimir City Soviet: **Moscow School Welcomes American Women**—congress participants attend graduation exercises.

NOVOSTI PRESS AGENCY

USSR

SOVIET LIFE TODAY

News Review The December issue will present highlights of the news of the past year in photographs: meetings between statesmen, the plenary meetings of the CPSU, the everyday life of Soviet people.

Students Speak A stenographic report of a discussion on such questions as "What conditions are necessary for the distribution of goods according to requirements?" and "What do we mean by a society of plenty?"

COMING SOON

Women's Page

THE WOMAN WHO TOOK OFF HER WEDDING RING

BY IRANA KAZAKOVA

"WHAT'S new?" I asked my girl friend on my return to Moscow from a long business trip. She showed me her ring finger. The wedding band was missing.

"You lost the ring?" I asked.

"No, I lost my husband."

I didn't know what to say, so I said nothing. She broke the silence, saying she would appreciate my not referring to the subject.

I don't like women who "tell all." My girl friend doesn't wear her heart on her sleeve; she manages to keep her troubles to herself. I respect her for that, even though I sometimes feel put out about it. After all, I am her best friend.

Sometime later she called up and asked me to come over to the City Court. I don't have to tell you how much that upset me.

When I walked into the court building, I found Natalya in the corridor, conversing very amiably with her husband. My hopes rose. The People's Court, before which divorce cases come, hadn't been able to reconcile them; perhaps the City Court could.

That day several divorce cases were being heard. The hearings are open to the public, and the courtroom was packed. Some of the women were crumpling their gloves nervously; others, I thought, were only trying to look agitated.

I studied law, although I have never practiced it. One of the exams I had suddenly flashed through my mind. The law on marriage, the family and guardianship had been my ruination.

"You don't know the subject," the professor had declared.

"I was never divorced," I had answered brightly. However, our professor had evidently no sense of humor during an exam period, and I didn't graduate with distinction.

I tried to recall what I had learned about the divorce law while listening to a suit being settled.

"Do you agree to a divorce?" the judge asked the woman.

"No!" came the adamant reply.

I considered the case. I felt no sympathy for the woman.

It is not easy to get a divorce in our country. You have to bring the case up in the People's Court (from which it goes to the City Court for review) and announce the suit in a local newspaper advertisement. You pay a tidy sum for the costs.

The court accepts only the most serious grounds. When children are involved and the wife does not consent to a divorce, it is usually not granted. The procedure is overly complicated; a Supreme Soviet committee is now working on the draft of a new divorce law.

Soviet law defends the woman's interests. Even after her divorce, the wife can keep her husband's surname. If there are children, their interests are primary. The father is required to pay his divorced wife a fourth or third of his income until they come of age.

"I suppose they'll fight over the division of property," I said to myself as I looked at the belligerent woman. "In cases where property ownership is involved, the court considers the interests of the wife and children first."

"She doesn't look the type who holds down a job," I mused. "But that doesn't matter so far as property accumulated after marriage is considered. Her housework will be considered a job when it comes to dividing the common property. As for what each owned before the marriage, that remains separate."

I was sorry my professor couldn't hear me thinking then! I could have added that the law requires the ex-husband to support the ex-wife if she is disabled. And in cases where the wife does not agree to a divorce, the husband has to pay the costs.

I heard my girl friend's name called and began to crumple my gloves. The case didn't take long. Both she and her husband had the same answers to all the questions and both said categorically that they wanted a divorce. I had the feeling that the judge was annoyed because it went so smoothly. To all his admonitions Natalya said in a very quiet but firm voice: "We've made our decision."

She came away with me, refusing her now ex-husband's offer to give us a lift. It was only then that I had an inkling of how bad she felt.

I was thinking that she did things the hard way. Another wife, learning that her husband was carrying on with another woman, would have blown up, cried a little, and then forgiven him "for the sake of the child." Some women will do lots more than that to keep a husband.

Natalya would not compromise. Especially where love was concerned. She was sure that if a ship sprang a leak, it would sink. On such ships children could never be happy.

"My son has a mother to look after him," she had said to the judge.

I'm sure there are people who think she did the wrong thing, but I have the utmost respect for anyone who can live by such high principles.

It's been some time now, and her son has reached the asking age. To his question "What's a perigee?" he gets the answer from his granddad. He goes to the park with his grandmother to feed his pet turtle. When mother returns from work, he relates happily how the turtle ate all the dandelions.

His father brings him toys, and Natalya does not discourage his visits.

I am often asked what the position of a divorced wife is in the USSR. I haven't noticed that Natalya feels she is in any special position. She told me that now she even has an advantage over me. For example, as a mother without a husband she can't be fired from her job even if the trade union committee goes along with the management.

Only last week Natalya came back from Bratsk, in Siberia. The design institute where she works had sent her there—she is considered a very promising engineer.

She rushed into my apartment all excited and immediately began to tell me what a wonderful city Bratsk was and what wonderful people lived there. Her eyes were so bright that I couldn't help saying:

"It looks like all 11 units of the Bratsk Hydroelectric Power Station are generating that sparkle in your eyes!"

She laughed happily.

I could see that something new and exciting had come into her life. It might be her job . . . or perhaps a man! ★

USSR Magazine Quiz

This is our second quiz. The first, on Soviet athletes, was in the January issue. The questions this time are on Soviet films. The correct answer to a question marked with an asterisk is worth two points; without, one point. The five top scorers will receive autographed photos of the directors or stars of the films mentioned below.

Send your answers to:

USSR Magazine
1706 18 St. N.W., Washington, D. C. 20009

* 2. Which of these three shots is from *Potemkin*? In what year was this film made? Give the director's name.

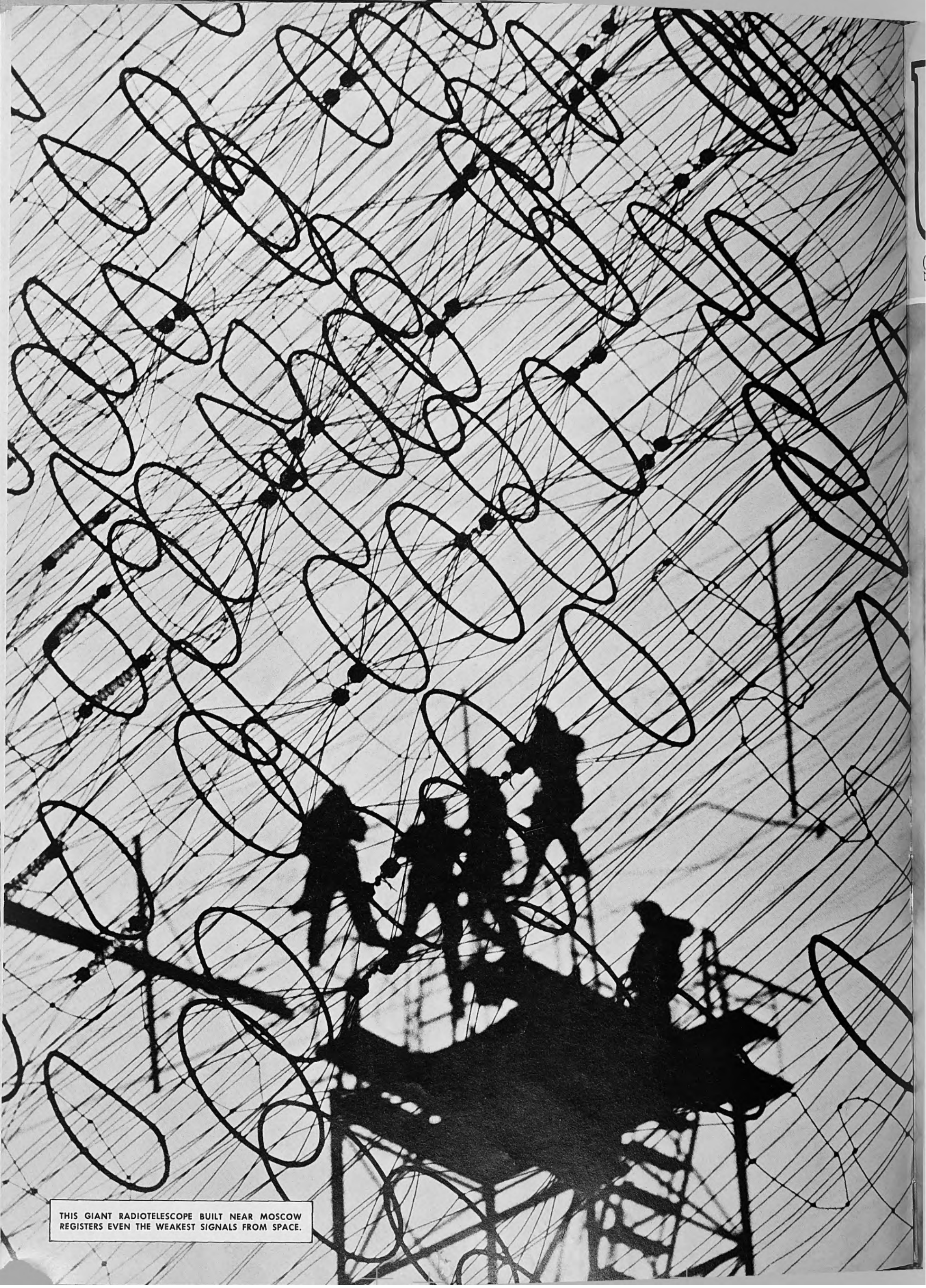
WHAT DO
ABOU

3. Which shot is from *Ballad of a Soldier*? What is the director's name? What other films has he directed?

1. This shot is from *Seryozha* (released in the United States as *A Summer to Remember*). Who wrote the novel on which this movie was based? Name a book by the same author published in the United States.

YOU KNOW SOVIET FILMS?

* 4. Who is this actress? Give the name of the film that made her world famous? Give the role she played.



THIS GIANT RADIOTELESCOPE BUILT NEAR MOSCOW REGISTERS EVEN THE WEAKEST SIGNALS FROM SPACE.

USSR

SOVIET LIFE TODAY

OCTOBER 1963
25 Cents

Soviet Educational System page 4
Portrait of the Country page 18
Who Discovered America? page 28
Our Human Values page 62

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People's Experience in Focu

Four years ago, in the September 1959 issue of our magazine, we told you about the USSR Exhibition of Economic Achievements in Moscow. The exhibition is often called "The Seven-Year Plan (1959-1965) in Operation." What changes has the country undergone in these four years? How did the exhibition reflect these changes? For the answers see picture story PEOPLE'S EXPERIENCE IN FOCUS on page 18.

OUR TRENDS

The Real Facts

Among our recent letters from readers is one from a theological student in West Baden Springs, Indiana. The letter interested us, not because it was unusual but because it expressed, very directly and clearly, a misconception which, we regret to say, a considerable number of our readers share. Since the writer indicates that his letter is not for publication, we cite this excerpt without his name.

Admitting that he was greatly impressed by the article on the Young Communist League (*USSR* No. 2 February 1962), our correspondent writes: "The regard that the members of your youth organization show toward others in giving of themselves, whether in times of peace or war, was most striking to me. Perhaps you are unaware that such sentiments expressed in an article on a Communist group are rather surprising to the average American (and I might add, Christian), who presumes that such ideas coming from you Communists are inconsistent with your basic materialistic philosophy. Pardon me if I go on to say that we just take for granted that such human ideals as self-sacrifice, which we Christians call fraternal charity, you Communists are simply incapable of attaining or, for that matter, even assenting to. . . ."

Alas, we are well aware that this misinterpretation of the ideas and ideals of communism is still widely current. It must be attributed, in large measure, to the fact that so many people are content to draw their information about the Soviet Union and its Communist Party from second-hand sources. At a session of the European Writers' Community held this summer in Leningrad, Soviet writer Ilya Ehrenburg made much the same point. Very many of us, he said, turning to his colleagues from France, Italy, the Federal Republic of Germany and other countries, are here attempting to judge books we ourselves have not read and know only somebody's opinion about. Incidentally, judgment should be based on the knowledge of *genuine* facts and not on hearsay.

This happens to be true not only of writers. Ordinary people in the West, unfortunately, do not have all the facts of Soviet life or a sufficient knowledge of the ideals of Soviet man to arrive at independent judgments without being befuddled by misinformation. That is why we are doing everything in our power to tell our readers how people in the Soviet Union really live and what the ideals of our society really are.

The Program of the Communist Party of the Soviet Union, which our people are working so hard and so enthusiastically to realize, has as its goal a society in which "the elementary standards of morality and justice" will become "inviolable rules for relations both between individuals and between peoples." Communist morality, the Program emphasizes, far from discarding the contributions of preceding generations, comprehends those fundamental ethical values which the masses of the people evolved over the ages as they fought evil and social oppression.

The struggle for the revolutionary transformation of the old society, the labor of building socialism and communism, has augmented this ethical legacy, given it new content, and has enriched the Soviet people with new principles. Marx and Engels, Lenin, Sverdlov, Dzerzhinsky, Kirov, Kalinin and the many other Communists who devoted their lives to the fight for the happiness of the people serve our youth and all Soviet people as examples of genuine self-sacrifice.

We do not want the citizen of our society to rest his judgments on blind belief in some prescribed dogma; we want his judgments to develop out of a conscious participation in the common cause, out of his work with others in building the most just and most prosperous society in history.

Let us review for the reader the moral code of the builder of communism, which is an integral part of the Program of the Communist Party of the Soviet Union and includes such moral principles as:

conscientious labor for the good of society—he who does not work, neither shall he eat;

collectivism and comradely mutual assistance—one for all and all for one;

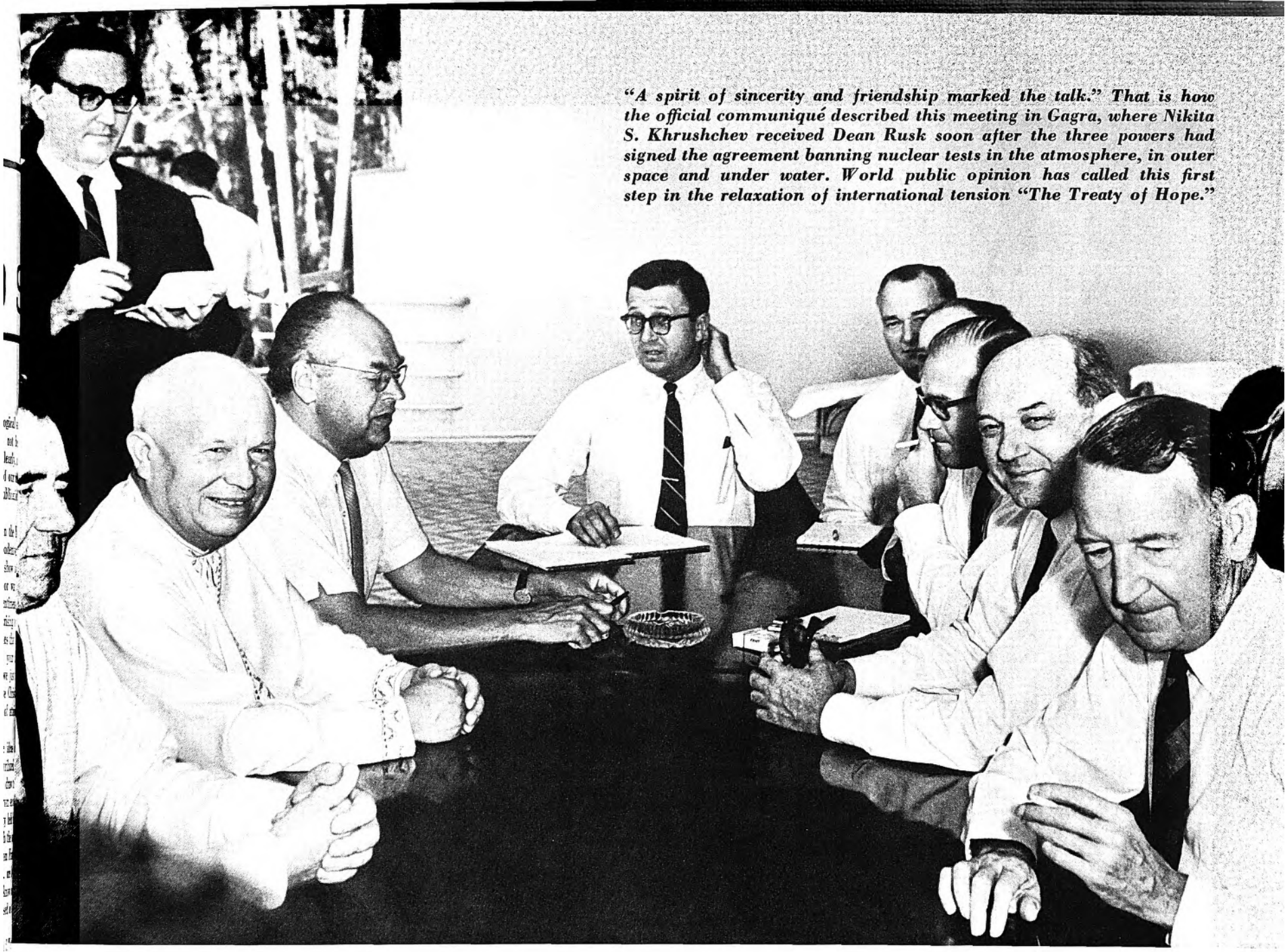
humane relations and mutual respect between individuals—man is to man a friend, comrade and brother;

honesty and truthfulness, moral purity, modesty and unpretentiousness in social and private life;

mutual respect in the family, and concern for the upbringing of children;

an uncompromising attitude to injustice, parasitism, dishonesty, self-seeking ambition and money grubbing;

friendship and brotherhood among all the peoples of the USSR; intolerance of national and racial hatred;



"A spirit of sincerity and friendship marked the talk." That is how the official communiqué described this meeting in Gagra, where Nikita S. Khrushchev received Dean Rusk soon after the three powers had signed the agreement banning nuclear tests in the atmosphere, in outer space and under water. World public opinion has called this first step in the relaxation of international tension "The Treaty of Hope."

fraternal solidarity with the working people of all countries and with all peoples.

We need not wait for a distant future to bring us people inspired by these principles. Tens of millions of such people live in the Soviet Union today, and their work is bringing us closer to this future. To know their feelings and aspirations is to find the road to mutual understanding. And in our times mutual understanding is the key to peace.

Steps to Peace

All peoples want a stable peace, want to be rid of the threat of nuclear war. But peace must be fought for; it is achieved only by the joint efforts of men of good will in all countries. Their long and hard struggle is beginning to bear fruit. The treaty banning tests in the atmosphere, outer space and under water signed by the three powers in Moscow in August has generated new hope. At long last a ray of sunshine has broken through the clouds and storms of the cold war.

This is the first step in many years taken jointly by the Great Powers to relax international tensions. From now on we should no longer be seeing the lethal mushrooms of experimental nuclear blasts in the skies over our planet. New radioactive fallout will no longer be bringing suffering to those of us now living and the generations to come. For this alone hundreds of millions of people on all continents hailed the Moscow treaty. It is the reason the treaty has turned into a worldwide plebiscite. The overwhelming majority of countries have signed or declared their readiness to sign.

The treaty is the first indication of a retreat from the ruinous arms race policy, the ever growing wave of which inevitably threatens to push mankind into the abyss of a nuclear war. But it must be considered soberly. A ban on nuclear weapons tests is not disarmament. By itself it does not end the stockpiling of weapons for mutual annihilation. The threat of a thermonuclear war will not end until an agreement is reached on general and complete disarmament under strict international control. However, it would be a mistake to underrate the importance of the step taken.

The greatest value of the Moscow treaty is its practical evidence of the beginning of a new trend in international relations. It is evidence of the readiness of the signatories to put aside past differences and to resolve problems with patience and persistence, not from positions of strength but by the counsel of reason, by negotiation. Special responsibility for the continued development of this life-saving trend rests with our two countries. As President Kennedy pointed out in his speech at American University in Washington, the USSR and the United States have the wherewithal to inflict unprecedented suffering on each other and to plunge the rest of the world into chaos. Hence, both our peoples have a vital interest in jointly finding the way to mutual understanding and in living in peace.

There are still plenty of problems ahead. The cold war advocates, adventurists of diverse political stamp, have not laid down their arms. With all the fanaticism they command, they work to increase tensions, to step up the arms race and to increase the spread of nuclear weapons. They try to mislead people with false fears and cheap slogans. But such adventurism has no future in our time. Mankind would have to pay too high a price—hundreds of millions of lives and civilization destroyed—if the adventurists were to be given a free hand, even for a short time.

The treaty can be a turning point in international relations. It can and should mark the beginning of stable and peaceful coexistence between countries with different social systems. For that one thing alone it is necessary to develop the success attained, to tirelessly and patiently negotiate all differences. The Soviet Government has already presented a concrete program of next steps which would make it possible to avoid a thermonuclear war. The Soviet people have no doubts whatsoever that all peoples would welcome the attainment of such agreements.

The first is the signing of a nonaggression pact between the NATO member-countries and the countries of the Warsaw Treaty Organization. The second is to freeze, or better still, to reduce military budgets and thereby lift some of the burden which the arms race imposes on the people. The third, in order to avert surprise attack, is to set up control posts on the territories of countries belonging to both military groupings.

These steps would carry us further along toward the goal of strengthening peace throughout the world. They would create a more favorable atmosphere for solving other problems. They would open the way to general and complete disarmament. Appraising the significance of the Moscow treaty very highly, Chairman Nikita S. Khrushchev has called upon the Western countries to show the same good will in discussing these new Soviet proposals. As for the USSR, the head of the Soviet Government stressed, there would be no lack of good will.

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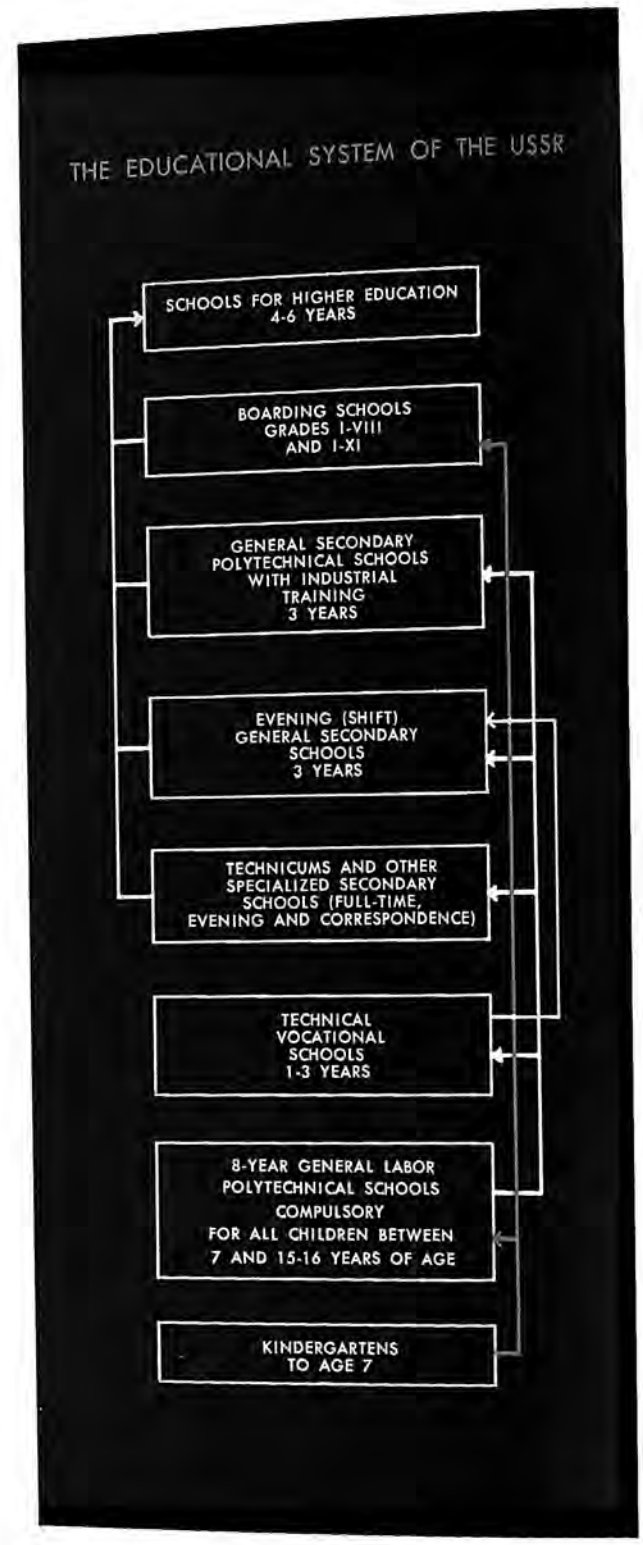
SOVIET SCHOOL

See pages 4-17, 40-57

SOVIET EDUCATIONAL PRINCIPLES



ONE OUT OF every five persons in the Soviet Union is attending some type of school. Prior to the October 1917 Revolution 78 per cent of the population was illiterate. Today everybody can read and write. Eight years of schooling is now universal and compulsory, and within the next decade 11-year schooling will be universal and compulsory. But even now all who wish may freely enroll in the ninth grade and graduate from an 11-year school.

These are the principles that govern the Soviet educational system:

Uniform Course of Study. All types of schools anywhere in the country provide the same education for each age group, so that a student moving from one city to another continues his education without interruption.

Free education at all levels, including that at institutions of higher learning.

Coeducation at all levels and in all types of schools.

Instruction in the native language.

The Soviet educational system is based on the general primary-secondary school. There are more than 200,000 primary, eight-year and secondary general schools, with a total of 43 million pupils. By 1965 the number will have grown to 50 million.

In recent years evening schools and evening school attendance have considerably increased. In the 1958-1959 school year there were 15,500 such schools, with a combined student body of 1.9 million. Today there are 25,200 evening schools. These are schools for young factory and farm workers and correspondence high schools, in which 2.8 million people are enrolled. Students in evening and correspondence schools work a shorter week and are entitled to a paid leave of absence to prepare for and take their year-end examinations. Special schools are organized for workers in plants where changing shifts make them necessary.

The types of general educational schools vary according to local conditions. Small villages with relatively few children have a primary school (first to fourth grades). But the more usual school is the eight-year school, with the primary grades included. The eight-year school may be either independent or part of an 11-year elementary-high school. Besides the 11-year schools, there are three-year high schools, running from the ninth through the eleventh grades. Eight-year-school graduates are eligible for these high schools.

Students at art, theater, circus and dancing schools receive a secondary general education and training in their special field. Children with an inclination for mathematics and the sciences attend special boarding schools.

There are also evening mathematics, chemistry, music and physical education schools which children may attend two or three times a week after their regular school work.

Children with physical and mental handicaps (the deaf-mute, the hard of hearing, the blind or partially seeing, the mentally retarded) go to special schools.

WHAT THE SOVIET SCHOOL TEACHES

BY VLADIMIR STREZIKOZIN
CHIEF, PROGRAM AND METHODS BOARD
RSFSR MINISTRY OF EDUCATION

THE accompanying chart lists the study material for every school grade. Our children master this material without great difficulty because of the progressive methods of teaching and the teacher's efforts in developing the abilities of each student.

We teach reading and writing by the analytic-synthetic method. In the first semester of the first grade the children are given the elementary reading and writing skills. In the second semester they are able to read short articles and stories with comprehension and expression. In the grades that follow they read, with some ease, not only the articles adapted for the grade in the textbook but also short pieces of fiction by such Russian classical writers as Alexander Pushkin, Leo Tolstoy and Nikolai Nekrasov.

In the first grade the children work together on two- or three-sentence stories and tell and write them down. By the fourth year they are able to make up and write a short story based on life at home or school, to write what they think about a book they have read, and retell, briefly, something they have read. The teacher tries to develop in the children the ability to express their own thoughts, and supports and encourages their creative efforts. In the upper grades the children have discussions and write compositions on subjects of their own choice.

The mathematics teacher helps them learn the basic arithmatic skills and develop the ability to solve problems and to apply the knowledge they have acquired practically.

In the natural sciences the children are taught to explore intensively and interpret rather than just describe the phenomena they are studying. They are taught to go beyond the facts they have learned in making their interpretation. They study modern scientific and technological discoveries, and have well-equipped laboratories to work in. In physics ninth-eleventh grade students learn about the physics of the atom, supersonics, semiconductors, the physical properties of plastics and their use in industry, outer space and its exploration. In chemistry upper-grade students study the properties and structure of high molecular compounds, their classification and the basic methods of synthesis. The course in general biology similarly covers the basic modern data in the field.

Beginning in the fifth grade the children study foreign languages, with heavy emphasis on speech. While they are acquiring the oral skills, they are learning phonetics and grammar. As their oral work improves, they learn to read more rapidly. Students in the upper high school grades can read rather difficult texts with the aid of a dictionary. As a rule, in their second year of foreign language study children are able to read adapted texts fairly well, as well as simple passages from the original. English language students read selections from Jack London, Mark Twain, Charles Dickens and Theodore Dreiser. They can understand conversation and express their own thoughts simply in the foreign language.

In 700 schools a foreign language is taught beginning with the second grade. In the upper grades of these schools a number of the other subjects are also taught in the foreign language.

A love for work and primary practical skills and habits are instilled in the child in his very first years at school. In grades one to four children learn to work with paper, cardboard, soft tin and wire; they study simple dressmaking, and grow house and garden plants. In grades five to eight they work in the school's metal and carpentry shops and on the school's garden plot. They study the manual and mechanical processing of metal and wood, they learn to assemble and repair an electric circuit and electrical home appliances, they grow farm crops and take care of young farm animals. Besides this, the girls take domestic science, which covers dressmaking, cooking and housekeeping.

The eight-year school familiarizes the child with various vocations and helps to uncover any special inclinations. The 11-year-school student gets his vocational training directly at factories and on building sites, state and collective farms, and in cultural and educational institutions. The larger factories have separate practical training shops; others assign workers to train students alongside them at the bench.

Vocational training equips the student for a specialty, and he needs no further training to qualify for a job.

Every republic in the USSR has its own Ministry of Education. Schools of the same type throughout the country use the same course of study and follow the same sequence, except that in each republic its native language and history, economy and culture is also studied. Often we find the emphasis on a particular subject varies according to national tradition. In the schools of Latvia, for instance, singing is taught in grades 1-11. In all the Soviet republics the native language, the Russian language and a foreign language are taught.

This uniform system makes it possible for pupils to transfer from one school to another without losing time. It also makes it simpler for educators to plan curriculums and devise teaching aids.

Students in high school grades 9-11 may take optional courses in the history of art, physics, chemistry, literature, technology and other fields of study. Students may also take extracurricular courses and lectures offered at Houses and Palaces of Young Pioneers, technical and tourist centers, and at centers for young naturalists.

The school year varies with the age group. In grades one to four it is 35 weeks; in grades five to six, 36 weeks (that includes one week for practical training); in the seventh grade, 38 weeks (with two weeks of practical training); in grades 8-11, 39 weeks (including the time devoted to the preparation for and the taking of final examinations).

CONTENT OF SOVIET ELEMENTARY

SUBJ

I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	X.	XI.	GRADES	
Elementary instruction in reading and writing a. reading short stories b. writing prepared stories	Reading articles and stories from Writing	short selections fiction and poetry. stories based on ob	Reading according to a topical plan. servation.	Pho- netics. Morph	ology. ←	Syntax. →					Russian language (2,184 hours)	
				Expositions and	compositions based	on observation and	literary material.					
				Study of short and poetry	works of fiction by topic.	Elementary course Soviet	in classical and literature.	course in	Systematic the history of Russian literature. A short history of foreign literature.	and Soviet	Literature (696 hours)	
Operations up to 20; counting up to 100.	Operations up to 100; counting up to 1,000.	Arithmetical up to Introduction to fractions.	operations 1,000,000. Units of time. Compound concrete numbers.	Whole numbers; common and decimal fractions.	Percentage and proportions.						Arithmetic	Mathematics (2,154 hours)
					Rational numbers. Monomials and polynomials.	First-degree equations. Algebraic fractions.	Quadratic equations. Functions and graphs.	Equations and inequalities. Power with rational exponent. Trigonometrical functions of any argument.	Trigonometrical theorems of addition. Numerical sequences. Logarithms.	The derivative and its use in studying functions. Complex numbers.	Algebra	
Introduction to geometrical figures.	Straight lines and segments. Construction of squares and rectangles.	Angles. Properties of the angles of rectangles and squares. Dime	Calculation of areas and volumes. nsions.		Triangles. Parallel straight lines.	Quadrilaterals. Circles. The areas of rectangles.	Similarity of figures. Polygons.	Geometrical transformations. Solution of triangles.	Solid geometry.	Volume measurement.	Geometry	
			Stories from the history of the Soviet Union.	Ancient history.	Medieval history.	An elementary history of	course in the the USSR.	the history of the history	Systematic course in USSR; modern and of other countries.	contemporary	History (726 hours)	
										Fundamentals of philosophy, political economy, ethics and morality.	Social science (70 hours)	
			Natural history. about the natural and natural resources of the district and the	An elementary course in physical geography and map reading.	The geography continents and the countries, facts natural features population.	of the principal about and Natural divisions economy	features, population, administrative and the national of the USSR.		Economic geography of foreign countries.	Economic geography of the USSR.	Geography (484 hours)	
			Elementary fac country.	Botany: basic structure, life, and importance	facts on variety of plants. Zoology: animal	a survey of groups.	Anatomy, physiology and hygiene.	General biology.			Biology (406 hou	Phy
												Optics

AND SECONDARY EDUCATION

E C T S

Physics (531 hours)					Physical phenomena and magnitudes.	Mechanics. Heat.	Sound. Light. Electricity.	Mechanics. Molecular physics. Heat.	Electricity.	Optics. The atom.	
Astronomy (39 hours)									Short course.		
Chemistry (407 hours)						Structure and composition of substances. Main classes of inorganic combinations.		Systematic course in inorganic and organic chemistry.			
Drafting (149 hours)						drawings.	How to read Elementary course in geometrical and mechanical drawing.				
Foreign languages (726 hours)				Vocabulary and word combinations—250. Learning to speak a foreign language. Beecher Stowe, Oscar Wilde,	Vocabulary—450 words.	Vocabulary—625 words. Reading foreign texts. Theodore Dreiser	Vocabulary—800 words. Translation of selections from the works of Jack London, Mark Twain, Harriet and Charles Dickens (for students of English). Learning to write.	Vocabulary—1,000 words.	Vocabulary—1,200 words.	Vocabulary—1,500 words.	
Drawing (248 hours)	← Drawing from nature; drawing based on themes; ornamental drawing. →										
			← Art discussion. →								
Music and singing (233 hours)	← Solo and choral singing; fundamentals of music. →										
			← Discussion of music; listening to musical compositions. →								
Physical education (792 hours)	Gymnastics and active games.		Gymnastics, track and field sports, games, skiing.	← Gymnastics, training in skiing, games, track and field sports. →							
Manual training (889 hours)	embroidery; weaving;	Self-help, household tasks; sewing; working with natural materials, paper and cardboard. Technical modelmaking. Work on a garden plot		Technical machinery	Woodworking and metalworking. modelmaking. Farm work. Elementary facts about and technology. Domestic science for girls.						
Vocational training.								Fundamentals of mechanical engineering. Electronics. Theoretical and practical training in a chosen specialty.			
Elective classes (234 hours)								Supplementary classes in keeping with the interests and inclination of the student.			

EDUCATION MAKES THE MAN

BY LYUBOV KABO

TEACHER AND WRITER

MY FORMER CHILDREN visit me. I still call them "my children." What else can I call these people who once sat at their desks facing me? Some of them are already nearing 40, most of them are from 25 to 30, and there are a few under 20. We always have things to talk about—literature, art, politics. Sometimes we get into fierce arguments. They observe parliamentary rules of order only out of respect for their former teacher's gray hair. I, however, ignore those rules completely. As a teacher, I can only experience pleasure in that situation, for I know that they learned from their other teachers and me the most important thing we had to give them—how to think.

How much energy it cost us! How many "two's" (unsatisfactory) we gave for written work that did not contain a single independent idea! How sarcastic we were in class to those who swallowed other people's ideas uncritically, to whom a collection of half-baked theories served as facts, those who quoted authorities on everything! How many discussions we had, how many exciting debates!

One of those who now visits me is geologist Zhenya Golovin (he will always be "Zhenya" to me, not Yevgeni) with the laughing eyes. I recall an incident. We were having a discussion on the historical novel, the objective conditions which helped it develop. Zhenya, all engrossed in the argument, razzed his opponent. I lost my temper. "Is that the way to behave? You're going to the principal with me for that!" I can't imagine why I suddenly reacted like that. But we went, and as we walked down the long corridor to the principal's office, Zhenya kept arguing:

"But it seems to me that for the development of the historical novel we must. . . ."

"The least you can do is apologize."

"Just a minute! Historical novels can develop if. . . ."

Those dear people of mine! That is Zhenya, who used to be all-fired by an idea and would never take anything on faith. And then there is dreamy Lyonya Rashpovich, who still has something of the child about him with his slow, enigmatic smile. And impetuous Ulyan Pirumov, who always seemed to be driven by a wind of flames. And his bosom pal Oleg Fyodorov, always so sincere and even-tempered.

I could go on and on. They are all so different! It was an amazing class: great friends, unrestrained dreamers, archadventurers. How carefully did we teachers nurture these fine qualities, foster the friendships, develop their talents. Each arrived at the answers to problems in his own way, independently. Some grasped things quickly; others got to the core of things slowly but deliberately. Kirill could do neither. But he had his own way of working. The class would help him by nodding, smiling, and bolstering every effort he made. The teacher used to say: "You see, you can do as well as anyone else. Good boy, Kirill, you got a 'five' (excellent) today!" And actually, after a while he did do excellent work.

On the last day of school the class hid a bottle under one of the floor boards. Thirty of them had put their signatures on a sheet of paper that they stuffed into the bottle. They then swore to meet in this very same place 10 years later—on a specific day and at a specific hour—come what may.

The reader will say: There are all kinds of teachers and all kinds of classes; the important thing is the system of education. And that is right! So let us talk about our system of education and upbringing and the results.

We still have shortcomings, many of them. For instance, in some places vocational training is not taken seriously enough, is only a formal gesture. Elsewhere, on the other hand, there is such an interest in vocational training that the most important function of the school is overlooked: to give the pupil a basic background in all branches of knowledge. But that sort of thing can happen in any large-scale operation. Sometimes teachers let themselves be guided by expediency rather than sound educational principles. We also still come across pedagogical apathy and unimaginative routine.

Taken as a whole, what does our system of education strive for most earnestly? The answer: to raise a generation of thinking, independent people with knowledge and ability.

Last year the word "Lipetsk" could be heard everywhere Soviet teachers gathered. I was fortunate enough to observe some Lipetsk teachers. Their lesson plans were carefully thought out, their teaching methods varied and flexible (particularly in the use of visual aids), which clearly had required much work on the teachers' part. But the chief value of these lessons lay not in the fact that they had been well thought out and prepared but that they were so admirably planned to force the pupils to think. That thinking made the lesson interesting to the children, motivated them to learn, understand and remember as much of the material as possible in the 45 minutes allocated. They were 45 minutes of training the mind.

"Unfold your maps," the geography teacher said to her seventh-grade class upon entering the room. "Now tell me, children. . . ." The children had not been taught anything yet, but she confidently had one, then another, then a third, rise. She mobilized all their resources of knowledge, their experiences, their observations. And the children gave her the answers. The review of the old material and the new conclusions that were drawn were all organically fused in this vivid, carefully directed discussion.

Only later, when the most important part of the lesson was over, did the teacher make her generalizations, the children listening intently to her graphic and effective explanation. She told them what the best writers had said about the Russian forest (the theme of the lesson was the Forest Zone), while from the classroom walls great painters spoke to the children in the moving language of their canvases.

At the next lesson the mathematics teacher, young, energetic Emilia Lakhnina, walked briskly into the room. One graph, then another, and the pupils had to make up equations for them. "Think, think!" the teacher said first to one pupil and then to another. The children seemed to be easily following the pace set them. They worked beautifully—correctly and efficiently. Experienced teacher that I am, I thought: "It can't be!" And I did some guessing: "That towhead sitting at the last desk—she'll surely be unable to do that problem, it's beyond her." But that towhead rose and answered quickly and clearly. Not in this class or any other, not in a single school in Lipetsk did I see on the face of any child a look of absentmindedness or boredom. Their faces reflected only the joyous effort of thinking and a lively interest.

Was it only in Lipetsk that I saw such inspired children's faces? Heavens, no! The true teacher, one who works creatively, tries first of all to get children to think. And how many such teachers there are! The reason why the city of Lipetsk got into the limelight was that here more than elsewhere they made the experience of their best teachers available to all the other teachers in the region.

Recently a discussion in the press was started off by Stepan Titov, an old rural teacher, the father of Cosmonaut No. 2. "Why do we teach literature?" he asked. "Do we teach the children to think independently, to defend their own point of view? Do we know how to develop their sense of beauty and to arouse whatever creative feeling they might have?" I should suppose that there never was a teacher of literature in the country who has not raised these questions at some time or other. Thanks to the Novosibirsk scientists, math teachers became concerned: How can we discover future scientists among the school children; how can we educate them?*

"That's all very nice—this blossoming of the individual and the development of creative thought," some people might say. "But doesn't your Soviet collectivism contradict all that?"

The little fellow who goes to school for the first time is full of a sense of his own dignity. What will the grown-ups at home ask him when he comes back from that first day at school? "What was your first day in public life

*See May 1963 issue of *USSR*, p. 22.

like, son?" Of course they won't ask him any such question. It will be: "Who are your classmates. Are the children friendly? What did you do in class?"

For the child who is at the threshold of life we set communist ideals. And what better has man produced than these ideals? At an age when the child's character is malleable, we tell him: "Man is to man a friend, comrade and brother, without national distinctions, without social barriers." We say: "The only thing that makes life worth living is to be of value to society so that the working people around you may live better." Is that bad? "Man, you who are the only inimitable thing on earth," we say to him, "it is wonderful that you are inimitable, the only one of your kind. We who teach and rear children will devote our lives in order to develop in you those qualities that make you like no other, your talent, your particular personality and your independence of thought. But remember: You are not alone in the world; you live with people and only for people!" Collectivism to us means the most complete flowering of the individual. In friendly intercourse with others we polish new facets of ourselves.

Different teachers? Different classes? Oh, no! Here we are very much one in spirit.

Our pupils decidedly will not put up with self-interest, greed, egoism. I remember my last class was in a factory. Vova K. worked apart from the others, by himself, conscientiously. The pupils worked cheerfully, but nothing poor Vova did escaped their criticism; for example, the fact that when the class went on a hike he put only his own things in his knapsack and none of the class's things, and the fact that he hid his sandwich instead of sharing it with a hungry classmate. They did not scold him, they did not take him to task. They only laughed, although puzzled—they couldn't understand Vova. A cave man, they called him, an unusual creature. But the strange part about the whole business was that Vova always stuck close to the class. He would be evasive, sly, usually out for himself, but he always took part in class activities. You ought to see the letters Vova now writes to his school friends!

Once the very spoiled son of a Minister showed up in our class. He thought that he could do anything and get away with it. But my "children" thought otherwise. They offered him a simple choice: "Either do right or get out of here!" I happen to know he found it rough going, but he decided to stay. That is collectivism—not dull uniformity, not a barrack-like spirit but gay, demanding, live comradeship.

But let's get back to the bottle. What came of it? Ten years later, exactly on the day and the hour agreed upon, 28 people gathered in the school. They let neither distance nor time stand in their way. One of them, a well-known Leningrad actor, had to perform in a play that evening, so he sent a telegram. And there was a radiogram from the distant Antarctic, from a sailor working with a whaling fleet, who sent greetings to his school friends. Everyone else came.

At the hour set for the reunion the school building was locked. One of the men, a diplomat just returned from America, took off his jacket, rolled up his shirt sleeves, and climbed into his old classroom through the fire escape. And another, who now holds a Master of Physicotechnical Sciences degree, tried to pull up the floor board under which the bottle had been hidden, mumbling all the while: "What we need is a crowbar."

Why all this reminiscing? No reason, except that we who teach children and the children we teach rejoice in that eternally living, eternally young institution we call the Soviet school.

THE EDUCATION BUDGET

BY MARIA RYABOVA

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USSR MINISTRY OF FINANCE

AT THE PRESENT TIME the Soviet schools, which have a total enrollment of about 50 million—a quarter of the country's population, are maintained by funds from the national budget. One of the principles of Soviet education is that the people who study should not have to worry about providing for themselves. For that reason students in colleges and specialized secondary schools (for training technicians, doctor's assistants and the like) receive stipends, pay very little for dormitory accommodations, and get their meals at nonprofit-making cafeterias.

The state covers most of the costs of the preschool institutions attended by 6.2 million children. It also maintains our wide network of clubs, museums and subsidizes theaters and concert halls.

Funds for education in the past 10 years have doubled those for any other item. In 1963 they totaled 13.8 billion rubles, or 16 per cent of all

budgetary expenditures. (In comparison the country's defense expenditures today are 13.888 billion rubles.)

Of the 12.4 billion rubles spent by the state in 1962 on education, 2.9 billion came from the USSR budget, 3.4 billion from the republics' budgets and 6.1 billion from the local budgets. Nine-tenths of all these budgetary expenditures were paid for out of the profits of the socialist enterprises. The large share of local funds is due to the fact that they go to maintain an overwhelming majority of the most common types of educational institutions—the general education schools, the kindergartens, libraries, etc.

Most of the money is spent on the general education schools (eight-year schools and 11-year schools). In the 1962-63 academic year the number of secondary school pupils increased by 7.6 million, or 25 per cent—to 38 million—as against the 1958-59 academic year. Budgetary expenditures for schools of that type increased in the same period by 38 per cent and totaled 3.67 billion rubles in 1962. This has meant more money for more teachers, better school buildings, classrooms, laboratories and workshops.

We now spend 87 rubles a year to train an eight-year-school pupil, and 90 rubles a year for an 11-year-school pupil. Costs are slightly higher in rural schools because of the smaller student bodies, and in the schools of the union republics, where Russian is taught in addition to the native and foreign languages.

A good many boarding schools have been set up in the past several years. This is one of the state aids to working parents in helping them bring up their children. In 1962 these schools were attended by 870,000 children as against 54,000 six years ago. The children at these 11-year general education boarding schools go home for weekends, holidays and their vacation periods.

In 1963 the state will have spent 700 million rubles, 16 times the 1956 figure, to build, equip and maintain these schools and their students. Part of the pupils' maintenance costs are met by the parents; the amount depends on their income. Families in the low-income brackets pay nothing. This year the parents' payments covered slightly less than a tenth of the boarding schools' expenses.

The state also maintains day boarding schools and after-school facilities in regular schools where the children of working parents are looked after until they can be called for. The extra expenses involved are covered by the state. These schools and after-school facilities were attended by a total of 1,561,000 children during the 1962-63 academic year; the budget had 21 million rubles earmarked for that purpose.

School construction is also paid for by the state. Each year of the fourth five-year plan (1946-1950) schools were constructed for 236,000 pupils. In the fifth five-year plan (1951-1955) the figure was 392,000, and in the past four years it has jumped to 1,016,000. All told, in the past seven years school space has been provided for 8.6 million pupils. Over the same period the collective farms have built schools for 4.5 million pupils on their own initiative and with their own funds.

All Soviet teachers are paid by the state. Their salaries depend on the grades they teach (one to four, five to seven or eight to eleven). For his basic salary the teacher of grades one to four teaches four hours a day; the teacher of grades five to eleven, three hours. If he puts in more time, he is paid more. Salary also varies with the teacher's qualifications—educational background and years of teaching. Teachers in rural areas are given rent-free apartments.

A teacher with 25 years of service is entitled to a long-service bonus even if he is only 45 years of age, a decade or more short of the retirement age. The long-service bonus amounts to 40 per cent of the regular salary and has nothing to do with the pension. Upon reaching pension age (55 years for women and 60 years for men), teachers may retire on an old-age pension if they so desire.

Teachers are trained at universities, teacher training colleges and pedagogical schools (for the elementary grades) for periods of five to six years, four to five, and four years respectively. The state spends 857 rubles a year to train a teacher at a college and 430 rubles at a pedagogical school.

PEDAGOGY: AN EXACT SCIENCE?

BY LEV ITELSON

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SCIENTIFIC DEVELOPMENT occurs in a paradoxical way. Often it will give us an insight into highly involved and unusual phenomena while withholding information about seemingly simple, everyday things. Indeed we know more about outer space, thousands of light years away, than about the structure of our earth. We have a better understanding of the mysterious world of the atom than of the behavior pattern of ordinary ants. And we know next to nothing about ourselves.

A child's growing up appears to be an age-old, thoroughly familiar process. A child is born, takes its first halting steps, utters its first words. Then come the first questions to which we supply the answers, the first school lessons, games, books, work, play and friends. The picture of a girl or a boy friend hidden from adult sight. Then questions we can no longer cope with, and finally independent action. Which brings the fact home to us that this is an individual in his own right, with his own ideas, attitudes, sentiments and aspirations, wanting to live his own life.

What kind of life will it turn out to be? We adults naturally want the younger generation to live unclouded, fulfilled and honorable lives. We want our successors in the relay race of life to hold high the baton of struggle for knowledge and creative work, for a better future, handed down from countless generations before us. And of course we want our children to be finer, better people than we ourselves are.

It is through the science of pedagogy that we will achieve this goal, perhaps a more vital goal than the conquest of outer space. For is it not through pedagogy that the characters of our future space conquerors must be molded?

But while the general tasks of pedagogy are explicit enough, the period of time necessary for their accomplishment is still highly uncertain. To this day educators prefer to talk of things as they should be, not as they really are. Pedagogy prescribes rather than explains; it summarizes more often than it proves.

All these are typical of the "teething troubles" that every branch of learning starts out with, when instead of a valid theory by which to make judgments and comparisons it has only a body of generalized practical experience to work with. When pedagogy today tells the teacher "to estimate the pupil's capacity, to divide the material into accessible units, and then proceed from easy to increasingly difficult material," this makes sense only at first glance. Actually, we know very little about "capacity" and "accessibility."

A science develops by the successive comprehension of unknown phenomena. The more involved the system under study, the more time science needs for bringing it within the bounds of quantitative and structural analysis. The achievements of Newtonian physics were equaled in chemistry only in the century that followed; in biology they were matched only in recent decades.

As for pedagogy, it still has a long way to go to equal these achievements. And understandably so, for the human brain and the product of its functioning—psychic activity and the human personality—are the most complex and least studied system of the universe. What is more, pedagogy is concerned with the laws of development of that system, with the means of controlling it and with the ways of molding the character of the individual.

The question arises: Is it possible, in the face of such great odds, to make pedagogy—at least to some degree—an exact science? Can we increase its powers by using mathematical methods as a research tool?

When the system is much too complex and difficult to study directly, a roundabout approach is sometimes employed. We look for a simpler and better-known system that is subject to similar laws, and use that as a model for studying the complex system.

Thus Newton, in order to elucidate the movement of heavenly bodies, studied the mechanism by which a ripe apple falls to the ground. Rutherford patterned his model of the atom on the solar system. Pavlov drew on the familiar art of training animals for insight into their behavior.

Cybernetics makes it possible for us to use a similar approach in pedagogy. The molding of a child's character, the inculcation of knowledge and techniques, the amassing of experience, the establishment of social behavior patterns—in short, all the functions of a teacher—can be summarized as *control* of the growth process of the individual.

It follows from this that the entire educative process can be viewed as a particular kind of control. We should therefore be able to apply the concepts and methods of *cybernetics* (the comparative study of the control system formed by the nervous system and brain and mechanicoelectrical communication systems) in studying this process.

One of the basic principles in cybernetics is that any form of control presupposes accumulation of the necessary information, its communication and processing, resulting in definite purposeful actions and states. The educative processes are no exception to this rule, for the teacher, aided by the pupil's environment, reaches him by communicating information of some kind. This information is "processed" in the pupil's brain, inducing certain changes in his store of knowledge, habits, behavior patterns, *i.e.*, in his personality. The teacher checks on these changes according to the fresh information he has gained from the pupil's answers, actions and behavior (the "feed back" principle), processes this information, and on this basis determines his future course according to his teaching goals.

This process can be viewed from three different angles. First, *what* does the teacher communicate to the pupil? (The problem of analyzing the *content* of education.) Second, *how* does the pupil assimilate and incorporate into his behavior pattern the information he receives from the teacher? (The problem of analyzing the *mechanism* of the process of education.) Third, *how* should the educative process be designed to produce the desired results? (The problem of analyzing the *organization* of education.)

With such a cybernetic formulation of these three major questions that arise in any science, we can use several highly effective modern techniques of mathematical research to solve our pedagogical problems—such concepts and methods as statistics, the theory of probability, the information theory, mathematical logic and algorisms, the theory of operations research, cybernetic modeling, the automatic control theory and the general theory of systems.

Generally speaking, what is required in teaching the essentials of a science, a skill or an art? Selection of material, the proper questions and assignments in sufficient number, their arrangement in a definite order (system) and division into units presented to the pupil one at a time (lesson). With that the use of various training methods (explanation, demon-

stration, exercise) to organize the mental and practical work of the pupil in such a way that he perceives, comprehends and retains the desired knowledge, techniques and habits.

Until recently compilers of textbooks and courses of study, methodologists and teachers did all this by basing themselves on certain general, and rather vague, principles; their own experience, judgment and intuition; and, finally, practical tests.

In the past this was a workable arrangement, productive of tolerable, although never brilliant, results; the schools always came in for criticism. But in our day it is inadequate, and increasingly so.

Some estimates have it that the sum total of man's scientific and technical knowledge doubled in the past half-century. There is every reason to believe that it will continue to increase at an accelerated pace. Even today the schools are flooded by an overpowering stream of new facts, new information acquired from scientific and technical progress. Imagine what the situation is likely to be in a few decades!

Under such conditions the problem of selecting and systematizing the teaching material and the teaching process that will most adequately provide the student with the essentials of modern science—and moreover guarantee that the teaching stimulates the maximum use of his capacities—has become education's No. 1 problem.

Studies made by the author of this article show that cybernetic concepts and methods may help us solve some aspects of this problem. We have been able to establish that a student's capacity usually ranges from six to seven bits (units of information) per second when acquiring new information, is 18 bits per second when processing familiar information, and reaches 70 bits per second when dealing with information based on automatic techniques. This permits us to calculate the time students need to complete certain types of assignments, the reasonable size of these assignments, and the sequence in which they should be augmented.

Experimental tests carried on at Schools No. 46 and No. 81 in Baku and similar tests undertaken by the staff of the Pedagogical Institute in Kursk at schools in that town confirm these figures.

Application of the information theory gives us an instrument with which we can make precise calculations of the *degree of complexity* of individual portions of the material offered to pupils and the correct *size* of these portions; the application of mathematical logic and algorisms opens the way for an exact analysis and description of the *system* of this material and the *structure* of the activities studied. For example, studying the work of the person in charge of an installation in a Baku oil refinery, we were able to derive logical formulas and integral equations which gave us a comprehensive description of both the system of intellectual operations required to operate the installation and the system of concrete physical acts performed.

These formulas are rather complicated and call for special knowledge, and we shall therefore not include them in this article. But we should like to note that they have served to reveal a number of errors in the present method of training workers in the operation of such installations. As a consequence, the training program is being improved. We are now engaged in similar research with other types of teaching.

Last but not least, our latest studies seem to point to certain ways in which the methods of operations research may be applied in the solution of the more complex problems in programing, planning and organizing training processes.

These initial results warrant the conclusion that this new approach opens up great opportunities in pedagogy, opportunities that are completely beyond the traditional methods and concepts.

OUR BOY-GIRL RELATIONS

BY ARTHUR PETROVSKY

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"AND WHAT DO YOU DO when Cupid steals into your school every spring, mixes with the crowd of seniors and shoots his arrows about? Do you catch him, break his arrows and pluck his wing feathers?"

"What shall I say? Cupid is hardly our most desirable guest. He can give us a lot of trouble. But nobody bothers to chase him away. No, we think it better to tame him rather than break his wings."

"And do you succeed?"

"Most often we do."

"Well, to put it somewhat less fancifully: With your coeducational system, it is a little hard for me to believe that the relations between your boys and girls are not based on sex. It's a simple law of nature, unless you've discovered a way of getting around it. Have you?"

"First of all, we differ in our interpretation of a law of nature. The laws to which human psychology is subject are not identical with natural laws; they are more likely to be laws of human society. Man is a social creature and lives in a society that has reached a high level of development, not only in the material sphere but also in the sphere of human relations, specifically ethical relations. To speak of human relations in terms of natural laws is tantamount to saying that man is no more than a talking animal. What about love?"

"You're not trying to argue away the fact that sexual attraction is an important element in love, are you—especially for young people?"

"Only a prude would say that. Of course sexual attraction is a factor. But from our point of view human love does not boil down to physiology. A long way back Engels said that in love is contained the greatest ethical progress. That holds true for young people too. Observing our young people, I'd say that more and more characteristic of their love relations is the romantic element, the idealization of the object of one's love. The predominant emotions are respect, tenderness and concern. The higher a young person's moral values, the more dominant these emotions. Love ennobles sexual attraction, gives to it a unique human character and reveals qualities of beauty and strength in a man which he himself was not aware of and others never suspected he had.

"I recall a case in a Moscow boarding school. A senior, let's call him simply S., stood out among the others because of his lack of discipline, cynicism and the boorishness he displayed toward older people and girls. There was even some question of expelling him. Suddenly he fell in love. This caused understandable apprehension. But it soon became evident to both S.'s teachers and his classmates that here was a changed young man. His very deep and unselfish love for the girl had routed all his former cynicism and boorishness. This first love of his, arising out of mutual attraction, had elevated the boy in his own eyes and in the eyes of those around him.

"Objectively, the basis of love is the sex instinct. Subjectively, for a young couple in love their behavior will be a negation of that instinctive urge. Its salient elements will be youthful romanticism and chastity."

"How does the story end. Did they get married?"

"So far as I know, not yet. Marriage among high school seniors is very rare, practically nonexistent."

"How do you explain it?"

"It's not an easy question to answer and there is probably more than one answer. Material things are not the big deterrent, except for the acute housing problem—which is likely to be only a temporary obstacle. There are also no legislative restraints. People in Russia and some of the other republics can marry at the age of 18; and in the Ukraine, Georgia, Armenia and Azerbaijan, even earlier, at 16.

"More likely the reasons are psychological. I have already mentioned that the relations between boys and girls in our senior classes develop along other levels than the sexual. This is not only something that we teachers would like to believe—the young people themselves think so.

"How do we do that? Well, to be frank we have no special method. Sex education is not handled in any special way, but is part and parcel, or, to put it better, one aspect of the whole process of ethical education. Our opinion is that it would be wrong to separate young men and women and read them lectures on sex and the inadvisability of early marriage. This would actually have the opposite result and arouse an unhealthy interest.

"We simply create an atmosphere for senior students in which sex is not the focus of their relations, so that they do not get to thinking that relations between a young man and a young woman can develop only in one single direction. If young people get used to studying together, helping each other, if they work on some joint creative project, play together and vacation together, the young man gets into the habit of looking at a girl as more than a possible bed companion. We try to get young men and young women interested in one another not only because they belong to different sexes, but because they have common interests and goals, a common cause whose success depends on their joint efforts, common joys and disappointments. That way love, should it happen, grows as a many-faceted emotion, with sex, neither muddied nor distorted, forming the emotional background that maintains and intensifies the relationship.

"Love and public-mindedness! That sounds like a paradox. The French say that 'love is the joint egoism of two people.' But for us this proverb is archaic. We know that this feeling, which since time immemorial has been a sacred expression of one's individuality, burns with greater intensity and brightness if a person lives in an atmosphere of social ideas, and wanes and becomes distorted if he removes himself from that environment. Our experience shows us that the rare instances when we encounter a sexual problem in our schools come, as a rule, from the fact that a boy and girl, because of special circumstances, find themselves outside the collective, with its interests, its beneficent and friendly influence. Their pent-up emotions find release then in the only direction open to them, in sexual intimacy.

"There is another factor, also psychological, that bears on the general problem. The concept of sex that young people have comes from their elders, from society. We must always keep that in mind. In our country young people see no pornographic pictures, books or films—we don't have them because they are prohibited by law. Neither do we have books or motion pictures glorifying cruelty, coercion or showing woman as a sex object being wooed by the triumphant male. Reflecting true life, our films, television and literature strive to bring out more vividly the beautiful and the noble in the human being and develop in the youth high ethical ideals."

"Am I to draw the conclusion that your schools have answered all their moral questions and that sex presents no problems?"

"That would be a much oversimplified conclusion. We have plenty of unsolved problems in the field of ethical training. But they are not so much problems of principle as of method, with every age bracket presenting its own problems. I merely wanted to give you a general idea of how we approach the problem of sex in our schools."

This is an imaginary conversation, but one that I might very well have had with a member of a foreign educators' delegation interested in how we handle sex in the Soviet school.

A JOB FOR EVERY GRADUATE

BY YEVGENI AFANASENKO

MINISTER OF PUBLIC EDUCATION, RUSSIAN FEDERATION

IN THE RUSSIAN FEDERATION 90 per cent of the schools are now 11-year schools with practical training; the remaining 10-year schools will change over this year. This means that all our young people will have a high school graduation certificate and a job qualification certificate. With these two documents they can go on to an institute or university, or get a job in industry or agriculture. Some of the graduates will go to work at factories, mills, stores or farms; others will continue their studies.

Those who fail the competitive entrance examinations for the institutes and universities are guaranteed jobs. This is a state responsibility, to place every school graduate in a job, and is handled by the executives of the district, city and regional Soviets, who reserve a job for every graduate a year before graduation.

As a rule, practical training is geared to the trades most needed by industry and agriculture, but with plenty of leeway for students to choose those they are inclined toward by special interests, family traditions, etc. The majority of our young people are satisfied with the work they have chosen and keep improving their qualifications by studying at evening and correspondence institutes and specialized secondary schools.

Here are some characteristic examples: Of the 80 pupils who graduated last year from School No. 139 in Leningrad, 50 are working at the Twenty-second CPSU Congress Metal Plant, where, while in school, they took their practical training. Dzerzhinsk is a big chemical industry center of the Russian Federation. Of the 130 students who recently graduated from School No. 13 in that city, 105 became specialists at chemical factories. In Leningrad, Dzerzhinsk and everywhere else more workers are needed than can

be supplied by the schools. The main source from which our labor pool is replenished is certainly not the secondary school, yet industry and farm management especially value our graduates who have a good general educational background and a specific vocational skill.

The problem then is not to get jobs for our graduates, but to get them interested in some trade or profession.

In Moscow the district Soviets made an instructive study of the likely 1963-1964 job placement of their high school graduates. This year Moscow had 15,000 graduating students, next year there will be about 29,000. They will work as turners, fitters, chauffeurs, milling-machine operators, radio assemblers, salesclerks, cooks, etc. At the present time Moscow needs several thousand chauffeurs, but the schools are preparing only 400 this year and no more than 950 for the next one. It is quite obvious that anyone can easily get a job.

Programmers for computing machines are being trained at more than 20 Moscow schools. In 1964 these schools will turn out 650 programmers; there are already requests for 580. The pupils of 16 schools are getting their practical training at the Likhachov Auto Plant. The Ministry of Transport Construction knows that Likhachov representatives are doing their best to attract as many graduates as possible.

What about salesclerks? Next year the schools will graduate 780. The retail trade authorities already have specific jobs earmarked for them. In short, every trade taught in the high schools is much in demand.

An all-Russian conference on practical training in urban schools was held last April. Besides teachers, directors of factories and state farms and chairmen of collective farms also participated. They all had figures to show how much graduates were needed in their particular areas of work. Farm managers made a particular point of it.

With Soviet agriculture mechanized, the rural schools graduate tractor drivers, harvester-combine operators, vegetable and field-crop growers.

What all this adds up to is that no young man or woman graduating from a Soviet high school needs to worry about a job.

LEARNING ABOUT THE UNITED STATES

BY KURT WIEDMAYER

SOVIET SCHOOL CHILDREN learn about the United States in their geography and history studies. The textbook chapters devoted to the United States describe the country's founding and the life and labor of its vigorous and resourceful people. They instill in the pupil a respect for the American people. One of the objectives of the course, says a current teaching guide for economic geography, is to show "that the American and Soviet peoples have every reason and possibility for developing broad economic and cultural ties founded on peaceful coexistence."

The textbook is only the jumping-off point for developing this thesis; the much larger portion of the job—as much as 75 per cent of it—is done through class discussion and supplementary reading.

We use the concentric method of teaching in the Soviet Union—the pupils first learn the general aspects of a subject and then return to it later for more detailed study. United States geography is first taught toward the end of the sixth school year, when the children have already studied other countries and can therefore compare levels of economic development. Pyotr Schastnev's and Pavel Terekhov's *Geography of the Various Parts of the World and the Most Important Countries* gives a fairly detailed description of the minerals, climate, waters and natural zones of North America, and follows that with an examination of the United States. This is the sequence:

Physical Geography stresses the country's vast area and its favorable location. This is illustrated by a diagram: the USA drawn in contour over the map of Europe in the same latitudes.

Natural Conditions deals with the relief, rivers, climate, animal and plant life.

The People and Their Economic Activities gives information on the size of the population and its density, distribution and national composition. Then follows a short essay on the country's economy and its biggest cities, illustrated with photos of the Capitol, an impressive picture of the Empire State Building and the neighboring skyscrapers, and a map of New York. The text on New York says: "The largest city not only in the USA but in the world. New York with its suburbs has a population of about 14 million. . . . A very important port and commercial center with an enormous number of stores, warehouses, offices, banks and varied industrial enterprises." The book devotes two pages to the business, cultural and other sides of this city's life.

The second and lengthier acquaintanceship with the United States, this time with its economic geography, comes in the tenth grade. Three years ago, before the school reform (the transition to the eleven-year school system), the economic geography of foreign countries was studied either in the ninth grade from Ivan Vitver's textbook or in the eighth from Ivan Mamayev's. In both cases a tenth of the some 300-page books is devoted to the United States. Mamayev's *Economic Geography of Foreign Countries* (published in 1961) covers these topics in the section on the United States:

Geographic location. Natural conditions. The population.
A general picture of the economy. Industry.
Agriculture. Transport. Foreign trade. Export of capital.
Regional differences and cities.
State system. Possessions and bases.

Each topic takes, as a rule, one or two lessons to cover. The treatment is, of course, more intensive and more detailed. General concepts are illustrated with statistics. Here, for instance, is an excerpt from the introduction to the chapter "A General Picture of the Economy":

"*The United States of America is the richest and economically the most developed country in the capitalist world.* Its factories produce almost as much as all the other capitalist countries taken together. Its contribution to the combined volume of steel, coal, iron ore and coke produced by the capitalist countries is 40-50 per cent. Agriculture also plays a large role in the country's economy. The USA is an *industrial-agrarian* country. Its industrial output is more than five times greater than its farm output."

The country's agriculture is dealt with in detail. A diagram gives wheat and corn production over a period of years, and a detailed map shows how farming is specialized and distributed.

The text describes the USA's transport, highways, foreign trade, regional manufacturing concentrations, and its biggest cities. There is a unit on the state system. The study of the United States (which this time takes about 20-23 days) winds up with a review lesson. The children supplement the textbook material with information culled from other books, magazines and newspapers. Students receive higher marks for referring to supplementary material. The educational objective is not so much a knowledge of the facts as the ability to make sociological generalizations.

The Soviet pupil makes his first acquaintance with American history in the seventh grade. The textbook deals with the attitude of England to its North American colony in the eighteenth century: the repressive laws, the Boston Tea Party, the War of Independence and George Washington, Thomas Jefferson and the Declaration of Independence, the significance of the American Revolution.

That same year the children study the Civil War. The text sketches the development of the United States at the beginning of the nineteenth century and covers Abraham Lincoln's presidency and the war between the North and the South.

The pupils return to these topics in the ninth grade, when they study Modern History in more detail.

The text, by Alexei Yefimov, deals with the relations between the Indians and the colonists, England's wars with Holland and France and the capture of New Amsterdam, the founding of New York and the southern plantation system. These are some of the subchapter headings: "The Reasons for the Revolt of the Colonies against England," "Start of the War," "The Beginning of Military Action." There is a separate chapter on "The Course of the War and the U.S. Constitution." An appendix to the text gives brief summaries and excerpts from the Declaration of Independence and Washington's letters.

Four or five lessons are spent reviewing the material and introducing the next theme "The USA after the War of Independence. The Civil War." The text deals with the first steps taken by the 13 former colonies that constituted the United States of America, the wars against the Indians, the Monroe Doctrine, the annexation of Texas, the treaty with Japan and settling the West. The students learn about Frederick Douglass and Harriet Tubman, John Brown's rebellion, the formation of the Republican Party and the election of Abraham Lincoln. The reasons for the rebellion of the South and the course and significance of the Civil War are developed in considerable detail.

The text, we should make clear, is no mere compilation of dates, facts and diagrams. Every event is assessed from the standpoint of historical materialism. We want our students to learn to think in broad categories, to look below the surface of events.

The supplementary reading makes up a lengthy list. Soviet fifth and sixth graders are already familiar with the novels of James Fenimore Cooper and Mayne Reid. They read them long before the teacher's recommendation. Suggested for reading and extramural discussion are Cooper's *Spy* and *Pilot*, Harriet Beecher-Stowe's *Uncle Tom's Cabin*, Richard Hildreth's *White Slave*, Charles Dickens' *Martin Chuzzlewit*, Bret Harte's story "Thankful Blossom" about Washington, Benjamin Franklin's "The Sale of the Hessians" and other works.

All upper-grade students are avid readers of Jack London and Mark Twain. London is by far the most popular foreign author for young Soviet readers. More of his books have been printed—17 million copies—than of any other foreign writer.

The tenth- and eleventh-grade current history text has two chapters on the United States besides such general topics as "World War II," "The Struggle of Two Trends in World Politics," etc.

The first chapter deals with the United States in the years after World War I, the Dawes Plan, the development of the trade union movement, the Depression, the Hoover administration, the New Deal of Franklin Delano Roosevelt, and the establishment of diplomatic relations between the USSR and the USA. The second chapter indicates the reasons for the differences between the former allies after World War II and gives a comparative analysis of the positions of the United States and the Soviet Union on major international problems.

Supplementary reading includes the novels of Theodore Dreiser, Upton Sinclair, John Steinbeck, Sinclair Lewis, Alexander Saxton and many other books.

This is the minimal body of information about the United States required of every Soviet high school graduate.

PHOTO OF THE MONTH

By Vladimir Lagrange

One morning a Moscow high school graduate never forgets. The tradition is for the class to greet the dawn on Red Square after the graduation ball.

PLANS AND ASPIRATIONS OF TEEN-AGERS

BY ZOYA MALKOVA

MASTER OF SCIENCE (PEDAGOGY)

IT IS NOT EASY to decide what to be when all vocations seem equally exciting, when you feel that you must try your hand at every one of the many things there are to do in this fascinating world. In the Soviet Union choosing a career is no simple matter—there are so many possibilities.

Since there is no unemployment, one has a wide choice of jobs. Tuition is free throughout—in the elementary and secondary schools, colleges and universities, evening and correspondence schools, and trade and professional schools to be found everywhere in the country. Besides free schooling, college students are paid a maintenance stipend. So that there are no financial barriers to learning, nor are there social, national or color barriers.

Soviet educators do not believe that a conversation with a guidance counselor or a group of formal tests is a valid basis for choosing one's lifework. Vocational orientation in Soviet schools is an integral part of in-school and out-of-school activities.

Our educators are opposed to premature specialization. They believe that the better general education a person has, the less likelihood there is of his choosing a vocation he is not suited for. The background in literature, history, geography, physics, chemistry, algebra, trigonometry, a foreign language and other subjects Soviet children acquire in high school gives them a sufficient spread to make a sensible choice.

Vocational guidance is done in these three ways:

1) Teachers acquaint their students with the different trades and professions.

2) The child's own interests and inclinations are studied.

3) Students try their hand at work in the fields that interest them.

This is only a formal division, of course. In practice it constitutes a single process which molds a child's interests, teaches him skills and develops his character.

Children are introduced to the world of work in the first grade. They learn from their readers how corn is grown, how cloth is woven, and how machines are made. Exhibitions are frequently mounted in classrooms on such subjects as "The Work Our Parents Do." On display are photos of the children's fathers and mothers at work in all sorts of shops, institutions and offices, with a simply phrased description of each of the trades and professions. As children come to realize it is the work of their parents that creates all the things around them, they give them that much more respect and affection.

Manual training starts in the fifth grade. Every Soviet school has its sponsoring factory, collective farm or institution, and the children often visit to familiarize themselves with the production processes and talk to the workers.

Out-of-school activities have the same purpose. Excursions are arranged to places of vocational interest. The children meet with scientists, actors, engineers, athletes. They hold discussions on topics like "What To Be," "Workers in Our Neighborhood," "How To Choose a Vocation," "The Difference between a Real Interest in a Profession and a Whim." These are only a few of the many and varied ways of acquainting the children with the world of labor. Literature, the movies, radio and television all help.

Teachers, books and films all stress that it is a man's contribution to society, not material success or personal fame, that makes for real happiness.

In the orientation process, the educator tries to relate the needs of society and the interests of the student. This requires a careful study of the child, his physical and psychological characteristics, his interests and inclinations, and is done by watching and analyzing his activity as a whole—in class, outside of school, in hobby circles, etc. The home room teacher keeps in touch with all the subject teachers and with the parents. To elicit the youngster's vocational inclinations he is given questionnaires to answer or essays to write on subjects like "What Shall I Be?" and "The Profession I Admire Most." In informal conversation with a pupil his teacher learns what subjects he likes best and least, how he is getting along, what his plans are for the future, what books he reads, what interests him most, and so on. The teacher watches his pupils in class, on the sports field, on hikes, etc., and draws his own conclusions. A case illustration—Igor N., a ninth-grader, said in answer to a questionnaire that he wanted to go to a technical college after he graduated. The teacher's observations showed that Igor was not at all technically-minded. Later it developed that Igor had decided on a technical school because he did not want to be separated from his best friend. To help him decide what he was really suited for, his history and literature teachers gave him special assignments. As he went along, Igor came to love history, and now he knows exactly what he wants to be.

Extracurricular and extramural activities and organizations help greatly to bring out the student's interests and inclinations and to shape them. Every school has its hobby circles and amateur societies. The student chooses the one he likes best. A youngster who does not know his own mind can join a "Club for the Jolly and Quick" or a "Free Activity Workshop" with no particular leaning, where he can do a bit of everything until he decides where his interests really lie. Then he joins one of the hobby circles or, if he is more ambitious, the Young Technicians, Young Nature Lovers, or one of the other circles maintained by the Young Pioneer or trade-union Palaces of Culture.

By the time a youngster gets to the eighth grade he knows his own mind. Thereafter he begins to learn a specific trade. Boys and girls can enter a vocational school where in two or three years, depending on the trade they choose, they become highly skilled workers. Or they can enter a specialized secondary school and become specialists of medium skills in the professions after three or four years of study. Or they may prefer to learn a trade on the job and continue their schooling evenings.

Ninth-to-eleventh-grade students in the general secondary schools combine classroom study with vocational training. They graduate with a school diploma and a certificate that makes them eligible for a job at the trade they have learned, say, lathe operator, fitter, seamstress, automobile driver, and so forth. This does not mean that the graduate is forever tied to this trade. He is free to choose and change his trade throughout his life. All he need do is enter an institute or technical school, or take one of the very great number of special courses given in our country.

Soviet society is continually developing, and with growth comes new problems, in vocational orientation among others. That is why our schools and scientific centers keep searching for improved ways in which our system of vocational orientation can better meet the requirements of the modern world.

STUDENT SELF-GOVERNMENT

BY EDWARD KOSTYASHKIN

MASTER OF SCIENCE (EDUCATION)
PRINCIPAL OF MOSCOW SCHOOL NO. 544

THE SYSTEM of student self-government in the Soviet Union has accumulated a fairly respectable fund of experience by this time. It was popularized and practiced by the famous Soviet educator and writer Anton Makarenko as far back as 30 years ago. It has special meaning for us now because our society has reached that stage of development when the state is turning over many of its functions to the public organizations. Hence our task is to try to apply the principle of self-government to the schools, to let the students take over some of the duties and obligations of the teaching staff.

The school, after all, is more than a fountainhead of knowledge. It is also a collective where the young citizen is brought up, where he is trained for life in a communist society. Incidentally, it is not only the teachers who do the training; the essence of student self-government is self-upbringing, the self-training of the children for adult life in a collective. The children learn to manage their school affairs, meet their

obligations and get used to feeling responsible for themselves and for their classmates as well.

We tell them: "Here is a job for you, which you will be held responsible for to no one else but yourselves. No one will be checking up on you except your own elected classmates."

There is, of course, a certain amount of risk. There is always the possibility that thoughtless seventh-graders may bungle the whole business. But psychologically speaking, it is far more likely that, proud of their new sense of responsibility, of being on their own, of being trusted and of no longer having any of that boring adult supervision, they will make a good job of it. This is being borne out by our experience here in Moscow School No. 544.

Our 15-year-olds apply themselves to things they are put in charge of with vim and vigor. They do minor repairs in classrooms, keep order, make toys for the children's homes and nurseries of which they are patrons. They themselves mark one another's conduct for the week and the term.

Each class has its own council, responsible for all extracurricular activities—recreation and sports, forums and debates, and even student relations. The class council is elected for a short term so that all the boys and girls get a chance to serve.

The children themselves raise what money they need for their activities by making furniture and garments ordered by different factories. The income—roughly 200,000 rubles a year—is spent on equipment for extracurricular activities and sports paraphernalia of all kinds, including canoes for summer trips.

Each class has its own treasury. The finance committee, as is proper in self-government, decides how much to spend for parties, theater tickets and birthday gifts. This is an important part of learning, in which the children acquire business acumen, a sense of discipline and the habit of meeting their own needs by their own efforts.

From the educational angle we find that self-government, with its emphasis on self-reliance and the collective spirit, affords children more than an earful of sermons. Nor does it make the boys and girls grow up too soon. Nothing of the sort. They govern themselves with a lot of fun and adventure.

The idea of self-government is winning increasing favor with our teachers and is being more and more widely practiced in Soviet schools.

Let my friend Sergei Petrukhin now tell you with pictures what self-government is like at School No. 544.

Each class in Moscow School No. 544 has a student council with a membership that changes often to give every child a chance to serve. The tenth-grade council and school principal Edward Kostyashkin discuss the school's camp.

The woodwork shop takes commercial orders for children's furniture. Sixth graders assembling tables.

Eighth-graders deposit their class earnings at the school's bank. It will pay for a trip to the Ukraine.

OUR VOCABULARY

General secondary education. The volume of knowledge of the humanities and the sciences provided by the 11-year schools. Within this decade a secondary education will become compulsory and universal. At present eight years of schooling is compulsory. The 11-year school curriculum includes systematic study of the native language and literature, arithmetic, algebra, geometry, physics, chemistry, biology, history, geography, a foreign language and other subjects.

Secondary school matriculation certificate. Graduation diploma from an 11-year school which permits a student to enter any Soviet institute or university.

Class master. The teacher in charge of a class. In the elementary grades (from first to fourth) the same instructor teaches all the subjects and is also the class master. In the upper grades each subject is taught by a different teacher, and the most experienced teacher is the class master. He usually remains in that capacity until the students graduate.

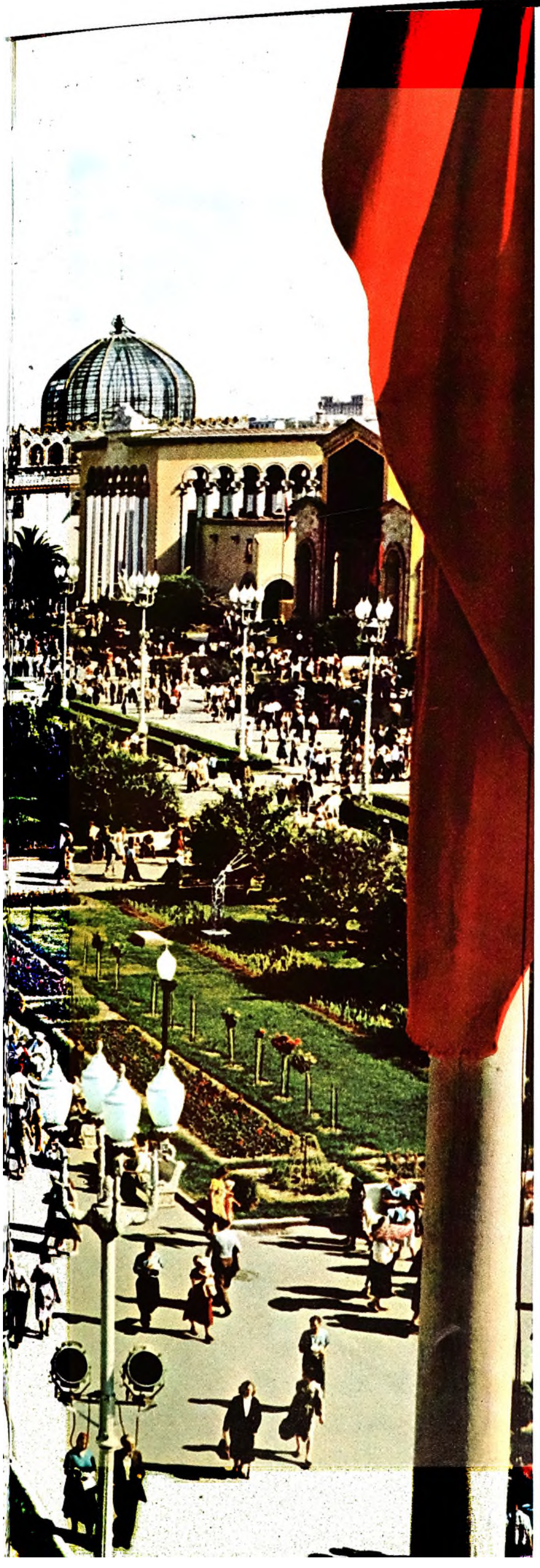
Teachers Council. A deliberative body headed by the school principal. It is made up of the assistant principal, the teaching staff, the Senior Young Pioneer leader, the school librarian, the school doctor and the chairman of the Parents Committee. The Teachers Council plans the school's work, considers student progress and the quality of teaching, discusses educational methods, and hears the teachers' and class masters' reports. The Teachers Council adopts decisions by majority vote.

Pupils Committee. Represents the entire student body of the upper grades. It is elected at a general meeting held at the beginning of each school year. Work on the committee helps children develop initiative and independence. The committee assigns various school duties and makes coaching arrangements for those who need help with their studies. Jointly with the YCL and Young Pioneer organizations, it puts out the school wall newspaper; organizes parties, excursions and group visits to the theater and movies; and calls student meetings. At these meetings the committee reports on its work. The class monitors assist the committee.

Class monitor. One of the best students who commands the respect of his classmates. Elected by the class, he is responsible for keeping order.

Five-mark grading system. The grading system in use at Soviet schools: five (excellent), four (good), three (satisfactory), two (unsatisfactory), one (failing). Marks are given for daily recitation in class, at the end of each school quarter, at the end of the school year, and for graduation examinations.

Examinations. These, oral and written, are taken by students at the end of the eighth and eleventh years of school. Eighth-graders take four examinations: in the Russian language (oral and written) and in mathematics (oral and written). The graduating eleventh-graders take seven examinations: in literature, algebra, geometry, physics, chemistry, history of the USSR, social science, and a foreign language. Students in the other grades are promoted to the next grade on the basis of their classroom work for the year. ★



People's Experience in Focus

BY YURI GRAFSKY

PHOTOS BY GEORGI PETRUSOV

IT is no easy assignment to do a portrait of a country, especially one like the Soviet Union, whose economic face is perpetually changing, a country where two or three big industrial plants are commissioned every day, where as many as 2,500 new machines and mechanisms are developed yearly, where the population growth is three million a year. The Exhibition of Economic Achievements in Moscow comes as close to an industrial and agricultural representation as anything can. It is the Soviet Union in miniature, with displays of everything the country is rich in and proud of.

Of course the exhibition is not without its shortcomings. One could say that in spots it does too much underlining of copybook truths. For instance, it is hardly necessary to explain in so much detail and in so many displays where petrochemicals are used; everybody knows that. But on the whole the exhibition is bursting with things new, original and up-to-the minute, and gives an accurate enough picture of what is going on.

The 1963 displays concentrate on developments in industry, construction, transport and power engineering, and, of course, agriculture.

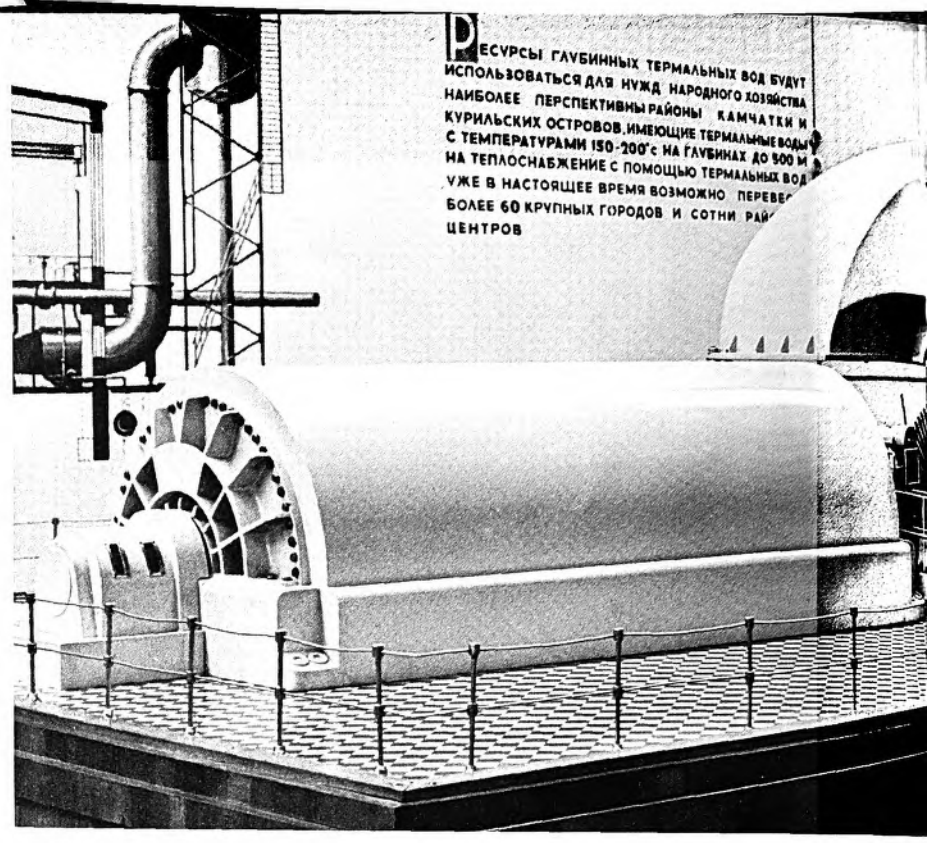
The exhibition is a digest of the country's industrial progress. Represented are 400 plants and mines that use the latest machinery and tools, the most labor-saving automated equipment and the newest technological processes. Many of the exhibits come from building projects and building-industry plants that have accomplished small miracles in mechanizing construction work, cutting costs with standard designs and turning out prize-winning structures.

The abstracted experience of industrial plant directors and state and collective farm managers are all there on display. The full story of the achievements of the innovators and inventors responsible for so many of the progressive methods of work and organization is also here.

The largest is the Machine-Building Industry Pavilion with 2,300 exhibits, 1,300 of them new, spread over an area of 215,260 square feet. On display is a 220-horsepower tractor manufactured by the Leningrad Kirov Plant. Early this year we saw these tractors being used with bulldozers to dam up the powerful Siberian river, the Yenisei.

Among the other displays in this pavilion are rotary automatic lines where the machining and transportation of components are done simultaneously, an ultrasonic installation for intensifying galvanic processes, and an all-purpose unit-type electronic machine for the registration and control of industrial processes.

The textile industry display includes some 2,000 samples of fabrics and carpeting. Shown is a spinning and twisting machine of an entirely new type developed by designers of the Tashkent



Textile Machinery Plant, the first machine of its type anywhere. Also on display is a spinning machine manufactured by the Textile Machinery Plant in Penza, Central Russia, that increases labor productivity as much as 30-50 per cent.

The USSR Transport Pavilion has more than 200 exhibits. Among the newer displays is a 8,480-horsepower trunkline alternating current electric locomotive that can develop a speed of 110 kilometers an hour (electric locomotives all over the world run on direct current only). The Baltic shipyards sent a model of their seagoing tanker *Sofia,* the biggest ship ever built in the Soviet Union. It has a displacement of 60,800 metric tons.

The Electrification Pavilion features a working model of the USSR's most powerful turbine—300,000 kilowatts (photo right). These single-shaft turbines, more economical than the two-shaft ones now in use, are being installed at a number of thermal power stations.

The top photo on the extreme right is a model of the Krasnoyarsk Hydroelectric Station, the world's largest, now under construction on the Yenisei. This five-million-kilowatt hydroelectric station will give life to a large East Siberian industrial complex.

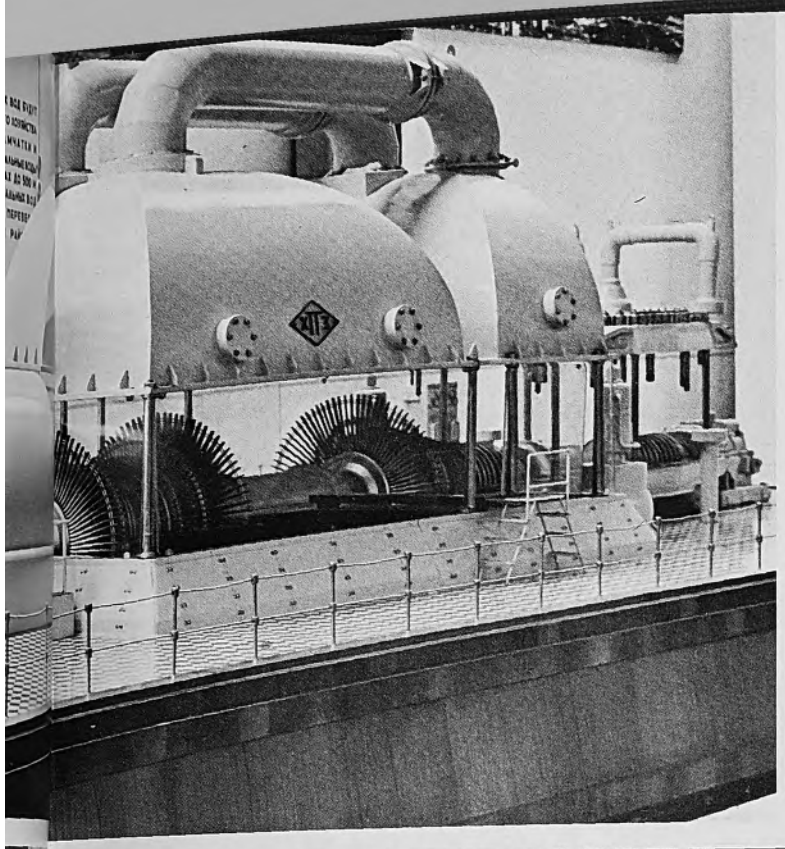
Photos in the second row from the top were taken in the Chemical Industry Pavilion. The production of artificial and synthetic fibers has grown markedly in the USSR during the past four years. (If we set the 1958 level at 100 per cent, the 1962 volume of output was 167 per cent, and the 1965 level will reach 311 per cent). Eight new artificial fiber combines were built and three existing plants were greatly enlarged.

Products of these plants are on display. Other exhibits show viscose fabrics, synthetic rubber tires, insecticides and fertilizers.

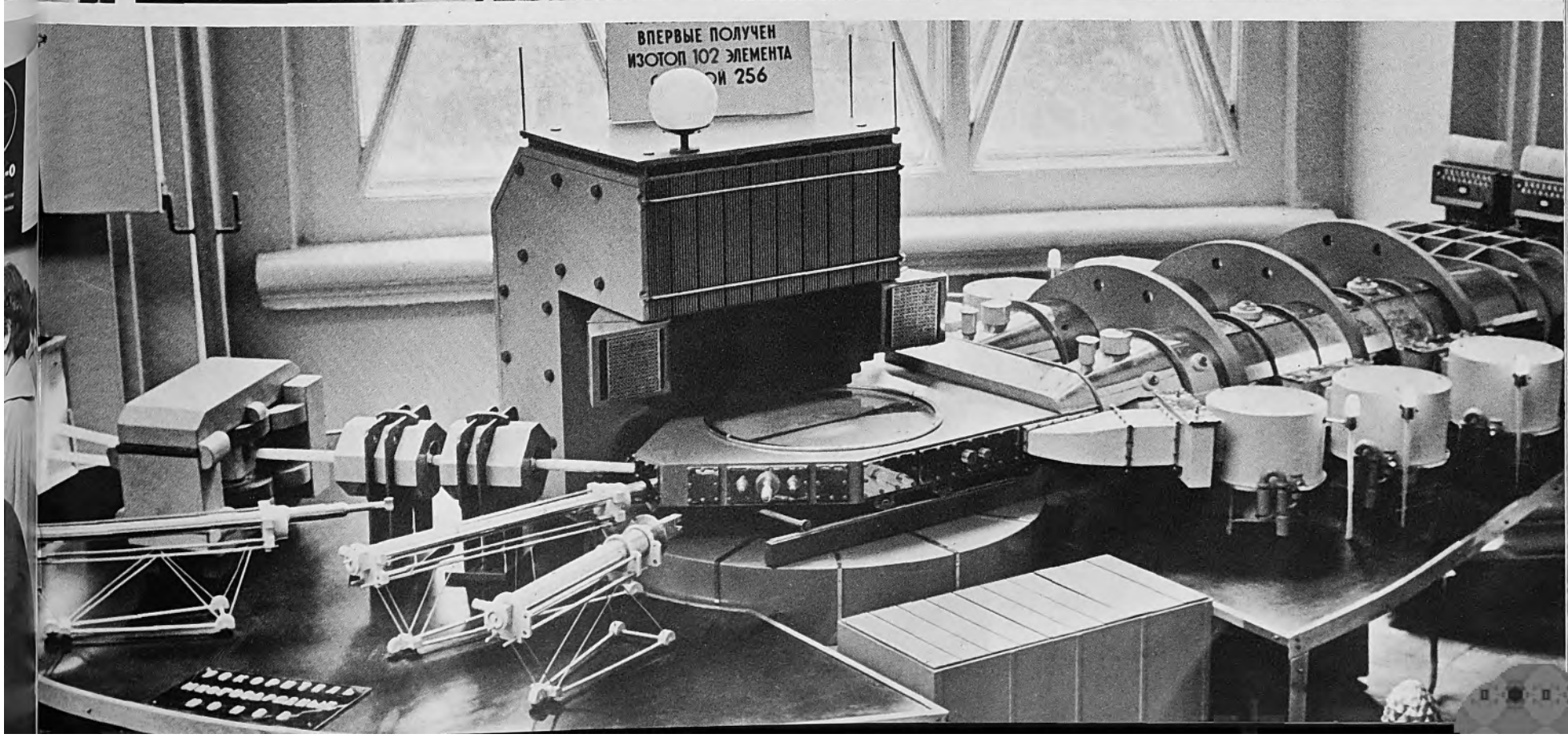
Two pavilions are devoted to the peaceful uses of atomic energy. The Joint Nuclear Research Institute of Dubna, the USSR Academy of Sciences Atomic Energy Institute and other research centers display mockups of their unique installations. The photo at the bottom right is a model of the multicharge ion accelerator with which the isotope of the 102nd element of the Mendeleyev Table with a mass of 256 was obtained. Alongside is a model of a seven-Bev proton accelerator with an accompanying sign to the effect that an installation 10 times more powerful is being built.

The Atomic Energy Pavilion has models of a whole series of installations for researching controlled thermonuclear reactions: the Ogra, Orekh and Alfa. A model of the installation with which Soviet scientists managed to keep plasma heated to one million degrees centigrade for several fractions of a second is also on display, as are models of the atomic icebreaker *Lenin* and several atomic electric stations now under construction. The country's atomic industry is represented by 650 exhibits.

In the Radioelectronics Pavilion we took this photo (bottom left) of a working digital computer. Among the 170 exhibits is a mockup of a cybernetic robot for running Moscow subway trains. The robot programs speeds, stops and schedules.



АЦЕТАТНЫЕ ВОЛОК


ВПЕРВЫЕ ПОЛУЧЕН
ИЗОТОП 102 ЭЛЕМЕНТА

Making the rounds of the pavilions, one begins to see not only these works of Soviet science and engineering but the human experience invested in them and the uses to which they are put.

Ivan Fedyanin, director of the exhibition, explained that about 3,000 of the inventions and processes first displayed at the exhibition have been picked up by industry and are now in general use. He cited several examples. In 1962 the various related enterprises of the USSR Merchant Marine put to use more than 40 of the instruments and devices which were introduced at the exhibition. Special resins for protecting screw propellers, for instance, helped the Black Sea Steamship Line save more than 60,000 rubles.

The use of vibrator pile drivers in building bridges on tubular piles has effected a saving of some 10 million rubles. This new technique, already used in the building of 107 bridges, has cut the volume of earth excavation by 525,000 cubic yards and halved the building time.

Seminars, lectures and consultations are given by leading workers and farmers right on the exhibition grounds. At the construction section, for example, 300 assemblers were trained to use the dowel driving gun which was on display. Siberian building workers recently sent a letter to the pavilion asking that the same course be given at the construction site of the Bratsk Hydroelectric Power Station.

The exhibition ran a course for corn-harvester operators of Central Russia, and another for milking-machine operators. Altogether some 200 such varied advanced training courses were attended by 13,000 workers in various fields of the economy. Besides these courses scientific-technological conferences are held for specialists. Six hundred such conferences drew a total of 100,000 participants.

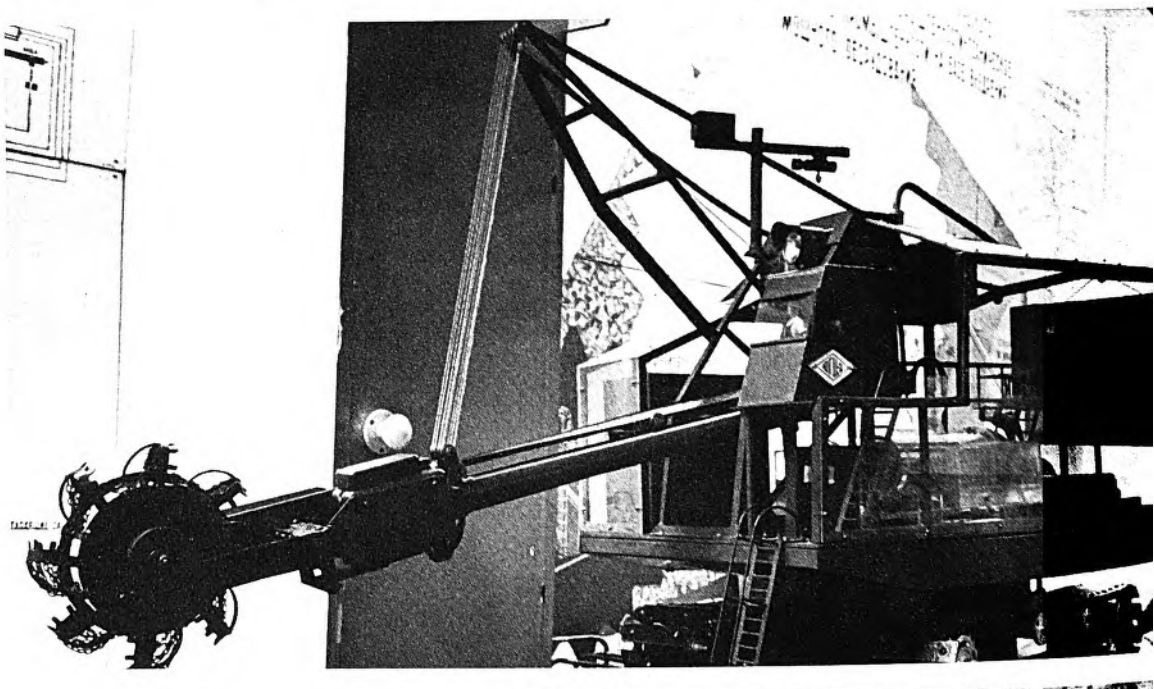
Every year the Moscow exhibition sends as many as 30 traveling exhibits, generally in one field, around the country. The USSR River Fleet Exhibition, for instance, is now touring the Volga with displays of new techniques and equipment in river transport. Other traveling exhibitions are scheduled for Riga, Kiev, Tashkent, Lugansk, Tallinn, Sverdlovsk and Smolensk.

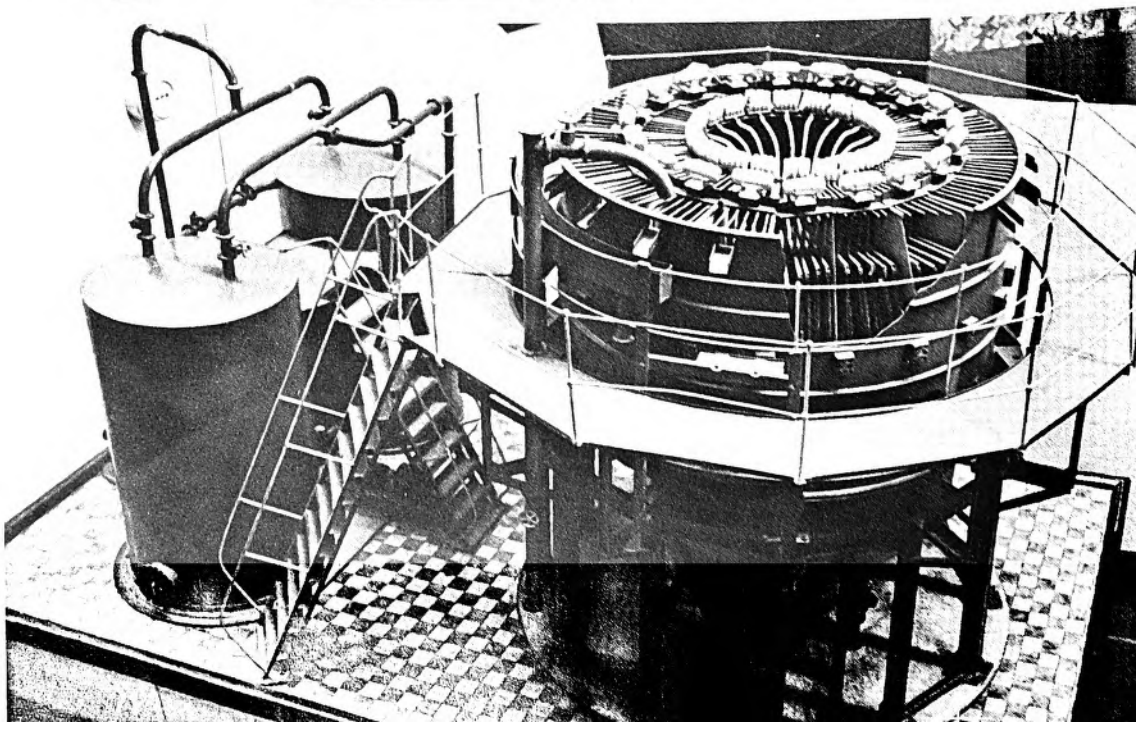
From time to time duplicates of the exhibition displays of individual machines, techniques and processes are sent to factories and farms. The Likhachov Motor Works, the Krasny Proletary Machine-building Plant, a furniture factory, and model sections of collective and state farms near Moscow had such displays.

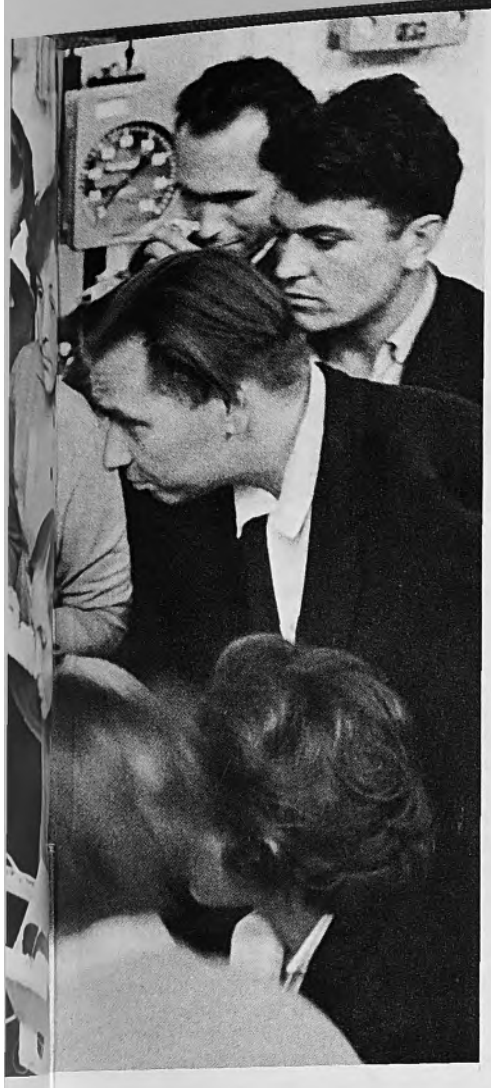
We asked the exhibition director how useful this practice was. In reply he told us what he considered to be a very typical story. A collective farm near Moscow demonstrated its methods of mechanical milking at the Moscow exhibition three years ago. Dairymen from Gorky Region who were there tried the method, adopted it, and have been getting even higher average yearly milk yields. They can now teach their Moscow teachers a thing or two.

Thus, as you see, the USSR Exhibition of Economic Achievements not only reflects life but is actively changing it. ★

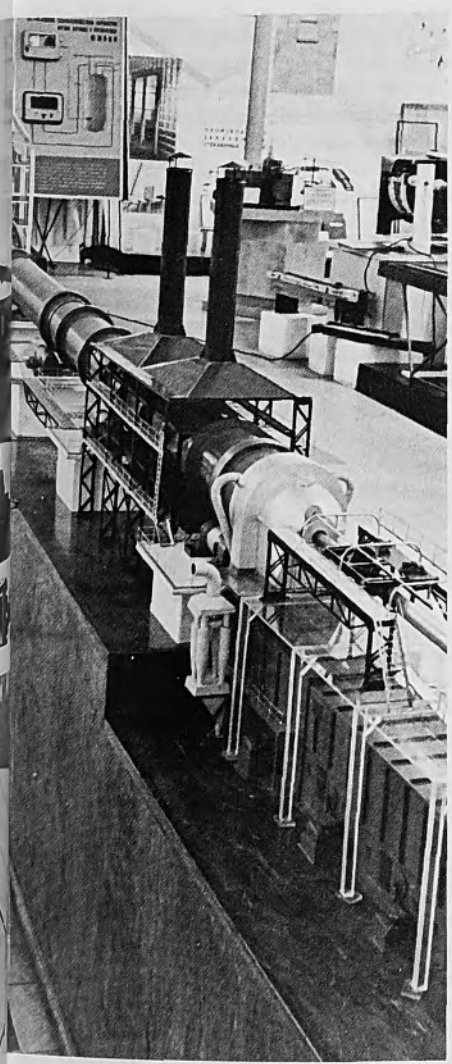
Seminars and lectures are held right on the exhibition grounds. This is a seminar at the Electronics Pavilion attended by specialists in the field from Volga Territory, the Ukraine and Central Asia. Engineer Oleg Abakumov explains the operation of his tension gauge oscillograph on display at the pavilion. This year the exhibition will be visited by 200,000 specialists from various parts of the country. Their traveling expenses and hotel bills will be paid by the enterprises they work for.

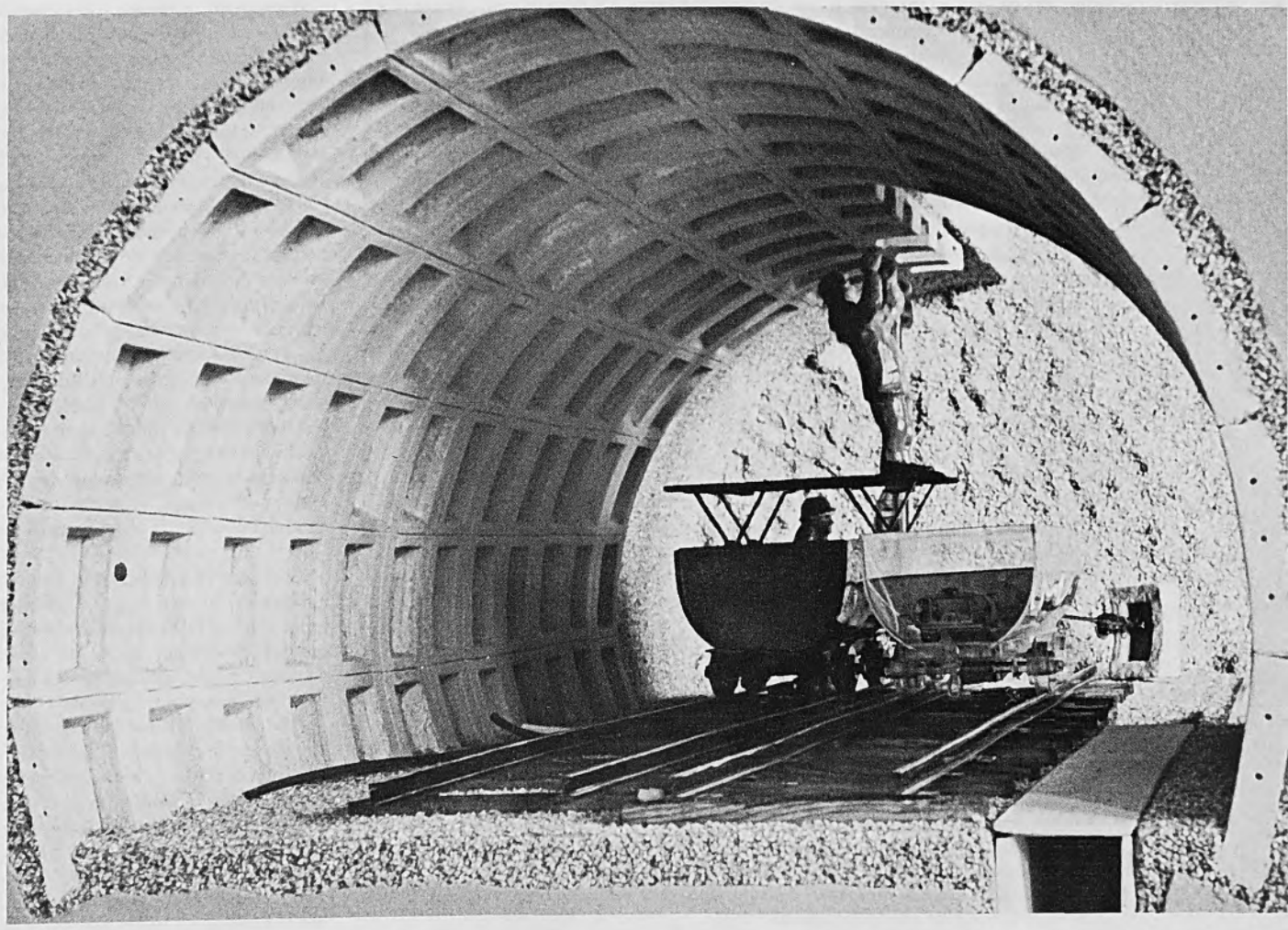






Some of the modern equipment for construction on display. The more than one thousand exhibits in this section show what's new in industrial and housing construction and in building materials. (Bottom photo) These tubular silicate-concrete mine props, a novelty in industrial construction, cut building costs, save lumber, improve working conditions and reduce accident hazards.





Schematic diagram of a cement plant now being built in the Ukraine on display at the Construction Section. The plant will be automated from beginning to end. Raw materials will be extracted and conveyed by a rotary combine (upper left photo) and the pulp dehydrated by a vacuum (bottom left photo). Soviet cement plants employ 600-foot-long rotary kilns (upper right photo).

PLANNING AN AFFLUENT

BY VLADIMIR SMOLYANSKY
MASTER OF SCIENCE (ECONOMICS)

FIGURES SAY A LOT, especially if they form part of a valid statistical analysis. What then do Soviet statistics say about the fulfillment of the national economic plans?

Let us take a short excursion into the past. The first five-year plan (1928-1933) to develop the Soviet economy was fulfilled ahead of time—in four years and three months. The second five-year plan took just as short a time. As a rule, planned quotas are met according to schedule.

How about the current seven-year plan (1959-1965)? During the past four years the net industrial product increased by 45 per cent instead of the planned 39. Figures indicate that if things go on this way, Soviet industry will increase its output by the end of the seven-year period, not by the 80 per cent contemplated but by approximately 100 per cent.

The annual figures are no less impressive. Take the one for 1962. The plan called for an 8.1 per cent increase over the preceding year in total industrial output; the actual increase was 9.5 per cent.

And here is one noteworthy detail. The 1962 plan scheduled a rise in the output of rolled metal to 59.2 million metric tons. This was attained last year by the Soviet iron and steel industry. Now if we look at the target quotas for the seven-year-plan, we will find that in 1962 the rolled metal output had already reached the level mapped by the long-range plan for 1963.

Now let us take the figure for electric power. According to last year's plan the Soviet Union was to produce 366 billion kilowatt-hours. Actually, 369 billion were produced.

Or take an even shorter period, three months. The plan for the first quarter of 1963 was overfulfilled by three per cent. At the same time a 13 per cent rise in the output of the machine-tool and metalworking industries had been reached, including a 19 per cent increase in farm machinery.

The rise in the standard of living is also according to plan. The general index of living standards is the national income. Over the past 10 years (1953-1962) its average increase was 9.2 per cent. The real income of the working people shows the same picture. In the first four years of the seven-year plan period it rose by 18 per cent per working person, including a three per cent increase in 1962.

Retail trade turnover is growing. In the past four years the volume of consumer goods sold increased by almost one-third, with a rise of about 40 per cent in meat products, about 50 per cent in milk and 40 per cent in sugar. The sale of clothing rose by 48 per cent and leather footwear by 39.

Here are some other figures that reflect improved living conditions. Ten years ago an average of 70,000 to 100,000 TV sets was sold annually; in the past four years the average annual sale has been 1.5 million. During the same period about 2.5 million refrigerators and more than 4.6 million washing machines—four times more than in the preceding four years—were sold.

One of our most acute problems is housing. This is understandable. In the past 40 years three destructive wars swept across our country like a fiery whirlwind. The state is spending vast sums to solve the housing problem. Last year alone more than two million apartments were built in cities and small towns. In the past six years nearly 75 million people, a third of the country's population, moved into new dwellings.

A big slice of the Soviet family income comes from the public consumption fund. This is the prototype of the distribution of goods and services in communist society—according to need rather than according to work performed. Among the many free services this fund pays for are education and medical treatment, cut-rate accommodations at health and vacation resorts, and training for better jobs. The rapid and regular increase in Soviet production results in a steady growth of this fund. The volume of pensions, grants and free welfare services made available to the Soviet people by it has increased sixfold in the past 20 years. According to the long-range plan, by 1980 it will have increased tenfold and will then comprise about half the real income of the population.

Exact Calculations

What accounts for the success of Soviet economic planning?

The very procedure followed in drawing up a plan is in many respects a guarantee of its viability. If, let us say, the plan forecasts a certain economic growth rate over a 20-year period, the figure is not arrived at by simply carrying over previous annual growth rates into the future. Soviet economist Yakov Lugantsev described the procedure as follows:

"Assume that we are drawing up our plan for steel production in 1980. This huge job of determining the steel requirements of every section of the country's industry involves hundreds of engineers, economists, and scientific workers in dozens of research institutes. It means finding out how much steel each of the many branches of industry will be using, how fast they will be using up their stocks, and whether they can use any substitute materials. It also means deciding how much coal and coke, ore and electric power will be required, how many workers in which vocation and with what qualifications will be needed, what the labor productivity is likely to be, what capital investments will have to be made."

The plan figure of a nearly 10 per cent rise in the rate of growth—a sixfold increase in industrial production in the course of 20 years—has been obtained on the basis of such exact calculations. They must then be translated into kilowatt-hours of electric power, tons of steel and soap, yards of fabrics, pairs of shoes, and so on.

The Balance Sheet Method

How is the relation between the volume of production of a particular product and the demand for it arrived at? We plan distribution by drawing up a resource balance sheet. These tables give us inventories of resources available (production capacities, imports, stocks left over from the previous year, etc.) for distribution in industry, construction, trade and other phases of our economic life. With the balance sheet we can determine the necessary ratios.

The production and personal consumption norms are based on scientifically processed data. For instance, statistical techniques that take into consideration the new machinery and processes developed make it possible to figure exactly how much mazut or gasoline is required to generate one kilowatt-hour of electric power. That is how the fuel norms are established. By multiplying these fuel figures by the total volume of production planned, we have the quantity of fuel required for the country's production needs. We must also include the fuel needed for private consumption—gasoline for passenger cars, gas for home use, etc.—to arrive at the total. The balance sheet indicates where bottlenecks in the national economy are likely to occur as well as the measures the state can take to overcome them.

The market serves as an additional means of checking whether production plans tally with consumer demand.

Democratic Centralism

The part of labor in the production process is also planned on both the national and local scale. The objective is to distribute available manpower most efficiently in the many sectors of the country's economy and make the most economical use of its working time. The labor plan provides for the training of skilled personnel and a rise in real income based on the planned increase in productivity.

The Soviet worker both creates the plan and corrects it when necessary. This is no journalistic cliché. Planning starts at the bottom, in the factories and mines. Who knows better than the workers of a given plant or mine where the possibilities are for greater production? It is with them that the technical and economic indices and production programs originate.

But more than that, the workers of a Soviet enterprise have both a material and moral interest in seeing that plan quotas anticipate certain increases in productivity. They are interested because an increase in output and a rise in its quality means higher real income (both in wages and in benefits from the public consumption fund) and also because ideas, inventions, suggestions for new and better ways of doing things bring a worker public recognition and government awards and decorations.

Plants and construction projects, economic councils, government ministries and departments, state committees—all take part in drawing up the country's economic plan. Professor Yefimov, director of the Scientific Re-

SOCIETY

search Institute of Economics of the USSR State Planning Committee, made the point recently that a single factory cannot possibly know how much of its products the country will need, especially since technical progress substantially alters the output of whole industries and individual factories within an industry. Hence the need for the higher planning bodies' preliminary calculations of the volume of production in the various branches of the national economy, which serve as a guide for the individual factory's planning. The final plan is a product of planning at both the top and the bottom.

Dynamics

Obviously this is not a fixed system. Life does not stand still, nor does planning. But whatever else changes, the principle of democratic centralism in managing the country's economy, elaborated by Lenin, is perennial. In practice this means that planning bodies at the national level should work out only the main direction of the national economy and the rates and ratios of its development. Of course, in planning, as in everything else, people are not infallible and mistakes and blunders are quite possible.

We should keep in mind that the Stalin personality cult also had its adverse effect on planning. In the last years of his life only the State Planning Committee worked on the national economic plans, a negation of democracy and of Lenin's concept that the people should be drawn into the management of the country's affairs. In practice even Stalin himself did not decide problems of economic planning. It was inevitable that such a situation should produce certain negative results.

This was recently commented on by Nikita Khrushchev. He mentioned, for one thing, the poor planning of capital investments. Until recently they were planned around the average data on production growth over past years (the percentage of increase in gross production was calculated, and the planned increase for the next period was based on that). Such planning left no funds for new branches of industry whose accelerated growth was required by the reality of life itself.

Under a planned economy, however, the state runs a huge economic complex and has in its hands all the major means of production. For that reason it is in a very good position to observe new trends in technology and the economy. It can also have a great deal of flexibility in seeking new forms of management and planning.

The situation is now substantially changed. The principle of democratic centralism is strictly applied. Slips and shortcomings are caught and corrected as soon as they become evident. The new system of planning capital investments is giving priority to the chemical industry: expanding the production of mineral fertilizers, plastics, synthetic fibers, artificial rubber and other materials. That is the type of planning being done now for 1964-1965 and for the 1966-1970 five-year plan. The new two-year plan winds up the current seven-year plan period and is the starting point of the next five-year plan period. Thus are the economic plans tied together.

Toward an Affluent Society

The Soviet economic plan is a rough sketch of the economic structure of an affluent society for everyone—communism. But abundance does not drop from the skies; it is created by the labor of people, people whose everyday experience tells them how fast the country is moving economically. That is why the minds and energies of tens of millions of Soviet workers are concentrated on the main direction of economic thrust. They do not merely fulfill the planned quotas but look for and find ways of breaking their own records.

Another thing. The Soviet program for economic growth is not merely a systematized collection of general economic tasks and assignments. Not at all. Our economic plan includes realistic measures for accomplishing the general economic tasks. Ours is a state with the means of production in the hands of the people, and because of this we have the combined power both of the executive and administrative forces for putting that plan into action, making it into a law that every factory must observe. ★

your women's editor on the subject of

THE SEVEN AGES OF WOMAN

BY IRANA KAZAKOVA

"DO you know how many ages a woman passes through in her lifetime?" my friend trumpeted with his radio announcer's voice. We turned to look at him. It was a very topical question. We were celebrating my birthday.

"Seven," he said, and commenced to count off his fingers: "Little girl. Teen-ager. Young woman. Young woman. Young woman. Young woman."

Everybody laughed and suggested toasting my wonderful prospects. As I drank, I looked at my friend and thought:

"When you and I reach the age of 40, people will say about you: 'He's only 40,' but about me, 'She's 40 already.'"

My guests went home after midnight, leaving the apartment in the usual mess. Several congratulatory telegrams lay on my desk. I glanced through them and thought of a woman's old age. In the dark-blue window I saw my reflection. We stared at each other and talked.

"You'll grow old . . ."

"Of course I will. But, like all young people, right now I feel I'll always be young."

"Age changes everybody. Your eyes grow dull, and so does your interest in life. . . ."

I listened to my imaginary dialogue. One of the speakers was trying to intimidate me, the other one searching for convincing answers.

What was it about old age that frightened me?

"Wrinkles?"

"To a degree. Even the most experienced physician at the Moscow Institute of Cosmetics can't keep the wrinkles away forever. You have to reconcile yourself to that. But I've noticed that the number of older women in Moscow whom you wouldn't think of calling 'old' is growing. They look well. They trip along on their high heels, their clothes suit them, and I sometimes find real charm in their autumnal aura.

Perhaps Walt Whitman is right. "There goes woman. The young are beautiful and the old still more beautiful."

But that wasn't the thing that worried me. I resumed the conversation with my reflection.

"Perhaps I'm frightened because I have no savings? I'm not putting anything away for my old age. Not because I won't need it, but simply because when I retire from my job at 55, I'll get a pension like all other working women. I'll get 120 rubles a month. That won't make me feel like a millionaire's daughter, but it'll be enough to keep me comfortable."

That didn't worry me so much either. The important thing was whether I'd still find life interesting. That was really the test.

A woman, even a young one, cannot thrive on adulation and love alone. That's all very good and fine, but it's only part of what she needs at 20. She wants to feel that she's needed by people, not only by the man she loves. And the older she grows, the greater that need becomes. I know many women who did not give up their jobs when they reached pension age, not because they needed the money, but because they still wanted to be useful.

"Youth comes with the years," somebody once told me. I thought the phrase was a paradox until I got to know the woman who said it. I understood then that the main thing in old age was to hold on to one's youthful feeling about life. Like her, to argue until you're hoarse, to be as absorbed in community activities and political events as in your own personal affairs, to get to opening nights at the theater even though you have to sit in the gallery, and to mark up your map with the routes you've traveled.

A whole gallery of portraits passed before my mind's eye. I recalled elderly women whom I had interviewed, traveled with in trains and sat with in beauty salons. It never occurred to me that their concerns and interests were limited by age.

I suppose in the long run everything depends on the individual. My friend was probably right when he said that a woman lived seven ages. Little girl. Teen-ager. Young woman. Young woman. Young woman. Young woman. ★

AROUND *the* COUNTRY

TO PLAY IN THE USA

The Moscow Chamber Orchestra is the first, and so far the only, musical ensemble of its kind in the Soviet Union.

Rudolph Barshai, art director, conductor and violist, founded the group seven years ago. All of its 23 members are young musicians who studied at the Moscow Conservatory.

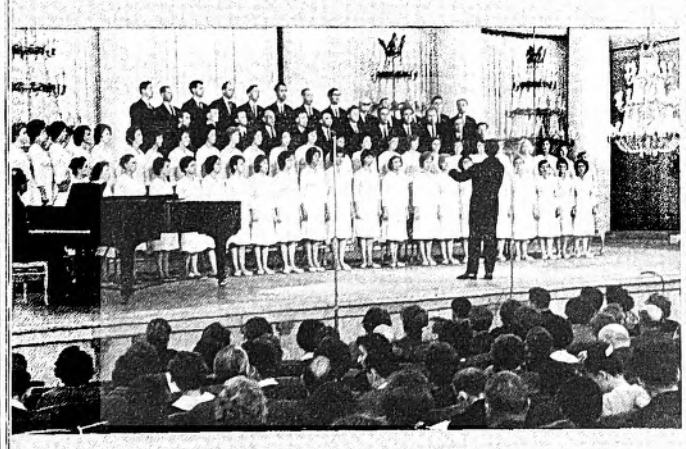
The orchestra's repertory draws on the old German, Austrian, Italian and French composers, as well as on such contemporary composers as Stravinsky, Hindemith, Britton, Tippett, Martinu and others. Prominently featured in the programs are compositions by Soviet composers Moissei Weinberg, Yuri Levitin, Edisson Denisov, Revol Bunin and Boris Chaikovsky written especially for the ensemble.

The imposing list of artists who have appeared as soloists with the orchestra includes David Oistrakh, Leonid Kogan, Emil Gilels, Svyatoslav Rikhter, Zara Dolukhanova, Galina Vishnevskaya, Irina Arkhipova and the Americans Yehudi Menuhin and Malcolm Frager.

On its American tour the Moscow Chamber Orchestra will play in Washington, New York, Philadelphia, Boston, Cleveland, Detroit, Chicago and elsewhere.

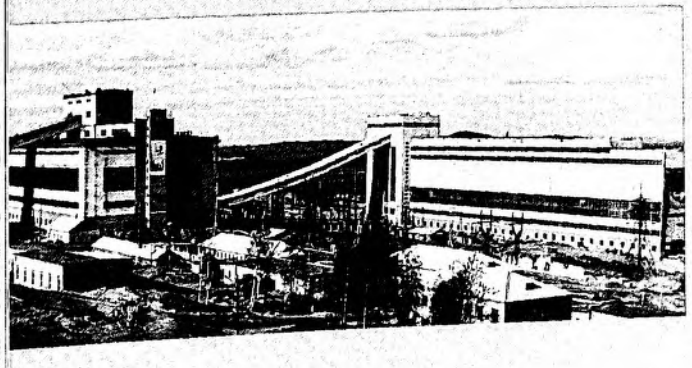
SIX-MONTH MUSIC FESTIVAL

It took six months to hear all the groups competing in the Russian Federation's amateur music festival. First-class certificates were awarded to 56 groups, the winners performing at a concert in the Hall of Columns of the House of Trade Unions in Moscow. Among the participants were the Kostroma Academic Choir, the Tula Region Folk Instrument Orchestra and the Kaluga Youth Song and Dance Company.



GIANT MILL IN THE TAIGA

In the foothills of Kachkanar, where six years ago there was nothing but wild taiga, a mill is processing ore concentrates that have a 60 per cent iron content. The new mill spreads over an area of some 39 square miles. With its advanced-type shop equipment it can process as much as 100,000 metric tons of ore daily.



A MARSHAL'S BIRTHDAY

People all over the Soviet Union helped the legendary Marshal Semyon Budyonny celebrate his eightieth birthday not long ago.

From the very first days of the 1917 Revolution this one-time cavalry sergeant major fought the people's fight. During the Civil War Budyonny commanded the Red Cavalry and won worldwide fame. Lenin said this about him in a conversation with the German Communist Clara Zetkin:

"Today our Budyonny should evidently be considered the most brilliant cavalry leader in the world. You know, of course, that he is of peasant stock. Just like the soldiers of the French Revolutionary army, he carried a marshal's baton in his knapsack, in this case in his saddlebag. He has a remarkable intuition for strategy. He is fearless to the point of wildness and reckless daring. He shares with his cavalry men the biggest deprivations and the greatest dangers. They are ready to let themselves be hacked to pieces for him. He, alone, is worth whole squadrons to us."

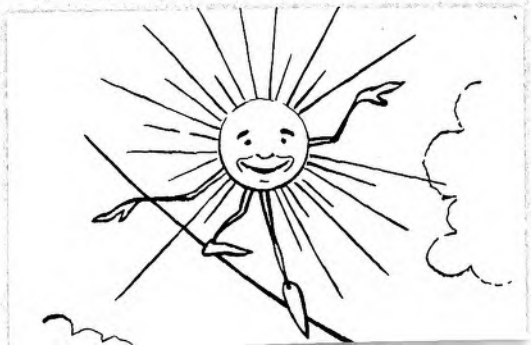
PACKAGED SUNSHINE

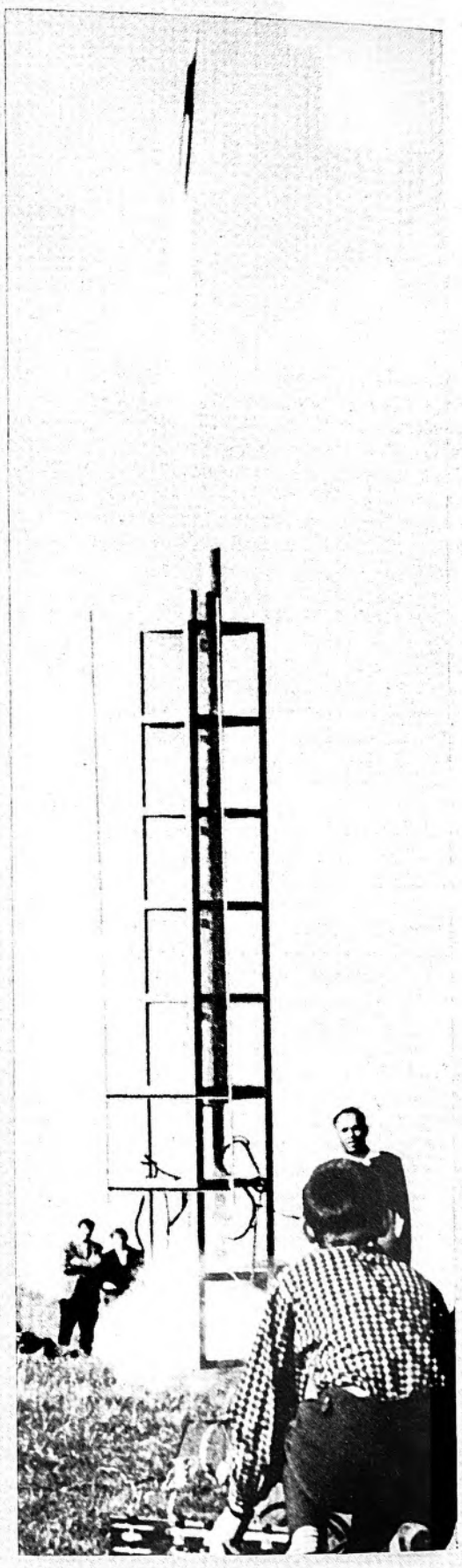
Solar rays packaged for delivery to a factory, a shop, a doctor's office, a private residence?

Soviet inventors Vsevolod Vineberg, Doctor of Science in Technology, of Leningrad and Damir Sattarov, a graduate student from Alma-Ata, have done just that.

Imagine a transparent glass thread in a casing. A ray of light strikes the thread, is trapped in the casing, runs along it, and is reflected millions of times before it escapes from the other end. The diameter of the thread is several hundredths of a millimeter. When a number of these threads are intertwined, they form a thick, flexible rope. Engineers have been using these ropes for the past several years to send images.

The rays can be transmitted a distance of about 165 feet. The distance increases if the threads are made thinner (some thousandths of a millimeter).





YOUNG ROCKETEERS

Nearly 200 young rocket builders waged a keen five-hour contest at the Second Moscow Regional Contest of Rocket Models. There were four events: for single-stage, multiengined, multistage and experimental rockets. The winners were Yevgeni Gvitov, Victor Nazin, Vladimir Shmitov and Nikolai Kosyanchuk. In the team contest a group of youngsters from the town of Fryazino, near Moscow, won first place and the Yuri Gagarin Challenge Prize.

To build a rocket a youngster has to know what makes it fly, has to be able to do mechanical drawing, and make the parts. The rocketeers learn all this in afterschool young technicians' stations.

FAMILY QUINTET

Pass No. 5 Portovaya Street in the Far Eastern city of Magadan almost any time after school, and if it isn't a piano you hear, it's a violin, a cello or an accordion. The musicians are the children of Victor Pospelov, an engineer with the regional building organization.

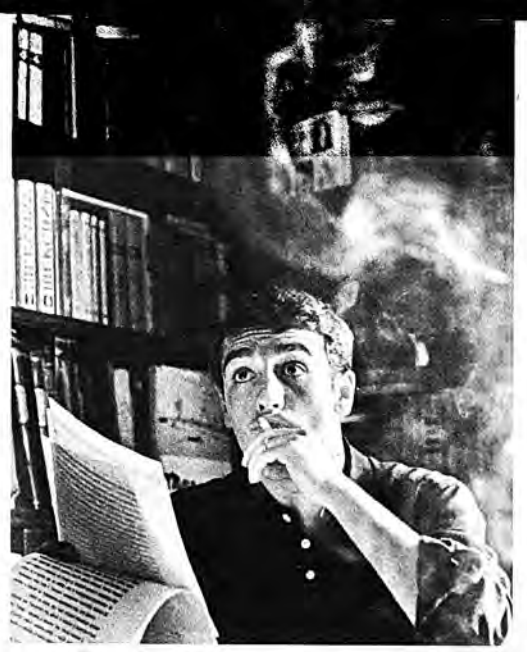
Olga and Alexei are studying the piano at the Magadan Music School, and Alexander the violin. Mikhail's favorite instrument is the cello, while the youngest, first-grader Vasya, is learning the accordion. The quintet, whose repertory includes Tchaikovsky, Beethoven, Schumann and Grieg, performs frequently.

THE BEES' EL DORADO

Georgian bees are world famous. Because their proboscises are longer than those of other varieties, Georgian bees can reach the nectar of flowers that other bees cannot.

Georgian bees have another virtue: they are very tame. You can putter about with uncovered hands near swarming thousands for hours without getting stung. Also, these bees break all records for industriousness; they leave their hives early in the morning and return later than ordinary bees. They work diligently in very cold weather, fly in fog and even in drizzling rain.

Apiarists the world over—in Australia, France, Austria, Italy, Afghanistan—write to the "bees' El Dorado," as the famous Russian scientists Alexander Butlerov called Georgia, requesting queen bees. Mountainous Georgia's bees are bred for export at eight state apiaries. One interesting note: the USA began to import Georgian bees long before other countries, 50 years ago, and to this day is one of the best customers.



GRAND PRIX FOR SOVIET TV FILM

Forty full-length films and documentaries were shown at the Sixth International TV Film Festival last spring in Cannes.

A Three Hours' Trip, produced by the young Moscow film director Edmund Keosayan (shown on the photo) and based on Vadim Kozhevnikov's story "Strong People," was judged the best art film. In addition to the official prize, the Grand Prix of Eurovision, it also received a prize offered by the Marseilles television studio's technicians.

The plot of *A Three Hours' Trip* is simple. A cross-country vehicle, carrying five people from a construction site in the polar region, is fighting its way through a severe Arctic snowstorm. The wife of one of these men, and a doctor by profession, had lost her life shortly before trying to save a patient. The viewer learns very little about this woman, but her fate is the major theme of the film.

Both the press and the public lauded the film for its humanity and the authenticity of its characterizations.

PLASTIC HOUSE

This plastic house strikes the eye even at a distance: the facade, lit up by the orange-hued rays of the sun, stands out from the five-story brick apartment houses all around it. The building is light blue with silvery window frames, glass doors and balconies.

The tenants do not have to buy any furniture: each apartment has built-in closets, bookcases, chests of drawers and other such items.

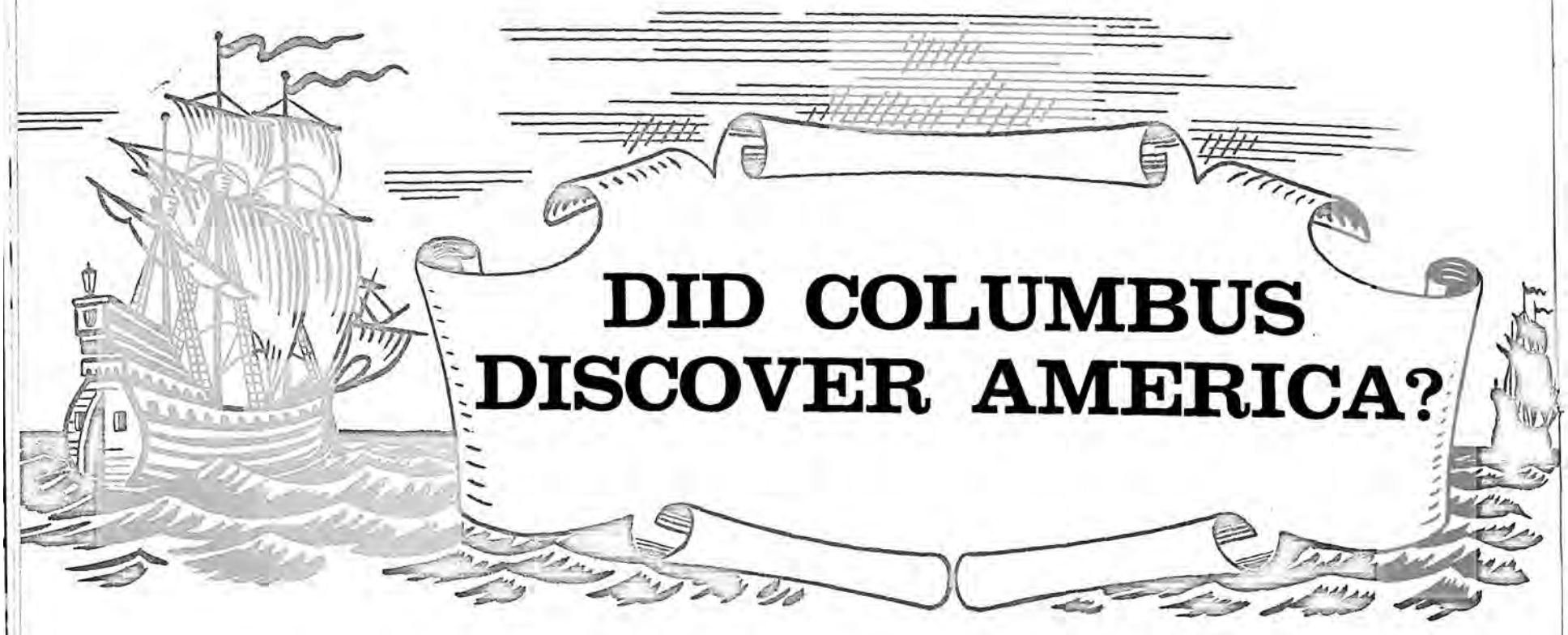
These apartments were planned on the "flexible" or "free" principle. The built-in furniture comes in portable sections so that the tenant can change the apartment layout at will. The floor is covered with a plasticized linoleum over an insulated base. The windows are large, almost to the floor.

Soviet architects are working on similar designs for a 12-story building, and on a new type of five-story plastic house.

TURKISH DELEGATION'S VISIT

Moscow, Volgograd, Azerbaijan, Uzbekistan, Leningrad and back to Moscow was the itinerary of a delegation of the Grand National Assembly of Turkey touring the Soviet Union last summer.

Suat Hayri Urgublu, Speaker of the Turkish Senate and head of the delegation, said that the tour had been very informative. Their visits to factories, collective and state farms, schools and cultural centers gave the Turkish legislators an opportunity to see Soviet life and learn what Soviet people feel and think. They found, Mr. Urgublu concluded, that the Soviet people are confidently moving toward the goals they have set for themselves, that they want peace for themselves and for all peoples.



DID COLUMBUS DISCOVER AMERICA?

SOVIET SCIENTIST DAVID TSUKERNIK'S NEW HYPOTHESIS

HISTORIANS have good reason to believe that the American continent was known to Europeans from the days of antiquity. Scientists have established that there were large Norman villages in America before the arrival of Columbus. Several maps have come down to us showing the Normans' route to America, and in their art is reflected their daring ocean journeys. We also know that the Viking Eric the Red was the first to sail to America. Banished from his country, he went to Greenland and Iceland, and thence, in the year 982, farther west until he reached the new continent. The news soon spread to his native Scandinavia.

But earlier still, it is thought, America was visited by the Celts who in the third century B.C. founded a village which they called Witramannaland (Land of the White Men). To Witramannaland came those who could not bear the hard rule of the Celtic tribal chieftains. In the year 56 B.C. a Roman fleet commanded by Julius Caesar destroyed the flotilla of the Celts, and thus their seafaring was ended. Their contact with the home continent broken, they settled down and intermarried with the local Indian tribes.

We also find mention of a great migration westward in the writings of ancient Greek and Roman historians. But in all likelihood the Romans were also not the first to cross the Atlantic. The information given us by Pliny and the *Book of Curious Cases*, attributed to Aristotle, was drawn from Carthaginian sources. Some hold to the opinion that America was discovered from the Pacific side by the Phoenicians.

Another hypothesis is suggested by the riddle of Alexander of Macedonia's fleet. In the year 323 B.C. Alexander built an enormous fleet of 800 ships on the Persian Gulf. There is no word of the fate of that fleet and the 5,000 Levantine and Greek shipbuilders who sailed with it. Heading eastward, they vanished without a trace. There appears to be evidence that the fleet, or part of it, reached the American coast. Drawings found in ancient American temples show white, bearded men in headgear resembling the helmets worn by the Greek warriors of Alexander the Great's time.

The history of America also contains quite a few riddles that lead us to suppose that there were contacts between the New and the Old Worlds (Europe and Asia) in ancient times. We know there were two completely independent civilizations on the American continent—the Mayas and Aztecs (in what is now Mexico) and the Incas (on the South American coast in Peru and Chile). The Europeans found remnants of former civilizations; to date historians, archeologists and linguists have shed surprising but still far from complete light on them.

The origin of the Incas is a puzzle. They lived as a caste, differing from the rest of the population in their lighter skin color, facial structure, clothes and the way they wore their hair. The language they spoke among themselves was incomprehensible to the rest of the population. Their legends told of ancestors who had come from overseas.

Nor has the riddle of the "white Indians"—the tribes of light-skinned people found all over both Americas—been answered. Who are they? Where did they come from?

The cross was a familiar symbol to the Mayas and the other Indian tribes. The cross, we know now, has its source in pre-Christian times. In Egypt it was called "the Key of the Nile."

Mexican and ancient Babylonian myths have much in common, and linguists have been struck by the similarity between the language of the Incas and Sanskrit, the sacred written language of India.

All this is only a sampling of the many facts that point to the astonishing similarity in the religions, customs and languages of peoples living at great distances from one another. It is not unreasonable to conjecture that these similarities could have had their origin in systematic contacts of the peoples on earth in prehistoric times.

Why did Columbus have to rediscover America many centuries later?

To answer this question, David Tsukernik, member of the USSR Geographic Society, made a detailed analysis of all the known data and documents relating to Columbus' voyage to America. His article appeared in a late 1962 issue of the popular literary magazine *Novy Mir*. Tsukernik came to the conclusion that Columbus' journey to America was not the first and that—and this is important—he had advance information of the new lands he "discovered" but kept it a secret.

The generally accepted version of the discovery of America, as we know, runs as follows: In the fifteenth century the efforts of Europeans to establish direct trade contacts with China and India led to the discovery by the Portuguese of a route to India around the southern tip of Africa. The competition between Spain and Portugal spawned the new idea of reaching India by sailing westward across the Atlantic Ocean.

This is what Columbus did. On this westward voyage he discovered new islands, and then a new continent which was later named "West Indies" because the Spaniards mistakenly thought the new lands a part of India or the eastern extremity of Asia. To put it bluntly, America was discovered by sheer accident. But is that really so?

Many of the official documents—the reports by Columbus, royal messages and other papers—were discovered by historians and published during the nineteenth century. Few of the private letters and statements of Columbus' contemporaries have come down to us, and for a while no special importance was attached to them. When they were published however, it was found that they differed essentially from the official documents of the Spanish rulers and those of Columbus and other leaders of the overseas voyages.

All the chroniclers maintain that what started Columbus off on his expedition were a letter and map sent him in 1474 by the Florentine scientist Toscanelli. A study of the facts has shown, however, that neither the letter nor the map was authentic. The much-cited letter from

Toscanelli offered the information that the alleged western road to India on the Lisbon latitude lay over approximately one-third of the globe's circumference (130 degrees). Consequently, the Old World on the Lisbon latitude would have been at 230 degrees (instead of the 130 degrees where it is). Hence the insistent recommendation to use the western route to India, a land of fabulous wealth, "as the shortest and easiest."

The documents of Toscanelli's private archives prove, however, that the Florentine scientist did not hold these mistaken views of the size of the globe and of the Old World. Moreover the first "Toscanelli letter" was found to have been written early in the sixteenth century, at least two decades after his death.

The Spanish chroniclers of the sixteenth century noted these discrepancies and contradictions. At the beginning of our century there was some question raised about the authenticity of the Columbus-Toscanelli correspondence.

David Tsukernik studied the material which had been dismissed as insignificant.

The Spanish chroniclers noted, among the more serious reasons that had prompted Columbus to undertake his expedition, the rumors current at the time that the admiral had received information about lands in the West from seamen who had been there before him.

Las Casas, a chronicler who sailed with Columbus, wrote, for instance, that when Columbus was living on the island of Madeira, a Portuguese ship landed there with a half-dead crew. They told him that a storm had driven their vessel far to the West—to the Atlantic—where they had come upon some islands. After aimlessly sailing the ocean for a long time, they had finally landed in Madeira. Las Casas added that the helmsman of that ship had lived in Columbus' house and, before dying, had given him the notes he took on the luckless voyage and a map of the lands they had discovered. The chronicler stressed further that many of Columbus' contemporaries and the members of his expedition accepted all this as fact and the reason for the admiral's decision to undertake the voyage "as a worthy cause."

This unconfirmed rumor cited by the chronicler has long been discounted. But the analysis of Columbus' maiden voyage made by Soviet scientist Tsukernik shows that it merits attention.

The log of the voyage demonstrates that there was no hesitancy in following the route although it was a long and arduous voyage from the Canary Islands across an unexplored ocean. Here Columbus' first flotilla took advantage of the steady eastern trade winds and currents. For several centuries after him sailing vessels heading south and for Central America followed this same route.

One would expect that on this unexplored ocean Columbus would have taken special precautions to keep the ships from running aground on unknown shores and islands. One would assume they would sail by day and either anchor or slow down at night. A study of the flotilla's movement, however, shows that the ships traveled full speed day and night.

Moreover, Ferdinand Columbus, the navigator's son, and the chronicler Las Casas, found among the admiral's papers instructions he had given his captains before sailing from the Canary Islands—to be opened only if the ships were separated in a storm. The admiral's instructions were for the ships to cast anchor at night after they had put 700 leagues (or 2,226 nautical miles) between themselves and the Canary Islands. Ferdinand Columbus and Las Casas both gave the same explanation for this. They wrote that the admiral "had not expected to sight land sooner than 750 leagues west of the Canary Islands."

The discrepancy in the figures can be explained as due to simple precaution. Columbus might reasonably have expected the estimates worked out by the other navigators to vary somewhat, and therefore had given them instructions that when they reached the seventieth league, they were to sail only during the daylight hours. Noteworthy is the fact that 750 leagues is approximately the distance from the western islands of the Canary group, where the flotilla began its voyage, to the eastern islands of the Caribbean Sea. It is not likely that this was pure coincidence.

One other fact, seen in a new light by David Tsukernik, confirms the theory that Columbus had authentic information on the lands toward which he was sailing. When the crews threatened to mutiny, fearful that they would never see home again, Columbus gave one of his commanders, Martin Alonzo Pinzon, a map about which the record of the voyage notes that on it were charted the islands "in this sea." The mutiny simmered down, but the ships' logs do not explain why. It is logical to suppose that it simmered down because Columbus showed the men that he had authentic information, and even a map, of the islands "in this sea."

Historians paid no attention to the reference to this map, since the generally accepted belief was that Columbus had gone by the Toscanelli letter and map. But if we compare the recommendations attributed to Toscanelli with Columbus' movements, we find an evident contradiction. The map that allegedly belonged to the Florentine scientist showed the route to China, with South China indicated on the Lisbon latitude (38 degrees North Latitude). Columbus' ships deviated southward from that course and came upon new lands at about 25 degrees North Latitude.

Further, to follow Toscanelli's instructions, the ships would have had to turn northwest from the first land sighted to reach China at the Lisbon latitude (38 degrees) marked on the "Toscanelli" map. But Columbus did exactly the opposite; he turned south and southeast, and then held to an eastern course all the way. Did bad weather force him to take that course? Not at all. Though a steady east wind and current favored a northeast voyage, he piloted his ships in the opposite direction in the teeth of the wind.

Thus Tsukernik demonstrates that there is no basis whatsoever for the contention that the Toscanelli letter prompted the Columbus expedition. How can we believe that a man was led to organize an expedition by certain instructions if his actions completely contradicted those same instructions!

No less curious are the facts disclosed by David Tsukernik in his analysis of the expedition's return voyage. We know that after the flotilla left the last islands of the New World, a new mutiny broke out on board the ships. The sailors had every reason to be alarmed by the fact that the constant west winds and currents would prevent them from returning home safely. Favorable winds on the way out could mean disaster on the way back. The crew threatened to kill Columbus. According to his contemporaries, he was not overly disturbed. He managed to convince the crew that they would have a fair wind on the homeward voyage. There is no doubt that Columbus must have been very certain of his return route. The fact is that it was the best possible one he could have taken considering the knowledge of navigation then available. The documents show that Columbus' ships did not even try to return the way they had come. They headed northeast, and for a little over two weeks (from January 16 to February 2) kept moving in the same direction, in the teeth of the wind, until they entered a zone of steady west winds and currents. Here they turned right about and sailed east. Under these favorable conditions they reached the Azores, the westernmost part of the Old World, in very short order (February 2 to February 15).

For dozens of years afterward no better route for sailing vessels was discovered. And Columbus did this without any wandering about or searching. An accident? Not likely. Again, on the return voyage the ships confidently sailed at full speed, day and night. The log of the return voyage shows that from January 17 to February 13, 1493, the ships covered 1,619 miles by day and 1,896 by night.

Only a well-informed pilot would have traveled at that speed without taking special precautions. Obviously that well-informed pilot was Columbus.

In the light of these and other facts cited by Tsukernik, the Spanish chroniclers' reference to the fact that unknown seamen had visited the unexplored lands west of the Atlantic Ocean and had given Columbus a map of the new lands and their notes made en route deserves serious attention.

There is also reason to believe that Columbus could have drawn his information about the new lands from some other, earlier sources, such as maps and logs. But in either case it is a foregone conclusion that he knew everything he needed to know about the new lands and that he had a map showing the route before he organized his expedition. But he kept the matter secret. Why?

To explain this Tsukernik cites Columbus' correspondence with King Ferdinand and Queen Isabella of Spain. Columbus' widely circulated letters describe the riches of the lands he discovered. But from official sources we learn that aside from Indian slaves, he brought back no riches. Why did Columbus and the royal court have to advertise the new lands? From the testimony of Columbus' contemporaries and his secret correspondence with the Spanish sovereigns, we learn that he had trouble recruiting a crew for each subsequent expedition. There was general disbelief in the fabulous wealth of the new lands, and therefore seamen refused to sign up. Later, there were very few who could be persuaded to emigrate to the trading posts he set up. To attract people to the new lands, Columbus and the Spanish court resorted to fraudulent advertising. Columbus borrowed all his descriptions of the charms of the new lands from Ptolemy, Marco Polo and other travelers who had earlier pictured the countries of Eastern Asia. He made notes in his own copies of books by these and other travelers and used many of the sentences he underlined in his "reports" to the King and Queen of Spain.

However, from Columbus' secret correspondence with the royal couple we learn that they were well aware of the real state of affairs in the new lands. In their secret message dated September 11, 1494, a year and a half after the return of the first expedition, the royal couple wrote to Columbus, then residing in the West Indies:

"We know that what you said we could get at the very beginning is true enough, as though you had seen it all before telling us about it" (*i.e.*, before the idea of the voyage was presented—Ed.).

This new interpretation puts in question the generally accepted version of the reason for Spain's striving to find a new route to the lands of the East. If the rulers of Spain were well informed of the commercial value of the Greater and Lesser Antilles, the aims of colonial expansion were quite different. Otherwise they would not have supported all the mystifications, distortions and misinformation that Columbus spread for so long a time.

Science accepts no theory or explanation as final. There are any number of cases where theories, even those seemingly completely substantiated and confirmed, were subsequently questioned and either corrected or discarded altogether. Sooner or later, we hope, historical research will give us the real purpose of Columbus' voyages to America. The Soviet scientist's hypothesis is an attempt to answer some of the riddles. It in no way detracts from the historic significance of Columbus' voyage; it simply speculates, with evidence, that his great discovery of the New World was no accident. ★

The Storming of the Kremlin *by Konstantin Yuon* *Tretyakov Art Gallery*

March Snow
by Igor Grabar
Tretyakov Art Gallery

RUSSIAN PAINTING IN THE EARLY TWENTIES

BY MARIA MILOTVORSKAYA

RUSSIAN PAINTING of the late nineteenth and early twentieth centuries abounded in celebrated names. From the ranks of these artists came those who later constituted the old guard of well-known Soviet artists. To this company of gifted painters, each with his highly personal imprint, belong Mikhail Nesterov, Konstantin Yuon, Vasili Baksheyev and Igor Grabar. Like many of their talented contemporaries, these artists had their roots deep in the realistic tradition of Russian painting.

Mikhail Nesterov (1862-1942) was a pupil of Vasili Perov, a distinguished exponent of the realistic and democratic school of Russian painting of the second half of the nineteenth century.* With his own distinct touch, Nesterov nevertheless took much from his teacher, notably his absorbing interest in genre painting. His early works in particular show Perov's influence. Later Nesterov turned to historical and religious subjects. His pictures *The Hermit, Taking Monastic Vows, The Boy Bartholomew's Vision, Holy Rus* and others, painted before the Revolution, reveal the artist's poignant disillusionment with the existing order of things. Nesterov brought to his canvases tormented and driven souls seeking an escape from the real world in religion or nature.

The human moods that pervade Nesterov's pictures and invest them with a peculiar charm are strongly suggested in his landscapes also. Nature obviously played an important part in the artist's work. Woods mantled in twilight, the slender grace of tall white birches, clear mists in open fields and meadows, pale skies bathed in still waters—these are his favorite subjects. His color arrangements have a coldness of tone relieved somewhat by the bold contrasts he uses.

As a portrait painter Nesterov achieved great depth; this is particularly true of the work he did during the Soviet period. Inspired by new themes and new people, his portraits are passionate attempts to express the ideal of the new man. His subjects included architect Alexei Shchusev, the sculptors Vera Mukhina and Ivan Shadr, and the renowned physiologist Ivan Pavlov. In each Nesterov caught the particular stance, gesture, expression that most revealed the inner life of the person. He was awarded the Order of the Red Banner of Labor and the title of Honored Art Worker of the Russian Federation by the Soviet Government.

Konstantin Yuon (1875-1958) had an unusually varied career. He studied at the Moscow School of Painting, Sculpture and Architecture; later taught there; and set up a studio of his own. He painted portraits, landscapes, historical subjects, and did stage designs. Nature is displayed in all her glory in such canvases of his as *March Sun, Cupolas and Swallows, To Trinity Church* and *An Open Window*. His colors are rich and glowing, his pictures full of dazzling sunlight. It was the decorative note he struck in his color schemes that later induced him to take up stage design.

To Soviet art Yuon came as an eminent painter, a guardian of national traditions, a teacher, and an author of important critical essays on art. Without rejecting his old themes, he demonstrated his keen interest in the Revolution and the people born of the new age in his *Delegate Arisha* (1925), *Youth in the Moscow Suburbs* (1928), *Red Square Parade in Moscow, November 7, 1941*. As a stage designer Yuon was a master at bringing the native Russian scene to the theater; examples are his settings for Moussorgsky's *Boris Godunov* and *Khovanshchina*, and for plays by Nikolai Ostrovsky, Maxim Gorky and Nikolai Gogol.

The long and prolific career of Vasili Baksheyev (1862-1958), which began in the eighties of the last century, was dedicated to painting the landscape of Central Russia. Throughout his life he took delight in picturing birch groves, forest paths, swampland, autumnal sunsets, bright May days and still evenings. In his realistic, unaffected landscapes, in which familiar motifs keep recurring, he continues the lyrical trend in landscape painting of the Russian *Peredvizhniki* artists. He follows in the tradition of Vasili Polenov, his teacher. Baksheyev's landscapes are almost lifelike, his scenes sharply delineated and visualized as complete characterizations of a place, with none of the vagueness of the incidental or fleeting impression. In his subtle choice of colors—in which nature's tones, especially the greens, now sparkle in the sunlight, now fade into the dim coolness of the evening—Baksheyev shows the influence of Polenov.

Igor Grabar (1871-1960) achieved distinction not only as an artist but as an art historian and scholar. As custodian of Moscow's Tretyakov Gallery, he did much to preserve and advance the country's artistic culture as well as popularize world art among the people.

He began as a pupil of the famed Ilya Repin and completed his education in Munich and Paris, in the school of Anton Ashbe. In his works he achieved an organic unity of the Russian and West European schools of painting. He showed an inclination for architecture, but what turned him to painting was the capricious play of sunlight and the way it changes the color and form of objects. *The Uncleared Table, Delphinium, Flowers and Fruit on the Piano* and *February Azure*—impressionist paintings in pure primary tones—are typical. His still lifes and landscapes bespeak his love for his native soil.

Grabar did considerable portrait work, particularly in the thirties when he painted his *Self-Portrait in Yellow Pajamas*, portraits of the writer Kornei Chukovsky, the composer Sergei Prokofiev, Academician Sergei Chaplygin, his own son and others. He also did a number of Lenin portraits —*Lenin in His Study at the Kremlin, Lenin at the Wire, Peasant Messengers See Lenin.*

Grabar had a distinguished career as a scholar. It began in 1910 when he was associated with the well-known World of Art *(Mir Iskusstva)* painters and continued to the very end of his long and fruitful life. Grabar's numerous critical analyses of contemporary painting testified to his profound knowledge of Russian art history. He edited a widely known *History of Russian Art* and wrote copiously on such famous painters as Valentin Serov and Ilya Repin.

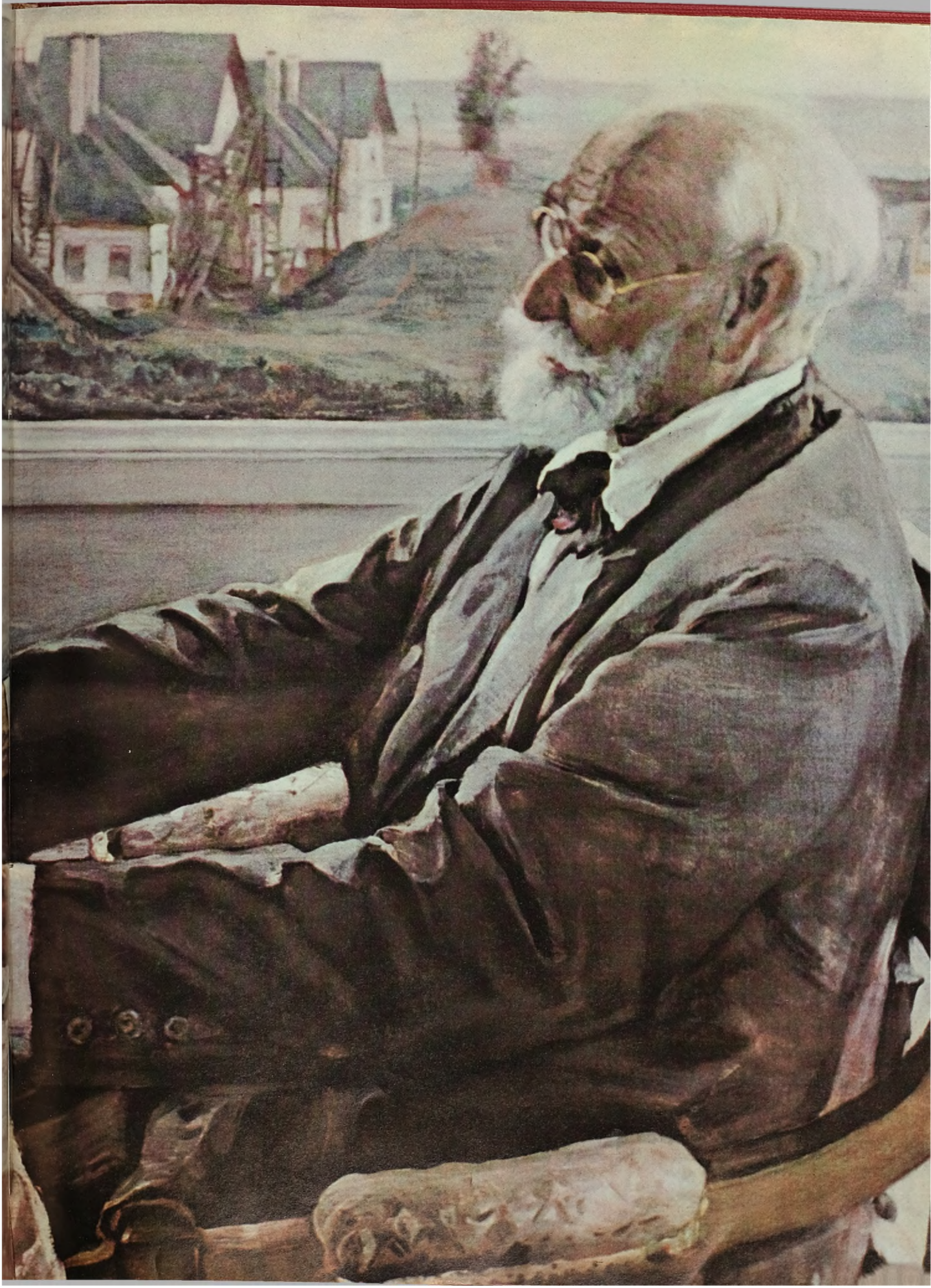
During the severals years that Grabar was the director of the Tretyakov Gallery in Moscow, he also worked with its Department of Museums and the Preservation of Monuments of Art and Antiquity. Restoration artists worked under his guidance.

Among the veterans of Russian and Soviet art living and working today we have Sergei Konenkov, the very well-known Russian sculptor who spent many years in the United States; Pavel Korin, the distinguished portraitist; the Armenian artist Martiros Saryan; and Vladimir Favorsky, the venerable wood engraver. Whatever the present-day achievements of our young artists, they cannot eclipse the contributions of this older generation of painters to our artistic development.

Still painting with full creative vigor, they take pride in the fact that the younger generation of Soviet artists is building on their knowledge and experience.

* See article "Peredvizhniki Artists" in the April issue.

Academician Pavlov
by Mikhail Nesterov
Tretyakov Art Gallery



Birch Grove
By Vasili Baksheyev
Tretyakov Art Gallery

University Students
by Konstantin Yuon
Tretyakov Art Gallery

QUERIES FROM READERS

QUESTION: How do you explain the fact that the first manned space flight was made by the Soviet Union?

ANSWER: We asked several Soviet people to answer this question for us—secondary school teacher Lea Makarova, engineer Sergei Petrov, journalist Oleg Pisarzhevsky, and factory worker Yakov Blinov.

Lea Makarova: To my mind, one of the reasons a Soviet citizen was the first space pilot is the high level of education in the Soviet Union, also the fact that education, from primary school through college, is free in our country so that any talent does not remain undiscovered. It was our system of education that placed Yuri Gagarin in orbit.

Sergei Petrov: Space flight and spaceship construction is possible only with a highly developed industry and skilled engineers, technicians and workers. We turned peasant Russia into an industrial power that can make everything from teaspoons to spaceships. And since we train more than three times as many engineers every year as the United States, we have enough technical specialists to produce everything necessary for space flight.

Oleg Pisarzhevsky: In our age great discoveries are made not by one brilliant man but by a concentration of scientific thought and organization of scientific forces. The complex problem of space flight requires the coordinated activities of scientists in the most diverse fields—specialists in space mechanics and astrophysicists, doctors and food specialists, cybernetics experts and astrogeologists. Such a concentration of scientific thought and effort in so many different fields of knowledge is only possible in a socialist society, where there are no competing firms or monopolies, where the state can plan scientific research and coordinate the efforts of its scientists.

Yakov Blinov: We know that space flight requires tremendous material and financial outlays as well as creative effort. I think only a country with a planned economy can pool all its resources on the big scale required for the conquest of space.

Editorial Board: One additional word from us. Addressing the meeting which welcomed Valeri Bykovsky and Valentina Tereshkova, Nikita Khrushchev said that the road to space did not begin when the first space scientists poured over their blueprints or started working with electronic machines, or when the Soviet cosmonauts began their training. "We set out on our road to the cosmos," said Chairman Khrushchev, "when the fathers and mothers of the cosmonauts, the older generation of Soviet people, were laying the first stones of the foundation of socialism." Socialism is justly called the launching pad of the cosmonauts.

QUESTION: About your pension system, how much do employees have to contribute?

ANSWER: Nothing. There are no deductions from a worker's pay envelope for his future pension. The whole pension is paid by the state.

QUESTION: At what age are people entitled to pensions?

ANSWER: Men at the age of 60, and women at 55. There is one other requirement—a man must have worked 25 years; a woman, 20.

QUESTION: Is it true that some pensions are as much as 100 per cent of a worker's former pay?

ANSWER: Yes, it is true for workers in the low-pay brackets. In general, pensions range from 50 to 100 per cent of earnings. The pension is calculated either on the basis of earnings for the last year of work or on the basis of any five successive years within a ten-year period, whichever is the greater amount.

QUESTION: Can a pensioner work?

ANSWER: A pensioner can work two months a year and still receive a full pension. A pensioner may, if he desires, continue in his regular full-time job, but in that case he is entitled to only half of his pension. As soon as he stops working, he gets his full pension.

QUESTION: Does a pensioner get more if he has dependents?

ANSWER: Yes, but only if the dependents are incapacitated or not old enough to work. In other words, if a husband retires on pension and his wife is 55 and not working, his pension is 10 per cent higher. The pension increases with the number of dependents.

QUESTION: How many pensioners are there in the Soviet Union?

ANSWER: Twenty-two million.

QUESTION: How much money does the USSR spend on science?

ANSWER: The current national budget appropriated 4.7 billion rubles for scientific research. This is double the appropriation of four years ago.

QUESTION: I am a regular reader of your magazine. Do many Soviet women work and at what sort of jobs? Are there any women in the Soviet parliament?

ANSWER: The majority of Soviet women work, and in practically every field. An especially large number become doctors and teachers. Many Soviet women are legislators; 27 per cent of the deputies to the Soviet parliament are women. This is far more than the number of women elected to the parliaments of all the capitalist countries combined. Women in the Soviet Union enjoy complete equality with men. Even space is no longer exclusively a male domain now that Valentina Tereshkova has come on the cosmic scene.

QUESTION: When I visited your country, I drank a fine cognac; the label on the bottle had a stork and a bunch of grapes. Was it Armenian?

ANSWER: No, although your mistake is understandable, as Armenian cognac is world famous. However, the stork and the grapes are the trade mark of Moldavian cognac.

The emblem has an interesting history. Legend has it that long ago a Moldavian village was surrounded by its enemy, who cut off the water supply. The storks, of whom there were many in the village, flew to the vineyards and carried back bunches of juicy grapes in their beaks. Since then the stork is always pictured on bottles of Moldavian wine. Many brands—among them Feteasca and Aligote—have won international medals.

QUESTION: I read somewhere that there are diamond fields in the USSR. Please give details.

ANSWER: There are diamond fields in Yakutia, an autonomous republic in Siberia. Before 1956 diamonds were mined only in the Urals. The Yakut deposits are much richer, and a large diamond-mining industry has sprung up there in the past few years. Some of the stones are very valuable, weighing as much as 57 carats.

Yakut diamonds now have strong competition from synthetic diamonds, which Soviet industry can turn out in quantity. Artificial diamonds are not as handsome as the natural variety, but their use in industry has demonstrated that they are much stronger.

QUESTION: What education does the average Soviet worker or farmer have?

ANSWER: Forty per cent of our workers and 23 per cent of our farmers have a partial or full secondary or higher education. Universal eight-year schooling, the widespread system of day and evening general and specialized secondary schools and institutes, and the fact that all education is completely free give Chairman Nikita Khrushchev every reason to say, as he did recently: "The day and the hour is not far off when every worker and collective farmer in our country will be a highly educated person. Even now there are dozens of factories, mills and state farms where everybody is studying, where the distinction between mental and physical labor is really being eliminated."

QUESTION: Are atomic power stations being built in the USSR?

ANSWER: Yes, the first power station run on nuclear fuel was built eight and a half years ago. Now the Novovoronezh and Beloyarsk stations, with a total capacity of 1.5 million kilowatts, are under construction. A one-million-kilowatt atomic power station is also being designed. ★

AGNIA BARTO

The 57-year-old poet, who has written numerous amusing and clever verses, plays and scenarios for children, is well known among the country's younger generation. Agnia Barto's works started to appear after the 1917 October Revolution, and she soon realized that a children's writer must first of all be a teacher. Her verses, the satirical sketches "Crybaby," "Chatterbox," "Tamara and I," "Bullfinch," and others, teach children discipline, good manners and respect for work. The films The Foundling *and* Alyosha Ptitsyn Develops a Will, *based on the poet's scenarios, are very popular among Soviet moviegoers. And the play* Dangerous Acquaintance, *dealing with morals, was shown at many children's theaters throughout the Soviet Union. Agnia Barto's poems are loved by both children and adults. They have been translated into 55 languages of the peoples of the Soviet Union and put out in editions of millions of copies.*

THE CRICKET

Daddy was working,
So I sat quite still.
Just then
A Cricket
Chirped under the sill.

I searched near the window
And looked on the floor,
But then heard the Cricket
Chirp hard by the door.

He's near and he's far,
But where—who can say!
At times he is silent,
At times chirps away.

Does he fly? Does he jump?
Does he crawl like a snail?
Perhaps he has whiskers,
And also a tail?

Or maybe he's fuzzy
And frightful to see?
And when he crawls out,
How surprised all will be!

And then Mummy said,
"He makes noise all the day.
I think we should drive
Such a lodger away."

We searched high and low,
And we searched all around:
A long-lost umbrella
Was all that we found.

And under the sofa,
Dad's glasses found we,
But never a sign
Of the Cricket did see.

Unseen little Cricket,
You come and you go,
But what you may look like,
I still do not know.

The way we live

GETTING

MUSCOVITES—more than six million of them in an area of some 312 square miles—travel by Metro, bus, trolleybus, streetcar and taxi.

The total length of all the lines is 1,930 miles, nearly four times the distance from Washington to Chicago. They carry millions of passengers every day.

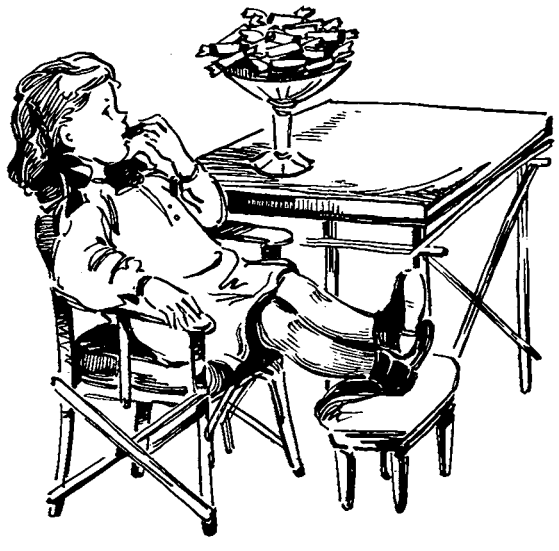
The most characteristic thing about the Moscow transportation map is the way it changes. Nearly every week new lines are added and old ones discontinued.

The map changes with the temperature. During the summer months many seasonal lines connect the city with its suburbs, reservoirs, beaches and boating stations.

The Metro also changes the map. It's almost a tradition now for two, three or even four stations to be opened, either on old lines or on new ones, every year. The Moscow Metro today has 62 miles of rail. Some lines, almost 17 miles long, are now being built. In the 1959-1965 period the Metro will have been expanded an additional 34 miles.

The Moscow transportation system is being developed consistently according to plan. The transportation department, under the Moscow Soviet, is constantly in touch with the housing authorities and knows exactly where new residential districts are being built. For example, here's a brand new street: the apartment houses are not yet completely occupied, but buses and trolleybuses are already running.

Sometimes the transport workers get there before the builders. It



MUMMY'S LITTLE HELPER

Little Tanya's very busy,
She is helping all the day.
When her brother's eating sweet-
meats,
Tanya helps him straightaway.

Eating, drinking tea and resting,
All are things that she must do.
First, she'll sit a while near
Mummy,
Then she'll sit near Granny, too.

And before she went to bed,
To her Mummy Tanya said:
"I'm too tired to undress,
But I'll help tomorrow, yes?"

TEARFUL GANYA

What a noise!
What a din!
Has a herd of cows come in?
No, it's not a milk-cow's moo,
It is Ganya's "Boo-hoo-hoo!"
Crying out her little eyes,
With her frock her tears she dries.
Boo-oo-ool

Out of doors our Ganya goes
And she puckers up her nose:
"Oh, how nasty it is there!
No, I won't go anywhere!"
Boo-oo-ool

Ganya toddles home again,
But her tears pour down like rain.
"Let me out again," cries she,
"Staying in is bad for me!"
O-o-oh!

Ganya got some milk today:
"Take this great big cup away!
I don't want it, bring another!"
Ganya whimpers to her mother.
Waa-aa-aa!

On the table it was put,
Tearful Ganya stamped her foot:
"Take this milk away from me!
Better bring a cup of tea!"
Woo-hoo-hoo!

Tearful Ganya goes to bed
Nearly crying off her head:
"I don't feel like sleeping!"
Ganya grumbles, weeping.
Boo-oo-ool

People came in a crowd
To see who wept so loud;
Who could it be crying,
Sobbing, moaning, sighing?

At the girl before their eyes
They were taken with surprise:
Wet with tears from foot to head,
And her swollen nose all red.
Boo-oo-oo
Hoo-oo-oo.

"What's the matter? Why such
tears?
You're already seven years!
If you keep on crying so,
Moss upon your nose will grow!"

AROUND IN MOSCOW

BY IGOR LUBIMOV

will be at least another two years before the experimental housing project in the Southwest District is finished, but the Metro station will be built this year. The construction workers will be the first to use it.

In the rush hours Metro passengers are often handed numbered slips. They know that this means that the statisticians are studying the flow of traffic. The results of the study do not remain on paper long; extra trains are added to the busiest lines.

A self-driven underground train is now being tested. With a computer in the driver's seat, the train operates on a split-second and unerring timetable.

Three-quarters of the traction substations that provide electric power for the city lines have been automated. Many of them are controlled by television from central posts.

Radio is the motorman's assistant. Through the loudspeakers installed in the trains he announces the next stop. A taxi can also be ordered by radio. And while we're on taxis, in the past years the demand for them has grown enormously and their number has doubled. At 10 kopecks a kilometer it almost doesn't pay to walk. Some people prefer to use taxis instead of buying their own cars.

Fares in Moscow, as in all other Soviet cities, are very low and are fixed. For five kopecks you can travel the whole length of the Moscow Metro, including changing from one line to another. A streetcar fare is three kopecks, trolleybus is four, and bus fare is five.

The buses, trolleybuses and streetcars operate without conductors, on the honor system. Passengers drop their fares into the cashbox; if they haven't the exact change, fellow passengers help them out. Experience shows that people can be trusted.

Apart from the transfers used specifically on the Metro, bus and trolleybus lines, there are also over-all transfers for all the types of city transport except taxis. They entitle the holder to an unlimited number of trips and to switchovers from one type of transport to another. This system is very convenient for people whose work requires them to travel around a lot. Also convenient are the so-called fixed-route taxis, attractive minibuses that can accommodate as many as 10 passengers. For 10 kopecks you can cross the entire city along a specified route, with stops on request.

The City Soviet annually allocates large sums for modernizing the rolling stock, buying new equipment and building depots and garages. Multistory garages for 800-1,000 cars each are being constructed in various parts of the city.

Transportation facilities hold an important place in Moscow's 20-year development plan. The circuit freight railway, in the inner ring, will become an electric passenger line connecting all the Moscow districts.

In designing new passenger lines, the Moscow City Soviet is primarily concerned with making the distance between the different parts of the city as short and as convenient to travel as possible. ★

MOSCOW SCHOOL WELCOMES AMERICAN WOMEN

BY IRINA SHVEDOVA

PHOTOS BY YURI ABRAMOCHKIN

SCHOOL NO. 101 was holding its graduation exercises, a memorable annual occasion. The high point of the evening was the presentation of diplomas. With his diploma, each graduate was presented with another document, this one certifying that he had taken a training course in one of several trades.

Among those present to congratulate yesterday's students were teachers, relatives, people from the factories where the graduates had taken their vocational training, and junior class students. Present also were rather special guests—a group of women from the United States who were in Moscow for the World Congress of Women. Mothers themselves, they wanted to know about the school curriculum, how the classrooms and laboratories were equipped, what the admission requirements were for Soviet colleges.

The students and teachers showed them around the school, with questions coming thick and fast.

"How many schools like this are there in Moscow?"

"There are 20 schools like ours. We train our students for six trades, including program-computer operation. Other schools teach only two or three trades."

"Who can go to these schools?" one of the women asked a teacher.

"Anyone who wants to."

This to a student: "You now have a trade. But can you go on to college if you want to?"

"Certainly, if you pass the competitive entrance exams. Those who do not can take the correspondence course. The only requirement is the desire to study."

"I read that many of your students drop out of high school because it is so hard to get into college. Is this true?" Mrs. Leona Grant of New York asked.

"I don't know of any," Yura Shcherbinin replied. "There were 70 of us who started in the drafting group, and all of us graduated today."

The questions continued popping at the banquet table, interspersed with jokes, laughter and songs in Russian and in English.

"I like the spontaneity of these young people; nothing solemn about these graduates," Clara Auerbach of California remarked.

Mrs. Lillian Gruber, who had taught for many years, commented on the great respect and warmth that Soviet school children showed toward their teachers. ★

"I like the spontaneity of the young people; nothing solemn about these graduates," said one of the American visitors.

Dr. Herbert Schwartz of Kentucky leading a song. Dr. Schwartz was especially interested in the vocational emphasis of the school.

Principal Arkadi Beletsky presenting the diplomas. In addition, every graduate also received a certificate of rating in one of six trades.

At the graduation banquet the serious talk was interspersed with laughter, singing and toasting in Russian and English.

Leona Grant of New York, whose daughter is the same age as these girls, compared their interests and choice of vocation.

SOVIET

A TEACHER'S DIARY

(SCHOOLTEACHER MARGARITA ZATSEPINA)

PHOTOS BY VSEVOLOD TARASEVICH

AS THE TRAIN went rolling along, the wheels seemed to be saying in rhythm: "I'm a teacher, I'm a teacher." There among the books in the suitcase was my diploma. The examinations were all over, and even graduation was back in the past.

We students had been interviewed for job assignments in the office of our college president. I had decided what I wanted to do, but I could not subdue my feeling of excitement.

"We have recommended you for graduate work."

"Thank you very much for the confidence you show in me. But I have definitely decided I want to teach."

"But we are offering you the opportunity to stay on here to do your graduate work."

"I'd like to do graduate work, of course, but not now. First I want to teach in a grade school so I can find out about things for myself. If I'm going to teach college students, I must know more than what's in the textbooks."

"So you've made up your mind?"

"Yes."

A few minutes later, after looking over the long list of vacancies, I had selected Daghestan.

I knew teachers were needed there, and that helped me decide. That's where I would teach Russian language and literature. I wanted the children of that distant, mountainous country to know the culture of the Russian people. With a knowledge of the Russian language they would be able to work anywhere in our country. Besides that, not all Russian classics had been translated into Kumyk, the language the people of Daghestan speak.

I awoke early. The village was enveloped in a transparent mist, and beyond the mountains gold-orange flames were rising. The old woman in whose house I had rented a room looked at me with concern. I must have seemed frightened.

"What are you afraid of? It's the dawn coming up."

The flames of the approaching day kept getting bigger and bigger. Even the sky seemed too small for them now. Streams of light came over the mountain top, flooding the village and penetrating the grapes to the very seed. So that is what you're like, first morning of my working life!

"Hello! Salaam!"

During the day I teach, and in the evening I prepare for my classes. So far, the principal is satisfied with me. The children are glad to see me when I come into the classroom. They are so frisky, so unconstrained, so . . . Last lesson I had such a bad headache that even the children noticed it. One of the boys, Gaji, raised his hand and asked permission to leave the room. Toward the end of the lesson he returned.

"Where were you?"

"I went to the drugstore, but it was closed."

"Thanks, Gaji. I feel better now."

I could hardly stumble home. I lay down, but it was a long time before I could fall asleep. When I awoke, I saw several medicines on the table labeled "For Headache."

"Who brought them?"

"Your pupils," my landlady replied.

Vagit Atayev, a tenth-grade student, surprised me today. He gave such a graphic sketch of Danko, one of the characters in Gorky's story *Old Izergil*, that it was hard to believe he is only a tenth-grader, and not a poet.

"Do you write poetry?"

"No."

"Have you ever tried?"

"No."

I couldn't help recalling a lecture I had had in pedagogy. "Observe the children carefully. Study them not only with your eyes but with your heart as well. You must search every child for any spark of talent, must develop it, perfect it, teach the child how to use it for the people."

And so I asked Vagit to try to translate Mikhail Lermontov's poem, "The Sail" into Kumyk. I knew this poem had unfortunately not yet been translated. In the evening Vagit brought me his translation. I took it to the teacher of the Kumyk language. He was pleasantly surprised.

Since that evening Vagit and I have been friends. He borrows my books, we talk about poetry a lot, and he shows me his new verses every day.

"What do you intend to do when you finish school?"

"I haven't decided yet. I love the soil very much. I want to make thinks grow."

Someone at the other end of the village was singing a drawling, plaintive Kumyk song.

"Who's singing?" I asked my landlady.

"Gaji."

Gaji? The boy who left the room to go to the drugstore? The one who is having a hard time pronouncing Russian words?

I stopped near Gaji's home. Adults and children were cleaning beans out in the yard. His mother saw me and came over, disturbed. "Anything the matter?"

"No, nothing at all. I came because I would like to help you clean the beans."

"Yakshi, yakshi."*

Gaji seemed to be sitting on hot coals. I was sure he had not shown his parents his poor report card.

"I heard singing coming from this direction, and it was so beautiful I could not stay at home."

"That was Gaji," his mother said with a touch of pride.

The boy flushed from ear to ear.

"Sing something for our guest," his mother said.

The boy hesitated. He did not want to offend me, but he could not get himself to sing.

"May I sing some other time?"

"Of course, Gaji. I'll visit you often. Look at how many beans are still left!" When I took my leave, I said: "Would you like me to teach you some Russian songs?"

"Kop yakshi!"**

In the evening the children gather on my veranda. I am making headway studying the Kumyk language and can now sing their songs with them. And the old, wrinkled mountains and the clouds that float somewhere down below in endless milky streams all listen to us. And the girls who weave rugs that can compete with the handiwork of Mother Nature, and those masters who work with wood, silver, and clay, those gifted Daghestan craftsmen—they all listen to the children sing. Daghestan is a land of folk talent.

Happiness and sadness have entered my heart simultaneously. I have acquired a family. So far only the beginning of a family—my husband.

"Happy?" asked Modina, the Kumyk teacher.

"Yes."

"Then why so sad?"

"I hate to think of leaving this place."

"I'm sorry you're leaving."

My pupils eyed Volodya askance. They like him, but he is taking me to the Urals, where he works. On the day of our departure Gaji brought me a bouquet of bright mountain flowers. "We'll miss you very much. If you don't like things there, come back to us."

Someone knocked at the door.

"The children have brought you some souvenirs to help you remember them by."

I had taught the children the Russian language but I had not taught them to understand that presents were not the important thing. I was taking with me the most durable of all souvenirs —loving memories.

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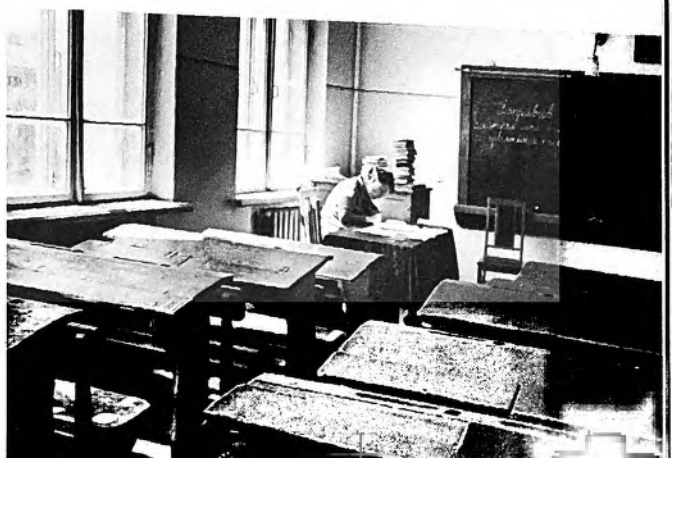
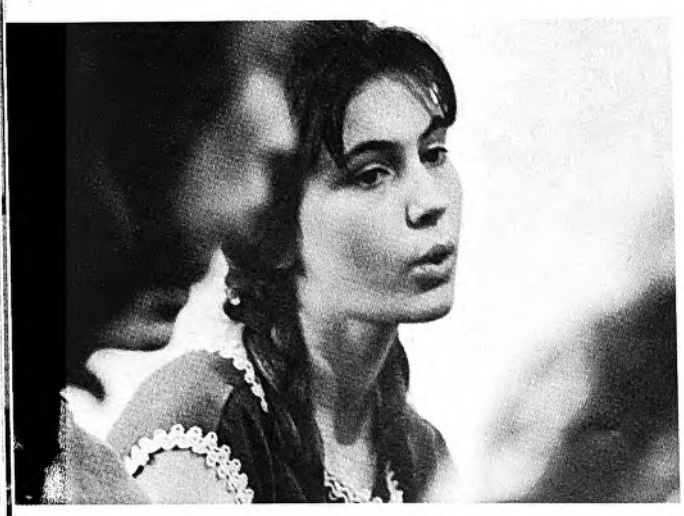
* *Yakshi* means "good" in Kumyk.

** *Kop yakshi*—"very good."





The whole tenth grade came to see us off. I did not know at that time that many of my pupils would be my colleagues one day. But one thing I was sure of even then: Daghestan is where my brothers and sisters are.

"How long have you been working?" I was asked when I came to the Urals.

"One year."

The school principal took off his glasses and looked straight at me.

"What kind of children do you like best?"

"Lively ones."

"So-o! Well, we'll let you have them."

The leaves kept falling and falling. It was quiet in the park. How was Gaji getting along? Did Vagit like his agricultural college? It was still summer in Daghestan, but here autumn was already casting its rusty hue on the grass and tearing the yellow leaves from the trees. They kept falling to the ground for a long, long time.

"Why are you sweeping up the leaves? It's prettier this way."

The voice sounded familiar. I looked around and there, sure enough, was Misha Nesterenko. When he saw me, he started to turn away.

"Please help me carry my notebooks," I asked him.

Misha took them readily enough, but then glanced around. Apparently such gallantry was not one of the unwritten laws of the children. Our conversation couldn't seem to get started.

"You copied the last dictation we had, didn't you?"

"Of course not!"

"But you did!"

"Prove it."

"You have a well worked-out system of cheating in class. You certainly do it neatly. I gave you a 'good' for your dictation, there was only one mistake in it. But you made eight mistakes in your history notebook."

"That's history. It's not your subject."

"That's true, but I do teach the Russian language. I'm a bad teacher if you make eight mistakes."

Misha didn't say anything.

"Let's sit down."

"All right."

"Tell me this. When a sick person goes to a doctor, does he hide his sickness or does he say honestly what hurts him?"

"Of course he doesn't hide it."

"There you are!"

"But that's a doctor."

"I'm a kind of doctor too. If you write your dictation honestly, by yourself, I'll know what the trouble is. And I'll know how to cure you, how to help you. But if you copy from someone, I can't see what the trouble with you is, what I have to treat you for. You may fool me once, twice, copy on your exam, but what's the use of that? You'll simply grow up an ignorant and dishonest person."

"Why did you change your seats?" I asked the seventh-graders.

One of the girls got up. "We're not going to copy any more. We're deceiving ourselves."

"Take your own places again. I trust you."

Misha Nesterenko kept sitting in his seat in the last row and wrote his dictation as if he had had nothing to do with the whole affair.

It was our fourth spring in Tagil, in the Urals. Now there were four of us, Volodya, Nanny, Baby Olya and I. In Daghestan they were already sowing, but here we were still wearing our winter coats. There was an item in the newspaper praising Vagit Atayev's poetry. He wrote me recently. "I feel I must share my happiness with you. I'm the father of a son. We've named him Zamir."

Yesterday the children wrote compositions. I was upset by Misha's. He wrote, "I just found out that my mother is not my real mother. She adopted me. How can I keep on living?"

Misha's father was killed in 1942 in the fighting for Novorossiisk. In a little box on a bookcase Misha kept a photo of his father. When his mother was not at home, he would take it out and look at it for a long time. It was the picture of a soldier. The picture had already turned yellow. The man had such frank, open eyes. He held a tommygun. The hands in the photograph looked very big. Maybe they really were so big. The photo was inscribed: "To my son Mikhail."

"He's not my father, either."

"Tell me everything from the beginning."

"What's there to tell? A relative came to the house. Mama wasn't home. He told me Nura was not my real mother. There was bombing. Nura met my mother and me in the bomb-shelter. I was a year old then. I wanted something to drink. Mama told Nura she had received a death notice about Papa. I wanted a drink, and Mama left me with Nura while she went to get some water. She took a green mug with her. A bomb exploded nearby, and everything came tumbling down. When they took the stones away, Mama was dead. She was still holding on to the green mug. That was how I came to stay with Nura. She wrote to the front, to her husband, asked him what to do with me. And he sent this picture."

"Does she know you found out."

"Not yet."

"Tell me about your life, Misha. Take any three days and tell me about them."

"About what."

"About anything you want."

I had to know what he remembered.

For a long time Misha was silent. Then he began.

"I was very little and became very sick. They took me to a hospital. She brought me tangerines and apples. I must have been very sick because she used to cry all the time. And this relative said that someone wanted to marry her, but she told him no because she was afraid he might not treat me well."

"Tell me something else, too."

"I had a birthday. I was in the fifth grade then. I told the boys not to waste their money on candy, but for each of them to bring me a pigeon instead. My mother found out and scolded me. She scolded me very much. Then I said to her:

" 'What are you so upset about? So what if they spent their money on the pigeons!'

" 'Misha, it's not the one who has a lot of money who is rich, but the one who has a big heart. What I'm afraid of is that you'll become very petty.' "

"You have a very good mother, Misha. It must have been hard for her to live through all the grief of the war. Where does she come from?"

"From the Urals."

I was never so nervous as before that lesson. "The Most Beautiful in the World"—it was a lesson about mothers who are kin to us in spirit, a story about women of great will. I had taught this lesson before, but I had never had anyone listen to me the way Misha did.

Before leaving, I dropped in on the Nesterenkos to say good-by. The mother had such good, young eyes; there were premature wrinkles around them.

"It must have been hard to bring up the boy."

"He's all my happiness," she answered simply.

"Mom, tell about Papa! He was a fine man, wasn't he?"

Again we are on our way. The wheels keep grinding out their song. The people in our compartment are arguing about the semiprecious stones of the Urals.

"The most beautiful thing about the Urals is its people."

"You think so?"

"I do."

The train drew into the station. The morning, washed by the rain, breathed right into our faces. Several of the passengers walked back and forth alongside the train.

"Why did you decide to go to the Pedagogical Institute, Lyuda?"

The girl looked at the young man with her big eyes.

"You're a geologist, you won't understand me. You want to be on the road all the time, but I prefer quiet work. I want to read *War and Peace* once, and then teach that one and the same thing the rest of my life. No headaches, nothing to worry about."

The young people hurried into their car. The train started.

"Quiet work, no bother, nothing to worry about. . . ." How unlike our profession that is! If I wanted to be literary, I would say that geologists and teachers are very much alike. Both they and we are on the road all our lives. They, the geologists, after pushing the dirt aside, search for the earth's riches. We, the teachers, search for the riches of the human soul. But we have to be on the road all the time in order to show the child how rich he is. As for the number of times we may read *War and Peace*—that has nothing to do with it.

Voronezh. The city where we were born. It was here that I spent my childhood, a childhood spoiled by the war. The houses were raised from ruins and ashes. This is where we grew up.

I checked Alyosha's notebook. There was a note in it that he must have forgotten. It lay there unfolded. "Natasha, why do you go to the movies with another man?" And under it were the words: "What business is it of yours?"

I had to organize a debate among the seniors on the question of friendship and love. That started an argument in the teachers' room. "Should we have a debate on this subject?" The principal, Anna Zakharovna, supported the idea.

"Who said that the school should teach children to solve only the problems in the textbooks? What about the problems with which life confronts them? When problems like these come up, you can't go running over to the neighbor's girl for help, or check your answer with the book."

The ideas expressed at the debate were as bright and disturbing as flames. There was also smoke that made the eyes smart. And warmth, the warmth of the human word, the living warmth of the heart. And those 17-year-olds turned to this bonfire and thought aloud near it. The teacher also took the floor.

"It seems to me that what is important in life is to wait for the beloved person, not to confuse him with anyone else, not to give your feelings, your tender, big words to anyone else."

In the summer my students and I went to a collective farm to lecture and to write a composition—"The Story of a Mother."

We were put up for the night in the homes of collective farmers whose sons had not come back from the war. It is easy to write a composition on a book you have read or seen reviewed in a magazine, but what if the book has not been written, if the story has not been told? They were lost in thought. "What shall I write about?" A quotation that has been memorized won't help here. You have to think, you have to select the necessary details, have to be able to tell your story simply but with feeling. You have to be a journalist.

In the evening we went down to the Don. The river lay at our very feet, big and quiet. The thick roots of the trees, washed by the high water, spread out like fantastic paws, reaching to the very edge. They pressed close to the water and drank, seemingly unable to drink their fill. The summer night set in over the land, bringing coolness with it. It carefully tucked in the earth, put out the lights in the windows, and lit up the stars in the sky.

"In the city we can't even see how big the sky is, can we?"

Many people came to the lectures the students gave.

"How much are you being paid for this?"

Inna replied: "Nothing. We do this as a community service."

Indeed, no money is paid for this work. But the people pay for it with their love. That is the greatest reward. The students knew that. And I was happy.

Misfortune befell us. Yura became blind. We no longer found any pleasure in the newspaper we put out on the subject "In the World of the Superb," nor did anyone notice Sasha's beautiful sweater. I put my class register on my desk and glanced at Yura's empty seat. I recalled one of our literature lessons.

"Why is it that when we speak of man, we think only of his attitude toward people?"

"What else?"

"How man treats animals is also important." . . . An accident on the skating rink, and our Yura, blind, was in the hospital in ward No. 12.

"What shall we do?" I asked the children.

"Yura will be operated on soon, but we've all decided that we want him to stay in our class."

"But he can't see," someone said quietly.

"Stepan Batrachenko come home from the war blind, and now he has a master's degree in history. You don't know what will power Yura has! He doesn't see, but everybody else here does, and the teachers see. Do you think we can desert him?"

"Who is in favor of keeping Yura in our class?"

All hands went up. The hands of adolescents as yet but already the hands of loyal friends.

It is a month since Yura was taken to the hospital. For a month the teachers and the children have been going over the lessons with him, reading the books to him, telling him the stories of the movies now on the screens in our city. The teachers do not put the letter "A"—absent—next to his name in the class register. There is no place for it, anyway; every square next to his name has a mark for work done.

Today the sky is the bluest it has ever been. Today is the happiest day of our life. Today the sun shines brightly for everybody. Yura can see!

I am 32 years old today. How little I have done as yet. But then I suddenly learned that the Presidium of the Supreme Soviet had awarded me the title Honored Schoolteacher of the Russian Federation. I received piles of telegrams from my pupils and their parents.

"Olya, what did she do that is so special?" my daughter's friends asked her.

"I don't know."

"You're her daughter and you don't know! She must have done something very unusual."

"A telegram for you from the minister."

"For me?"

I couldn't believe my eyes.

The very dearest guests came over in the evening, my former pupils, now university students.

"Margarita Alexeyevna, why did you choose the teaching profession?"

"Because teaching is the most difficult and the most necessary profession on earth." ★

CHOOSING A PROFESSION

Friendship *is a handwritten magazine in English published by the students of School No. 11 in Lyubertsy, a town near Moscow. Last spring several of the seniors wrote short articles about their after-graduation plans. The common theme was, of course, choosing a profession.*

Their English teacher, Victoria Baraz, showed us the magazine. We found it so interesting that we thought we'd like to have a look at the contributors.

Very different people and personalities—as can be seen from their photos taken by our correspondent Mikhail Kharlampiyev and their articles reprinted below. Notice, however, that none of them is at all worried about the future; all of them look forward to it with confidence. Their confidence is not the thoughtless variety that one occasionally finds in young people who overrate their own talents. It is based on something more solid: the right of all Soviet citizens to education and work, and to the fact that in our secondary schools young people get a thorough grounding for their future vocations. The course of study includes practical training. When the boys and girls graduate from the Lyubertsy school, they can qualify as fitters, lathe operators, draftsmen and chemical laboratory assistants—trades they learned in the school workshops and nearby factories.

This is in line with the national drive to realize the precept expressed by Vladimir Ilyich Lenin, the founder of the Soviet state, that "an ideal future society cannot be conceived without the combination of education with the productive labor of the younger generation."

Naturally, the lives of these children will be different after they leave school. But one thing is certain—they will have every chance to reach their goals.

Their English is hardly perfect, but we think the hopes and aspirations of these young Soviet citizens will come through to our readers.

Nina Bessmertnykh:

I Want To Be a Doctor

I chose my future profession as a doctor. This seems to me to be very interesting work. In our country all roads are open to reach our aims. Doctors help the people to get rid of all kinds of illness. Our institute prepares surgeons, therapeutists, and so on and so forth. I wish to be a therapeutist. In our country there are many rest homes, sanatoriums, health resorts for our people. All these require a doctor. Therefore I want to be a doctor to help our people to be in good health.

Vladimir Verbitsky:

I Want To Be an Atomic Physicist

In our country all roads are open for Soviet youth. In schools children can get the profession they like. Now in Moscow many schools are open where one studies mathematics, physics, chemistry, etc.

The development of working habits in our children will undoubtedly help them to be useful members of socialist society.

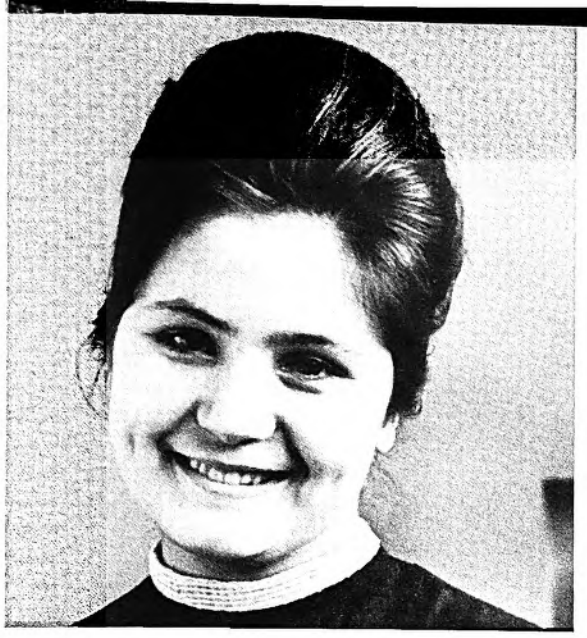
After finishing school I dream of entering the institute, in the faculty of physics and mathematics. When I graduate from the institute I want to study the problems of the atomic nucleus. Now difficult problems are standing in front of scientists of the whole world, solution of which will give new and inexhaustible stocks of energy for need of all the people.

Now I study at the eleventh class. We are studying the profession of the draftsmen. It is useful for studies in the institute.

Elena Kurgashova:

I Like Chemistry

In all Soviet schools practical training is introduced. Our school has practical training too. And we have it at large plants, which are equipped with modern machines. I work in a chemical laboratory and I like my specialty very much. Back in the seventh class I came to be interested in chemistry. And with every year I love it all the more. There are many remarkable, interesting trades in our country and I chose one of them. I want to become a chemical engineer. After finishing school I want to enter a Moscow chemical institute, and after graduation I want to become a real engineer. I will work at a chemical plant which puts out new synthetic materials.



Lidia Shevchenko:

I Shall Build Many New Houses

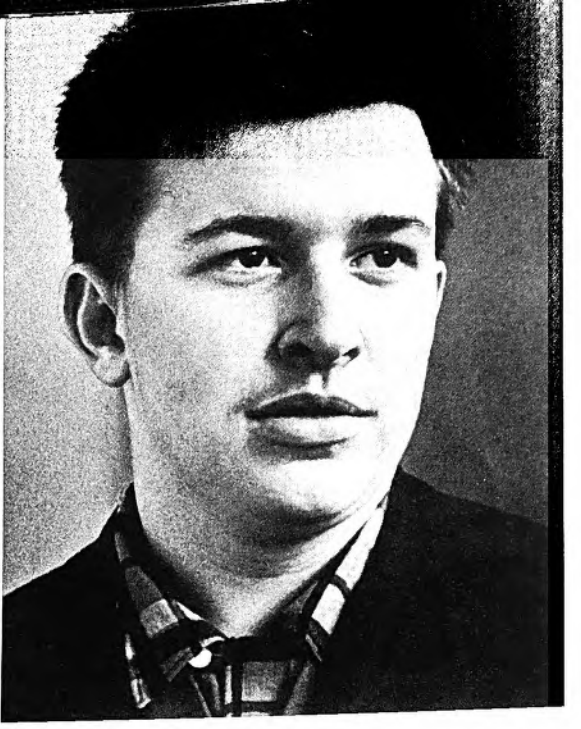
When I finish my middle school, I shall try to join the Building Institute, because my greatest dream is to be an engineer-designer. When I graduate from the institute I shall build many houses, schools, hospitals, theaters, stadiums, factories and plants and many other establishments in our country. I want people in my country to live in beautiful houses, with comfortable furniture; I want their rest to be full of happiness and good health.

Lyudmila Olkhova:

I Like Drawing

Now our country has stepped out onto the road of communist construction. We need people with an all-round development of their physical and mental abilities. At our school are many trades: draftsmen, chemists and many others. I like drawing. We study in the workshop. We have a special room, which is equipped for us. We draw details of plans and we study resistance material and many others. We shall work at the airplane works when we finish middle school. Our airplane works is very large and beautiful.

At the plant are many communist brigades. The socialist emulation is holding at the plant between the shops. The plant fulfills the plans ahead of schedule always. I want to work at this plant when I graduate from the institute that I shall enter. I shall enter the technical institute, because I like mathematics and physics. I want to be a real citizen and be of use to our motherland, which is going toward communism.

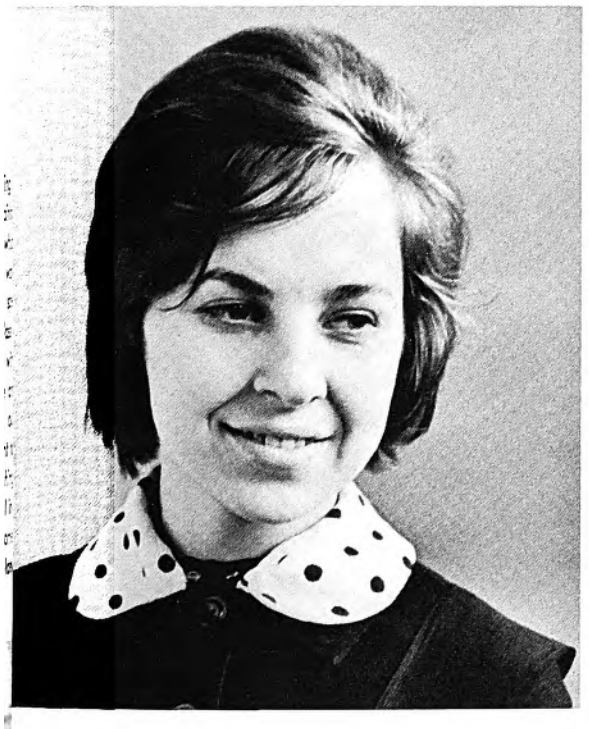


Vladimir Gusev:

I Want to Work at a Plant

I am finishing school and I want to work at a plant, I shall work at a plant as a fitter. The school in which I study has labor training. On finishing school I will join the family of the working people.

Our plant is equipped with modern machines. There are new benches and other equipment. I like my specialty very much. I want to enter an evening institute. When I graduate from the institute I shall work as engineer at this plant.



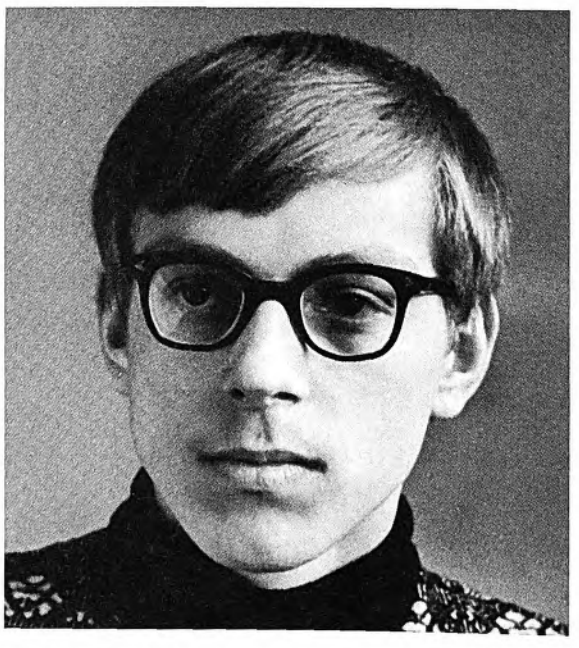
Natasha Postnova:

I Like English Very Much

I am still a schoolgirl. I study in the eleventh form now. It is our last school year. Soon we shall finish school. Everybody puts a question to himself: "What shall I be?" Some want to be doctors, some engineers. There are many trades at our school. I am a chemist. But this trade doesn't satisfy me. I want to be a linguist. It is very useful to know foreign languages. But learning a foreign language perfectly is not an easy task. I want to know English very well. I want to read and translate books without a dictionary, to speak English quite fluently. My work will be very interesting, because I like English very much.

If I become an English teacher, I shall give my love for the language to my pupils.

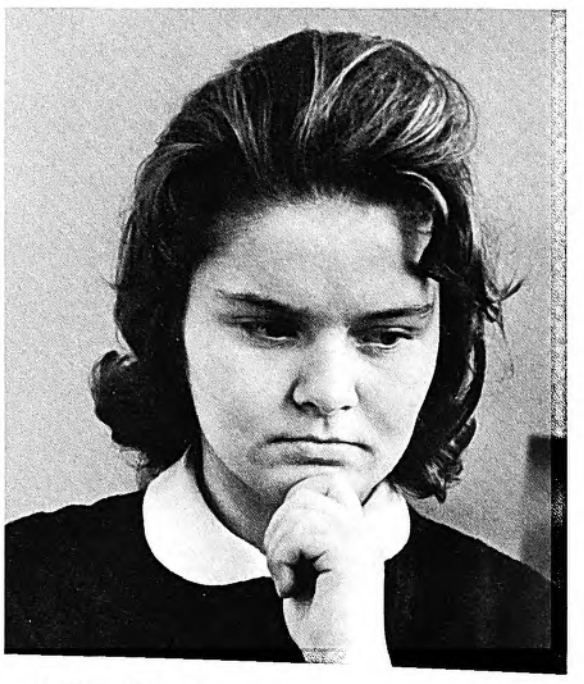
Certainly the knowledge which I received at the school is very insufficient. I know that I must study very hard. But I shall make a great effort and achieve my aim.



Vladimir Lobanov:

I Want To Be a Spaceman

I want to be a spaceman. I want to fly to Mars. I want very much to be like cosmonauts Gagarin, Titov, Nikolayev and Popovich. Our spacemen are Heroes of the Soviet Union. The launching of the sputniks is a magnificent step forward in science. We live in an era of interplanetary navigation and the conquest of the cosmos. I want to make a contribution to the science of astronautics.



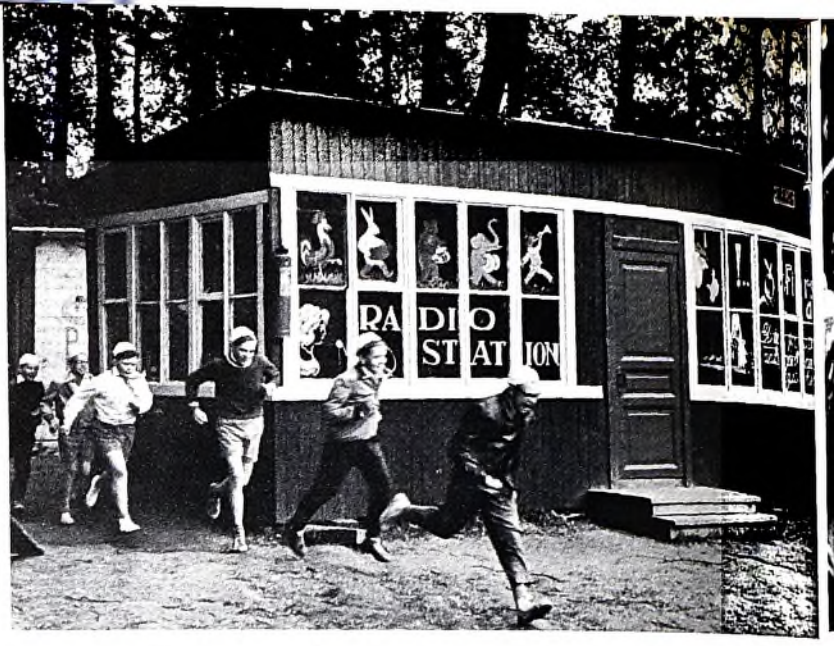
Galina Martynova:

I Would Like to Build Spaceships

Our country needs people who are developed all round. The labor habits are received in school already. I can go to work in industry upon graduation. Now I am working in a laboratory; it will help me in my future work. When I finish school, I want to enter the technical institute. I like mathematics very much. I shall study in the institute very hard, so that I can work on complex electronic machines. This specialty is very necessary for people; it has a great future. I shall work in a light and big laboratory well-equipped with modern machines. I want to calculate the new and complicated equipment, maybe for spaceships that will be able to fly to different planets. I want to know who will be the first man from earth on these planets, but for this I must finish school very well.

HOW WE LEARN ENGLISH

BY VLADIMIR ZHITOMIRSKY



MORE THAN 60,000 people from foreign countries visited the Soviet Union last year and tens of thousands of Soviet citizens went abroad. More and more Soviet people want to acquire both a speaking and reading knowledge of a foreign language. This has changed our language-teaching emphasis. At one time we taught our students to read and translate a foreign text, paying very little attention to speech. Now instruction is comprehensive, covering every aspect of language study.

As readers of *USSR* probably know, we have eight- and 11-year schools. Foreign languages are taught in both. An eight-year school graduate is able to meet the following requirements—carry on a conversation or make a short report in English, for instance, on his work, home, family, studies, recreation, the struggle for peace, life in English-speaking countries, and other topics. He is able to read, without a dictionary, texts with familiar grammatical material with no more than four to six unfamiliar words in every 100 words of text. The meaning of new words is usually understandable from the context. He is able to tell in English a story he has read and to understand a tape-recorded speech.

The reading speed required of the pupil is usually 1,000 to 1,200 words (approximately three pages of a pocket-size book) during a 45-minute lesson.

You can judge the difficulty of the text he is required to read without a dictionary from this passage taken out of an eighth-grade book by N. Yegunova, E. Prokhorova and M. Ryvkina (Moscow, 1962).

Mr. Pickwick's First Adventure

The bright sun began to shine on the morning of the thirteenth of May, one thousand eight hundred and twenty-seven, when Mr. Pickwick rose from his bed like another sun, opened his window and looked out at the world before him. Goswell Street was at his feet, Goswell Street was on his right hand, Goswell Street was on his left, Goswell Street lay in front of him. "Such," thought Mr. Pickwick, "are the poor lives of the people who see only those things that lie before them. I cannot look at Goswell Street all my life; I must study other countries too."

Breakfast was soon over, and Mr. Pickwick, with his telescope in his hand and his famous notebook in his pocket, went out ready for adventure.

He took a cab, and they started. The driver, with a number on his coat, was like one of those strange old things which people often see at a historical museum.

In four years (from the fifth grade through the eighth) the pupil learns enough grammar to use verbs in the present, past and future indefinite tenses, in the present continuous tense and the present perfect tense; the word order in affirmative, negative and interrogative sentences; the degrees of comparison of adjectives; etc.

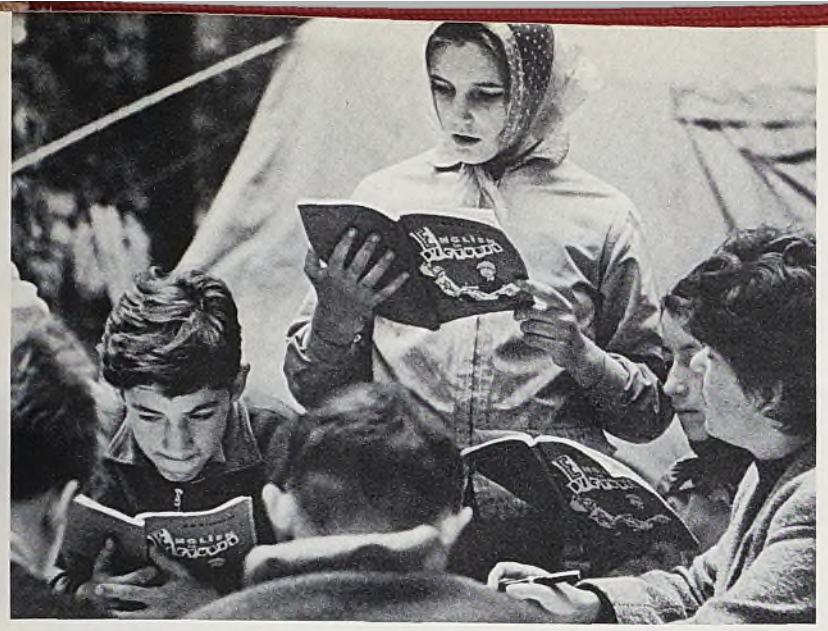
By the time he completes the eighth grade, the pupil knows 800 foreign words and phrase combinations.

In the upper grades (ninth through eleventh) he perfects the skills in oral speech acquired in the eight-year school and learns to read and understand moderately complicated pieces of fiction, popular science and sociopolitical literature.

The following passage from the tenth-eleventh grade textbook by A. Veize and B. Zarubin (Moscow, 1960) is an example.

The Old Man and the Sea

The old man was fishing alone in his boat. For 84 days he had been out at sea, but luck was against him. During the first 40 days a



ENGLISH CLUB

The English Club, which has a membership of 150 from among the pupils of Moscow's Secondary School No. 6, is no different from any other school club, with the exception that all the boys and girls speak only in English.

The activities at this particular club include indoor and outdoor games, language study, drawing, clay modeling, and operation of the club's radio station. Much time is also spent in reading aloud before the group. All these activities help increase the children's vocabulary and provide many opportunities for using the spoken language.

An affiliate of the USSR-Britain Society, the English Club has many pen pals in Britain, the United States, Canada and Australia. It also exchanges recordings of contemporary and folk songs with its correspondents.

These youngsters spend late spring, summer and early autumn at a Young Pioneer camp in one of the many thickly wooded areas of the Moscow suburbs.

boy had been with the old man. But as they had caught no fish, the boy's parents thought that old Yago was out of luck and suggested that the boy should go fishing alone in another boat.

On the eighty-fourth day the old man decided to go farther out into the open sea. He had dropped the bait long before daybreak. Hour after hour went by, and yet there was no bite.

Now the sun had risen and it was very hot; the man's shirt was wet with sweat. Only in the afternoon did the old man notice one of the green fishing rods give a jerk. He took hold of the line and felt a great weight dragging it down. He untied the line from the rod, and it quickly slipped between his fingers.

An eleventh-grader's oral speech is reasonably fluent, with many of the elementary skills becoming automatic and reflecting a wider range of subjects. The student is able to tell, in English, about his work training, about writers, artists, scientists and statesmen in the Soviet Union and the country whose language he is learning. With the words he knows in new combinations and the 700 new words and expressions he has mastered in the three years from the ninth through the eleventh grades, he is able to express himself fairly adequately. All told, he often acquires a vocabulary of close to 1500 words.

Emphasis in grammar is on the forms most widely used in speech. The subjunctive and conditional moods, for example, are not included in the school syllabus. When they occur in the text, the teacher explains them without going into detail.

So far as methodology is concerned, out teachers feel that their major objectives are:

1) to maintain the student's interest. In Moscow School No. 610, for instance, they put out a wall newspaper, recite poems, sing songs, and act short scenes from plays—all in English.

2) to use study aids widely—pictures, charts, tape recordings, slides —which help the student retain the material studied.

3) to introduce material sequentially. Thus in the fifth grade the pupil begins with pronunciation drills, going on to reading more and more difficult texts.

4) to keep the material within the pupils' comprehension. Students should not be given tasks beyond their power, nor should the assignments be too easy. For example, the exercise we give below to tenth-graders is too difficult for sixth-graders.

Fill in the blanks with: up, on, to, of, by, in, from, off, round.

1. *Tom bent ..... the ground and picked ..... a stone.*
2. *The road bends ..... the left.*
3. *Ann devotes much time ..... study.*
4. *That rock is a danger ..... all ships sailing ..... the river.*
5. *The dog disappeared ..... the corner.*
6. *Nick felt rather tired ..... the end ..... the long drive.*
7. *I shall see you .... your trip ..... Sochi.*
8. *Try it ..... and see if you like this pretty dress.*
9. *The brave sailor could hardly save the little girl ..... drowning.*

Disciplined study is vital in learning language. Our teachers motivate their pupils by encouraging them to work independently. A good deal of time is spent on analyzing unfamiliar texts for grammatical forms and vocabulary, since once they are out of school people usually improve their knowledge mainly by reading. Our students get homework to fix in their minds the material learned in school.

For texts we use adapted and original English and American books, popular science pamphlets and various graded manuals.

Foreign language teachers are trained either at foreign language departments of pedagogical institutes or at specialized foreign language institutes. During their fourth and fifth (the last) years they spend some time observing classes and have at least a month of practice teaching.

Besides conventional schools where foreign languages are studied, there are special English, French and other schools where all of the regular course is taught in the foreign language.*

*An article about one such school appeared in the November 1962 issue of *USSR*, "An English Language School" by Nikolai Anastasiev, pp. 56-59.

WHAT OUR Y

BY VERA KARCHENTSOVA

WHAT is the school child's inner world like? What does he think and dream about? Few adults can answer these questions. Children do not readily reveal their innermost thoughts and feelings. The child's inner world is the province of the psychologist and teacher. But the books children read do give us some clues. I talked with Yevgenia Troitskaya, librarian at the Surikov Children's Library, about it.

In school the children study Russian and foreign classical literature and science fundamentals. Their textbooks do not, of course, answer all their questions, and they turn to the library for more information. In demand by those interested in literature—and that means in very great demand—is Irakli Andronnikov's *A Literary Critic's Stories*, an interesting account of the life and work of the Russian poet Mikhail Lermontov. Children who take to the science of zoology, for example, like Brem's *The Life of Animals* or Zhidkov's *Beasts and Birds Who Live On Our Earth*.

Most school children are interested in astronomy these days. Although it is not taught until the tenth grade, even the little ones know what "the cosmos" means. Youngsters argue the difference between a star and a planet. To find out, they read *The Sun's Family* by Ivanovsky, *The Earth and the Sky* by Volkov, and Ryabchikov's *The Pilot of the Stellar Ship*—all popular children's books that give simple answers to many of their space questions.

The librarian guides and develops the interests that school studies create. But school studies are not the only things that bring a child to the library. He will ask for a book recommended by a friend or the story of a film he saw. When *The Three Musketeers* was shown on Soviet screens, Dumas' books vanished from the library shelves. His *The Vicomte de Bragelonne* and *Twenty Years After* were read and reread. When the children saw *The Dingo*, there was a rush for Fraerman's book. *Ivan's Childhood*, a film awarded the Prize of the Golden Lion of St. Mark at the International Film Festival in Venice, started a run on neighborhood libraries for Bogomolov's story *Ivan* on which the script is based.

Children's opinions on books and films are far from unanimous, and the variety of questions they ask are practically infinite. They serve as themes for school and library discussions, where the youngsters debate their points of view.

Yevgenia Troitskaya noted that young readers, as a rule, go through three stages: fairy tales, adventure stories and novels. As they grow older, the boys become interested in engineering, the girls in art and history. Upper-grade students are interested in world problems and also favor foreign contemporary and classical fiction, poetry, and love lyrics.

In the Surikov Library I saw a little girl with black pigtails, very preoccupied in choosing a book. She told me her name was Marina Khomyakova, that she was nine years old, and that she was in the second grade. "Before, when I couldn't read, I always had to ask Mama and

YOUNGSTERS READ

Daddy to read to me," she said, "and they told me, 'We hope you'll learn to read yourself soon.' Now I don't have to ask anybody, I can read myself."

Marina's library card showed she had read 43 books in three months, the thin children's books, of course—Russian fairy tales, foreign tales like Charles Perrot's, tales by Anderson and Topelius, *The Little Hump-Backed Horse* by Yershov, the Italian folk tale *Trediccino* and *The Red Flower* by Aksakov. There were also books about nature. I asked her which she liked best.

"Books about animals and fairy tales. They're all interesting, and everybody is happy at the end."

The librarian showed me other children's cards. Andryusha Kil is 10 years old and in the third grade. His card was full of titles—children's stories by Leo Tolstoy and Ivan Turgenev, Sergei Mikhalkov's fairy tales, the adventure stories of the famous fabricator Baron Münchausen, Kipling, Hugo, Odoyevsky, animal stories by Vera Chaplina and Georgi Skrebitsky, and, of course, the stories of that very popular Soviet writer Arkadi Gaidar: *The School, The Blue Cup, Timur and His Team.* Andryusha had also read such books on popular engineering as *Who Built the House?* by Mar, Dorokhov's *How the Screw Pushed the Truck, The Little Blue Screw* by Donchenko, and *Stories About the Remarkable* by Ganneiser and Parini.

The card of Boris Katsov, a 12-year-old sixth-grader showed 40 titles of books by Mayne Read, Walter Scott, Jules Verne, Mark Twain and H. G. Wells. He had also read Louis Boussenard's book about the adventures of four Frenchmen, a book on the fight of the Boers against the English, and Alexander Belyayev's *The Star Kets* ("Kets" stands for Konstantin E. Tsiolkovsky), *The Amphibian, Over the Abyss, The Island of Wrecked Ships, Submerged Farmers,* and others. Boris was very partial to science fiction. He had just brought back Ivan Yefremov's *Andromeda Nebula,* about the space flight of thirtieth century people and their bold struggles against the forces of nature. I found him reading Grigori Adamov's *The Conquerors of the Earth's Depths,* about the possible use of subterranean thermal energy. "I like to read science fiction stories," said Boris, "to see how the dreams of people are coming true."

Tenth-grader Tanya Drozdova is 16 years old. Charged on her card were the works of Pushkin and Chekhov, Heine's poems, Goethe's *Faust* and plays by Ibsen and Shakespeare, Sienkiewicz' *The Crusaders,* and *The Moonstone* by Wilkie Collins. Also mathematics books *Following Pythagoras* and Zaikovsky's *Popular Mathematics.* Tanya has competed in several annual school mathematics contests and is a member of a mathematics group at Moscow University. Goldstein's booklet *Music in Lenin's Life,* and Rakova's *Russian Art in the Early Nineteenth Century* were also listed on her card. She often visits the Tretyakov Art Gallery and is well up on the works of such Russian painters as Ivanov, Kiprensky, Rokotov and Levitsky. Her card showed a wide range of interests—in the life and work of the Curies of radium fame, in the Russian sociologist and democrat Chernyshevsky, in Napoleon's story, so brilliantly analyzed by Academician Tarle, in the theoretical works of Konstantin Tsiolkovsky on jet propulsion. Tanya (like teen-agers everywhere) reads a lot about great people of the past—Michelangelo, Leonardo da Vinci, Beethoven, Schiller, Cervantes, Lermontov, Shchepkin and Linnaeus.

Her card indicated that Tanya is also interested in the ethics and philosophy of our society and the ideal of the Soviet man. She searched for the answer to her question in Anatoli Kuznetsov's *The Continuation of a Legend* and in Vladimir Pistolenko's *At the Open Door,* which describe the young person's first independent steps in life, the joy of working and the great power there is in comradely support; in Agnia Kuznetsova's *My Word of Honor as a Young Communist;* in *Personal Happiness* by Lyubov Voronkova; in Alexander Fadeyev's *The Story of Our Youth;* and in Anna Brushtein's trilogy *To the Far Horizon,* all of them about the young builders of the new communist society.

Maria Postupalskaya's *Pure Gold,* Tanya told me, really made her understand more than ever before, that happiness comes not only from personal well-being but from the satisfaction a person gets from work and from sharing his knowledge and experience.

"I love books about friendship, about blazing new trails in life, about our youth reaching the goals they set for themselves."

THEY FIND THEIR PLACE IN LIFE

BY ALEXEI NIKANOROV

PHOTOS BY SERGEI PETRUKHIN

GLASS, aluminum and concrete give the building a lightness that belies its size, a lightness that seems admirably adapted to its purpose. This is the Moscow Pioneer Palace on Lenin Hills.

Every day children come here from every part of the capital. They come in a noisy crowd, mischievous grins on their faces, some bearing traces of bangs and scratches. But they leave the boisterousness outside the transparent doors and enter the building with a yearning for knowledge about the world, a wondering about the unknown, a wish to work and to think for themselves. When they pass through these hospitable doors, even their way of walking, their expressions, their very thoughts change. They walk purposefully to lecture halls, studios, laboratories and study rooms.

Soviet schools do not group children into classes of fast, normal and slow learners. There is a latent danger in such a division—too much possibility of overlooking an imperceptible but basic feature. When you tag a child as a slow learner, you can cripple him psychologically for the rest of his life though he may be a potentially useful and fine human being. Sometimes a man lives out his life without discovering his true self and his special capability.

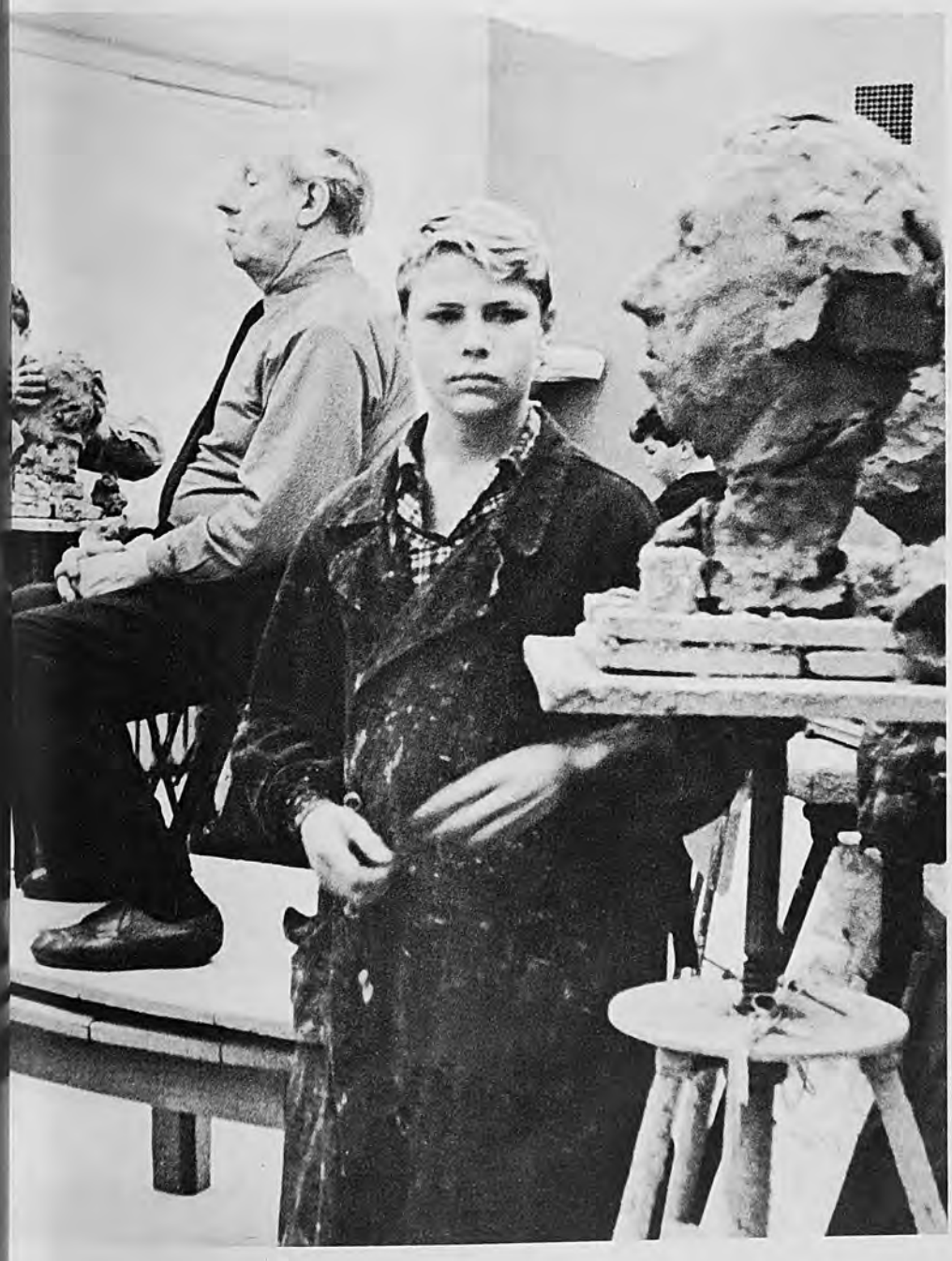
At school a child learns physics and literature, grammar and mathematics, history and chemistry. All of them are necessary if he is to grow into a well-rounded human. But there is a fountain of energy spurting within a child. He wants to apply his knowledge right now to create things. With the knowledge he acquired only yesterday he wants to explore his world, to create something with his own hands that is useful, to test his capacities on a real job.

He goes to the Pioneer Palace and joins one of its many groups of young readers and writers, young chemists, mathematicians, designers, singers, dancers and artists. Here in the Palace every child does only what he likes best.

It is here that future Mendeleyevs, Ulanovas, Pavlovs and Kurchatovs are developed. It is here that the child feels for the first time a deserved pride in what he has made with his own hands. It is here that he has the first feeling of disappointment when he finds that what may appear to be a beautiful, enticing and interesting job can also be difficult and prosaic. It is here that his self-control and perseverance are put to the test. Some of the children leave, but most stay on to do serious and fascinating work.

This Palace was built to show the children how wonderful and interesting the world is, and to help them find their proper place in it.

Future Mendeleyevs? These children are learning chemistry research techniques at their neighborhood Young Pioneer Palace.



In time their sculpture will decorate the parks and buildings of new cities; now they are studying the fundamentals of art.

At these workshops, studios and science circles the youngster acquires the pride in skill that marks the creative worker.

THE SOVIET UNION PROVIDES FOR ITS CHILDREN:

3,229 Pioneer Palaces and Houses, the largest being the Moscow Pioneer Palace which can accommodate 5,000 children

361 Young Technicians stations

275 Young Naturalists stations

167 excursion and tourist stations

174 children s recreation parks

33 children's railways

1,965 children's music, arts and dancing schools

190,000 children's libraries

106 children's theaters, attended annually by 20 million children

7,916 children's Pioneer camps in the countryside

1,965 children's sports schools

There are Pioneer circles in every conceivable field where the budding talents of young people are discovered and developed.

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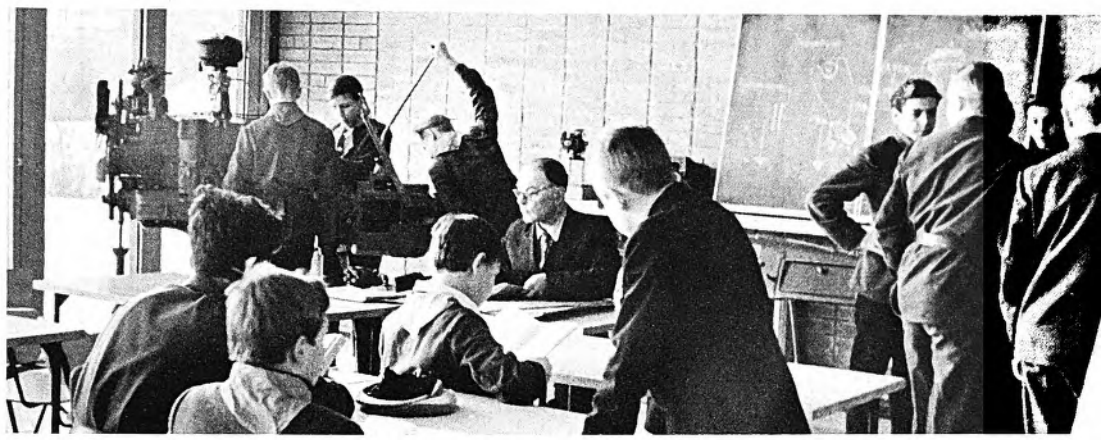
No reason why a physicist or historian, engineer or philologist should not be able to turn out a creditable dinner.



(Upper right) At these circles for young engineers, teenagers try their minds and hands at the various specialties.

(Below) Along with their Beethoven, Tchaikovsky and Mozart, they learn to see and respond to the beauty around them.

Learning the difficult art of evaluating their own work and, no less important, to understand and appreciate that of others.

our calendar

October 4, 1959. The USSR successfully launched its third space rocket. It carried an automatic interplanetary station and relayed to earth the first photos ever taken of the dark side of the moon.

October 13, 1958. The emulation movement for the honored title of Communist Work Team was initiated by workers in industry. The trade unions confer the title on the best work teams whose members consistently exceed their production quotas, who study to improve themselves professionally and culturally, who lead exemplary personal lives, and who assume more than their share of community responsibility. This popular movement now has 20 million adherents.

October 15, 1963. This date marks the fifty-fifth anniversary of the publication of Lenin's article "Marxism and Revisionism." It was the Russian Communists' answer to the revisionists, those in the working-class movement who were following a bourgeois ideology.

"The progress of Marxism and the fact that its ideas are spreading and taking firm hold in the working class," Lenin pointed out, "inevitably tend to increase the frequency and intensity of these bourgeois attacks on Marxism, which only becomes stronger, more hardened and more tenacious every time it is 'annihilated' by official science."

"What we now frequently experience," wrote Lenin, "only in the domain of ideology—disputes over theoretical amendments to Marx—what now crops up in practice only over individual partial issues of the labor movement as tactical differences with the revisionists and splits on these grounds, will all unfailingly have to be experienced by the working class on an incomparably larger scale. . . ."

October 17-31, 1961. Convocation in Moscow of the Twenty-second Congress of the Communist Party of the Soviet Union which adopted a new, the third, Program of the Communist Party. The first two programs (1903, 1919) were fulfilled. The new program charted the building of a Communist society in the USSR in the lifetime of the present generation. It will be achieved with the creation of the material and technical basis of communism, the establishment of communist social relations, and the education of a new kind of man.

October 23 and 29, 1917. The Central Committee of the Communist Party held two meetings in Petrograd under Lenin's leadership which decided to begin an armed uprising and hand power over to the revolutionary Soviets of Workers' and Peasants' Deputies. The uprising began on November 7 and immediately developed into a proletarian socialist revolution, unprecedented for its social depth, which spread throughout Russia.

October 29 is the forty-fifth anniversary of the founding of the Komsomol (YCL). It has a membership of 21 million young men and women from 15 to 28 years of age. The YCL is an independent organization with its own rules, elected bodies, publishing houses that issue about 200 newspapers and magazines, many clubs, Palaces of Culture, holiday homes and cafés frequented by young people, both members and nonmembers of the YCL. The organization has five times been awarded the Soviet Union's highest decorations for its part in defending the country during the years of the Civil War and the Great Patriotic War and in building socialism. Some 400,000 young people have been elected deputies to city, regional and republic Soviets, and more than 200 YCLers are members of the national parliament—the USSR Supreme Soviet.★

The

Semyon Karabanov, a reckless, husky chap who both worked and rested with zest and gusto was one of Makarenko's favorites. His life in the Gorky colony and his reform brilliantly demonstrated the validity of Makarenko's educational methods.

There was a sudden reversion when Semyon made friends with one Mityagin, a young but already successful, hard-bitten thief. Mityagin was so accustomed to crime, to sponging on others, that Makarenko's every effort to reform him was thwarted. Recognizing that Mityagin's philosophy of life was infecting the other boys, Makarenko realized he would have to give it up as a bad job and expel him. However, Karabanov fell for the lures of the underworld and also left the colony.

The excerpt begins with Karabanov's return after several months of bumming.

WRITER AND EDUCATOR

ANTON MAKARENKO (1888-1939) has a special place in Soviet literature. He was a happy combination of educator and writer, gifted in both callings. He began to write quite late, in his forties, but had become well-known much earlier, in 1920, for his work with a colony of juvenile delinquents.

The twenties were very hard years. The Civil War and the intervention by 14 powers hostile to the young Soviet republic brought economic ruin and famine. Thousands of unemployed flooded the streets of towns and cities. Homeless children, thieves and prostitutes were the fruits of this environment. These moral wounds inflicted by the war were no less damaging than the physical wounds and material destruction; they had to be healed without delay. Lost and corrupted souls had to be redeemed with the new socialist ideas.

The efforts of educators to reclaim the children were truly heroic. They spared neither time nor energy, worked devotedly despite famine and tremendous difficulties. Anton Makarenko, a revolutionary in education, was the first to undertake the molding of the new man, the builder of socialism.

What are the basic principles of Makarenko's method? Put briefly—to have complete faith and full trust in a human being, even if he was a former criminal, and to make high demands upon him. What fired his method was his deep faith in the *collective*. "In a perfect collective," Makarenko wrote, "we can educate a man to be good, intelligent, to lead a stimulating personal life."

The Great October Socialist Revolution of 1917 was the source of Makarenko's creative inspiration. Here is what he wrote: "The October Revolution suddenly opened up unprecedented opportunities for the development of the free personality, great opportunities for educational work."

Makarenko brilliantly realized these opportunities in his work with juvenile delinquents at the Gorky colony near Poltava and in the Dzerzhinsky colony near Kharkov, the Ukraine. He described this work with its failures and many successes in *The Road to Life*, published in 1935. The book won Makarenko recognition as a writer. It has had 41 editions in a total printing of 1,225,000 copies—testimony to the place it has in Soviet literature and the great popularity it enjoys—and has been translated into English by the Foreign Languages Publishing House in Moscow as well as by publishing houses in London and in Bombay.

The Road to Life is a biographical novel. Its characters are real people with their names unchanged or only slightly changed (Karabanov—Karabasov). The author introduces the reader to 400 boys and girls who study at the colony school and live like a single, closely knit family. The personal business of each of them becomes the common business of the collective, and vice versa. But although they have common joys, common work and common ideas, each is an individual.

Without any hypocrisy, without any glossing over of difficulties, Makarenko shows us the long and complicated process of remaking a human being. *The Road to Life* is a novel, not a treatise on education. That is why we are so deeply moved by the story he tells, so emotionally involved with its characters. The fact that Makarenko's pupils become good people—doctors, machine operators, engineers and teachers—gives us a sense of personal pleasure.

Makarenko, who died in 1939, spent the last years of his life writing. He did more than 60 articles and essays on education; "Honor," a long story; *Learning to Live*, a sequel to *The Road to Life*; and *Book for Parents*, a work of quite an original stamp, composed of theoretical articles, essays on education and short stories.

Road to Life

BY ANTON MAKARENKO

AT the very height of the agricultural fever, early in February, Karabanov walked into the colony. The boys met him with enthusiastic embraces and kisses. He shook them off somehow or other, and burst into my room.

"I've come to see how you're getting on."

Smiling, joyful countenances were peeping into the office—boys, teachers, laundry workers.

"It's Semyon! Just look! Isn't that fine!"

Semyon strolled about the colony till evening, visited "Trepke," and in the evening returned to me, melancholy and taciturn.

"Tell me, how are you getting on, Semyon?"

"All right. I've been living with my father."

"And where's Mityagin?"

"To hell with him! I've dropped him. He went to Moscow, I believe."

"How was it at your father's?"

"Oh, well, villagers, just like it always is. My old man's still going strong. My brother's been killed."

"How's that?"

"He was a guerrilla fighter—the Petlyura men killed him."

"And what do you mean to do—stay with your father?"

"No, I don't want to stay with my father. I don't know . . ."

He shifted uneasily in his seat and moved his chair nearer to me.

"Look here, Anton Semyonovich!" he brought out abruptly. "Supposing I were to stay in the colony? How about it?"

Semyon shot a rapid glance at me and lowered his head right on to his knees.

"Why not?" I said simply and gaily. "Stay, of course! We'll all be glad."

Semyon leaped from his chair, shaking with suppressed emotion.

"I couldn't stand it!" he cried. "I couldn't! The first days it wasn't so bad, but afterward—I simply couldn't. I'd be going about, working, sitting down to dinner, and it would all come over me, till I wanted to cry. I'll tell you what—I've become fond of the colony, and I didn't know it myself. I thought it would pass, and then I thought—I'll just go and have a look. And when I came here and saw how you were getting on—but it's simply wonderful here! And this Sherre of yours . . ."

"Don't work yourself up," I said. "You should have come right away. Why torture yourself like that?"

"That's what I thought myself, and then I remembered all the goings on, the way we treated you, and I . . ." He threw out his hands and fell silent.

"All right," I said. "That'll do."

Semyon cautiously raised his head.

"Maybe you think . . . that I'm putting it on, like you said. No, no! Oh, if you only knew what a lesson I've had! Tell me straight out—do you believe me?"

"I believe you," I said gravely.

"No, but tell me the truth—you believe me?"

"Oh, to hell with you!" I exclaimed laughing. "You don't mean to go back to your old ways, do you?"

"You see, you don't quite trust me!"

"Don't excite yourself so, Semyon! I trust everybody, only some more, some less. Some people I trust an inch or two, some people a foot or two."

"And me?"

"You, I trust a mile."

"And I don't believe you a bit," retorted Semyon.

"Fancy that!"

"Well, never mind! I'll show you yet . . ."

Semyon went to the dormitory.

From the very first day he became Sherre's right hand. He had a pronounced agricultural vein, he had acquired a lot of knowledge, and a lot of instinctive knowledge was in his blood, from his fathers and his grandfathers, handed down from their experience of life in the steppe. At the same time he eagerly absorbed new agricultural ideas, and the beauty and grace of agronomical technique.

Semyon jealously followed Sherre's every movement with his eyes, endeavoring to show him that he too was capable of endurance and incessant work. But he was incapable of emulating the calmness of Edward Nikolayevich and was in a continual state of excitement and elation, continually bubbling over—now with indignation, now with enthusiasm, now with sheer animal spirits.

Two weeks later I summoned him, and said simply:

"Here's a power of attorney. Go and get five hundred rubles from the Financial Department."

Semyon opened his eyes and his mouth, turned deathly pale, and at last brought out awkwardly:

"Five hundred rubles! And then what?"

"Nothing!" I replied, looking into the drawer of my table. "Just bring it to me."

"Am I to go on horse?"

"Of course! Here's a revolver in case you need it."

I handed Semyon the very revolver which I had taken from Mityagin's belt in the autumn, still with the three cartridges in it. Karabanov took the revolver mechanically, eyed it wildly, thrust it with a rapid movement into his pocket and left the room without a word. Ten minutes later I heard the clatter of hoofs on the stones, and a rider galloped past my window.

Toward evening Semyon entered my office, belted, in his short smith's leather jacket, slender, svelte, but somber. In silence he laid a bundle of notes and the revolver on the table.

I picked up the notes and asked in the most indifferent and inexpressive tones I could muster:

"Did you count them?"

"Yes."

I threw the whole bundle carelessly into my drawer.

"Thanks! Go and have dinner."

Karabanov for some reason or other shifted the belt confining his jacket from right to left and made a few rapid steps in the room. But he only said quietly:

"All right," and went out.

Two weeks passed. Semyon greeted me somewhat glumly when we chanced to meet, as if he did not feel at ease with me.

He received my new order no less glumly.

He gave me a long, puzzled look while thrusting the Browning into his pocket and said, weighing every syllable:

"Two thousand? And suppose I don't bring it back?"

I leaped from my chair and shouted at him:

"Kindly stop that idiotic talk! You've got your orders, go and do what you're told! Cut out the psychological stuff!"

Karabanov shrugged his shoulders and whispered vaguely:

"Well . . . all right . . ."

When he brought me the money he would not let me alone.

"Count it!"

"What for?"

"Please count it!"

"But you counted it, didn't you?"

"Count it, I tell you!"

"Leave me alone!"

He clasped his throat as if something was choking him, then tore at his collar and swayed on his feet.

"You're making a fool of me! You couldn't trust me so! It's impossible! Don't you see? It's impossible! You're taking the risk on purpose! I know! On purpose!"

He sank onto a chair, breathless.

"I have to pay heavily for your services," I said.

"Pay? How?" said Semyon, leaning forward abruptly.

"By putting up with your hysterics—that's how!"

Semyon gripped the window sill.

"Anton Semyonovich!" he growled.

"What's the matter with you?" I cried, really a little alarmed by now.

"If you only knew! If you only knew! All the way, galloping along the road, I kept thinking—if only there was a God! If only God would send somebody out of the woods to attack me! If there were ten of them, any number of them . . . I would shoot, I'd bite, I'd worry them like a dog, so long as there was life left in me . . . and you know, I almost cried. I knew quite well you were sitting here thinking: 'Will he bring it or won't he?' You were taking a risk, weren't you?"

"You're a funny guy, Semyon! There's always a risk with money. You can't bring a bundle of notes into the colony without risk. But I thought to myself that if you bring the money, the risk will be less. You're young, strong, a splendid horseman, you could get away from any bandit, while they'd easily catch me."

Semyon winked joyfully:

"You're an artful chap, Anton Semyonovich."

"What have I got to be artful about?" I said. "You know how to go for money now, and in the future you'll get it for me again. There's no special art needed for that, I'm not a bit afraid. I know very well that you're just as honest as I am. I knew it before—couldn't you see that?"

"No, I thought you didn't know that," said Semyon. ★

IN THE NEXT ISSUE

The front cover shows Ken Jackey, a Mesta Plant machinist, with Soviet Chairman Nikita Khrushchev on his visit to the United States in 1959. To commemorate the thirtieth anniversary of the establishment of diplomatic relations between the USSR and the USA, 21 pages of the November issue will deal with this event.

The history of the Russian revolutionary poster is the history of graphic propaganda for Soviet power, a chronicle of the tasks confronting the Russian Communists and people from the very inception of the Soviet state. **Revolutionary Poster** conveys the spirit of the struggle in the early years of the Revolution.

Soviet Russia has been called "a riddle," "a colossus on clay legs" and various other appellations. **The Russian Miracle** is what German documentary film directors Anneli and André Thorndike entitled their epic screen production. We shall try to reveal this "miracle" by means of the stills given us by the Thorndikes.

Among the other interesting articles in the November issue are:
Who Makes History?— the individual and the evolution of society;
The Fifth USSR-USA Meet— the results of the 1962 and 1963 track-and-field encounters; **Hydrofoils**— the fastest way to travel by water.

NOVOSTI PRESS AGENCY

USSR

SOVIET LIFE TODAY

Full Employment An expert on the USSR State Planning Committee tells how manpower requirements are planned and how a people's state guarantees full employment.

Chronicles of 1963 A photo story depicting highlights in the life of the Soviet Union and the most important international events of the year will appear in the December issue.

Mosfilm Film director Gennadi Rosental describes the work, people and productions of Mosfilm—the largest of 20 studios producing feature-length films in the USSR.

Judiciary System An article on the principles, organization and goal of Soviet justice and on the part played by the public and public organizations in combating crime.

COMING SOON

ECONOMICS AND NUCLEAR WEAPONS

BY VLADIMIR SMOLIN

A LASTING PEACE is not easily achieved, particularly in our time, when opposing powers have already accumulated weapons in such quantity that even their partial use would make the few who stay alive envy the dead. The only hope for universal security is in general and complete disarmament.

The very first act of the young Soviet Republic was the Decree on Peace, in which the government headed by Vladimir Lenin branded war a crime against humanity.

Time and time again in the four decades since, from the rostrums of the League of Nations and the United Nations, the Soviet Union has offered the program for peace and disarmament. The same program, worked out in elaborate detail, with provisions to ban nuclear tests and nuclear weapons, was presented to the UN General Assembly by Nikita Khrushchev a few years ago.

The Soviet people regard the nuclear test ban treaty as a logical development of their country's foreign policy, the result of its efforts to end the threat of war. That is why we are surprised, to put it mildly, to hear that the USSR has agreed to end nuclear tests because it is having economic difficulties at home, that the USSR has taken this initiative to relax international tension because its rate of economic development is "slowing down."

Does the Soviet Union have its economic difficulties? Yes, it does. But they are the inevitable difficulties of growth. Let us take agriculture as an example. Its rate of development lags somewhat behind the long stride of industry. But this is certainly no evidence of a "slowdown."

What do statistics show? Gross agricultural output went up by an average of 4.2 per cent in 1930-40 and 1946-52 (I exclude the period of World War II). And for the 1954-62 period the average annual growth jumped to 5.5 per cent.

The figures for industry are even more striking. The general volume of industrial output increased, on the average, by 10.5 per cent in the 18 postwar years (1945-62), with the increase for the past nine years (1954-62) rising to 10.7 per cent.

And if we take a shorter period, let's say the year 1962 alone, what do the figures show? Soviet national income went up by 6 per cent, the total national product by 7 per cent, and industrial output by 9.5 per cent. The production rise in individual industries that year, compared with 1961, followed the same pattern: steel, 8 per cent; oil, 12 per cent; electric power, 13 per cent; metallurgical equipment, 13 per cent; farm machinery, 21 per cent; refrigerators, 22 per cent; washing machines, 40 per cent.

I should add that the annual increase in industrial output for the future as well will not be less than 9 or 10 per cent (I have in mind the national economic plan for the coming 20 years). And for such important, fast developing industries as oil, chemicals, synthetics and farm machinery, the increase will be even higher.

Let us now turn to per capita growth of industrial production. The figure for the past five years has been 48 per cent. Generally speaking, Soviet industrial production was about 63 per cent of that of the United States last year. But only five years ago, in 1957, the figure was 47 per cent.

The comparison of the dynamics of national income growth is just as characteristic; here the Soviet rate of growth is 3.4 times higher than the American.

Would the picture be different if we compared the economic development of the socialist countries with the capitalist countries, or the Common Market countries with the member countries of the Council of Mutual Economic Assistance? The figures answer this. Between 1958 and 1961 the annual growth of industrial production in the countries of the socialist camp approximated 13 per cent, almost triple the rate of economic development of the capitalist countries. In 1962 the industrial output of the socialist countries reached approximately 64 per cent of the corresponding indices of the economically developed capitalist countries. Industrial output last year rose by nine per cent in the CMEA countries and by four per cent in the West European countries. Trade among CMEA countries increased by 14 per cent and their over-all foreign trade went up by 10 per cent.

I could make these columns of dry figures longer, but I think that we have enough to draw this one conclusion: The difficulties experienced by the Soviet economy now are difficulties of its explosive growth.

Obviously, any considerable expansion of production calls for big capital investments, and the Soviet economy is no exception to the rule. One of the secrets of our rapid growth rate is the fact that the USSR has surpassed the United States in physical volume of investments (45 billion dollars as against 40 billion).

Of course, the composition of capital investments is not permanent, not unchangeable. The Soviet state keeps a sharp eye out for anything new and promising in science and engineering that can have general application in industry and agriculture. Thus, for example, scientific and technical progress required a drastic change in the country's fuel pattern, a larger ratio of oil and natural gas; it also required an increase in the proportion of automated equipment, automated production lines and of whole automated shops and factories in the machine-building industries, etc.

That same process is going on right now. Changes are being made in the structural organization and interrelation of the various branches of industry; funds are being rebudgeted to give priority to the development of such new industries as electronics, semiconductors, petrochemicals, plastics, synthetic fiber, etc. The new method of planning adopted in the Soviet Union a short time ago favors these highly productive industries.

It is evident, in the face of all this, that any talk of an ever-growing Soviet military build-up or of the USSR signing the treaty on the nuclear test ban as a way out of an economic crisis is sheer nonsense.

One more allegation—that the Soviet Union is waging economic war against the United States. Is it right, or even sensible, to talk of "war" in this connection? It is true that our country has challenged the West. But to what end? The Soviet Union offers *peaceful* competition for higher living standards, competition to satisfy the material and cultural needs of people, competition to give every person an opportunity for rounded development and creative self-expression. This is our challenge. It has nothing to do with "war." On the contrary, peace is its indispensable condition.

Looked at this way, the nuclear test ban has undeniable economic value. The "atom for peace" presents us with incomparable opportunities. Think what the two social systems can accomplish by competing in this field. Banning costly tests of atomic and hydrogen weapons gives us the possibility for wider, more universal application of the atom for mankind's peaceful needs. This economic aspect must not be ignored. And the Soviet Union takes it into account in its economic planning.

The policy of peace stems from the very nature of the Soviet system. There are no classes in the Soviet Union with an economic interest in war preparations. The policy stems also from the ideological principles of the Communist Party of the Soviet Union. The policy is implicit in the fact that the Soviet Union carried out an extensive demobilization program, completely dismantled its military bases on the territories of foreign states and proposed a concrete and altogether realistic plan for general and complete disarmament.

The nuclear test ban treaty is a step toward this disarmament. Granted it does not ban nuclear weapons, destroy nuclear stocks and discontinue the manufacture of nuclear weapons. But if it is not possible to solve the whole problem at one time, the only wise thing is to solve it step by step.

The Soviet people firmly believe that relations between countries with different social systems need not be hostile. On the contrary, we are for the broadest possible contacts. We are for reasonable compromises if they are in the interest of the peoples, if they serve to end the danger of a world thermonuclear war. Peaceful coexistence means a search for solutions acceptable to both sides. It is the general line of Soviet foreign policy, a line which is not influenced by temporary economic fluctuations. ★

"THE EXCHANGE WAS VERY VALUABLE"

says Dr. Urie Bronfenbrenner

Professor Urie Bronfenbrenner of the Department of Child Development and Family Relationships at Cornell University in Ithaca, New York, spent three months in the Soviet Union recently working at the Institute of Psychology of the Academy of Pedagogical Sciences as part of the exchange program. Very shortly a Soviet psychologist will be going to Cornell for a three months' stay.

On this visit to the Soviet Union, his third, Dr. Bronfenbrenner was accompanied by his wife and two of his six children, Kate and Steve. Besides Moscow, Dr. Bronfenbrenner visited Leningrad, Alma-Ata, Tashkent, Irkutsk and other cities.

His work here was facilitated by an excellent command of Russian. Our reporter interviewed Dr. Bronfenbrenner at his hotel before his departure.

Question: What impression did you get of the work being done here in your special field?
Answer: My field is personality development, and I am especially interested in the forces that influence personality development outside the family. Not much work has been done in this area in the United States, while in the Soviet Union the problem has had a great deal of attention—not so much from the scientific side perhaps, but a great deal of applied work has been done, because the whole emphasis of Soviet education is on the role of the collective. We do not have that emphasis in the United States to any comparable degree.

Question: What do you think about the Soviet way of bringing up children?
Answer: We have met many children mainly through our informal contacts. I have also seen many children at school and have been very much impressed by their courtesy and their industry. They are hard-working kids, as we say in the United States. They love to read, which is very commendable. They appear to be very competent in many different—not only in scholastic—subjects, but also in shop work, self-government (running their collectives and school classes and so on). But my strongest impression of Soviet education—I think I would not be the only one to say it—is the dedication of the teachers. It seems to me that the teachers are extraordinarily—if I may use the term—idealistic and hard working, and really have the interests of the youngsters at heart. And this is very good to see in any society.

Question: What is your opinion of the newly created boarding schools?
Answer: In general I am very much impressed by the boarding schools and also by the prolonged-day schools. What is impressive about them is that here the school has clearly accepted responsibility, not just for the academic teaching of the child but for his character development. This is a very difficult task, bringing up a human being. It is difficult in any situation, and I am very impressed by the careful thought that is going into the process. There are, of course, disagreements in our approach to these matters, but I would say—given your objectives, given the objectives of a Soviet society—one cannot but feel that they are being pursued very devotedly and, to the extent that was possible for me to judge, very effectively.

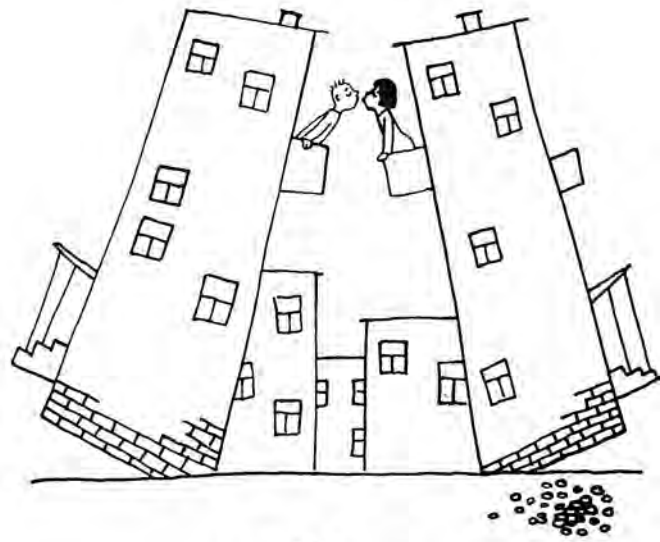
Question: With whom have you worked here?
Answer: This has been one of the most gratifying aspects of my stay. I cannot really say that I was able to work in the usual sense of the word because that implies sitting down with one experiment and one project and working it through. And I just had no time for that kind of thing, although we have started some cooperative research which we hope will continue.

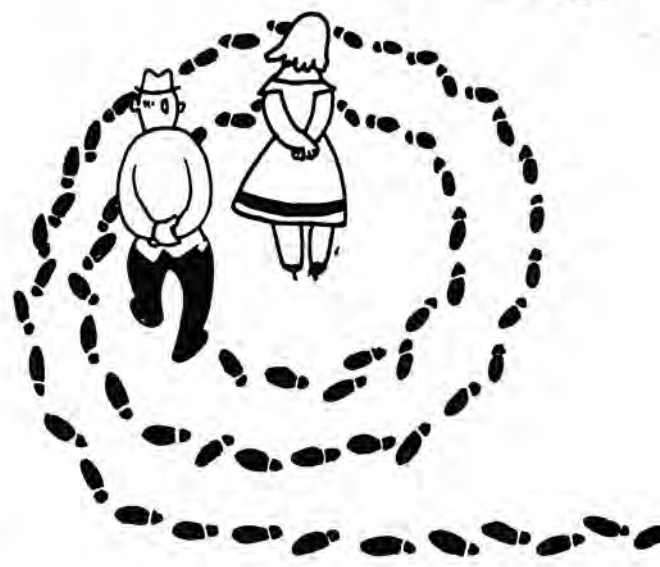
But one of my most rewarding opportunities was to continue my 18-year-old acquaintance and professional friendship with Professor Alexei Leontiev. And one fine Sunday morning while we were here, we picked up a newspaper and to our great pleasure read that he had just received the Lenin Prize. This is an event not only for Soviet psychology. Professor Leontiev's colleagues and friends, of whom there are many around the world, feel a sense of pride about it, especially those of us who know him personally. I think all of us look upon it as recognition of our field, psychology. I believe this is the first time that a psychologist has received the Lenin Prize.

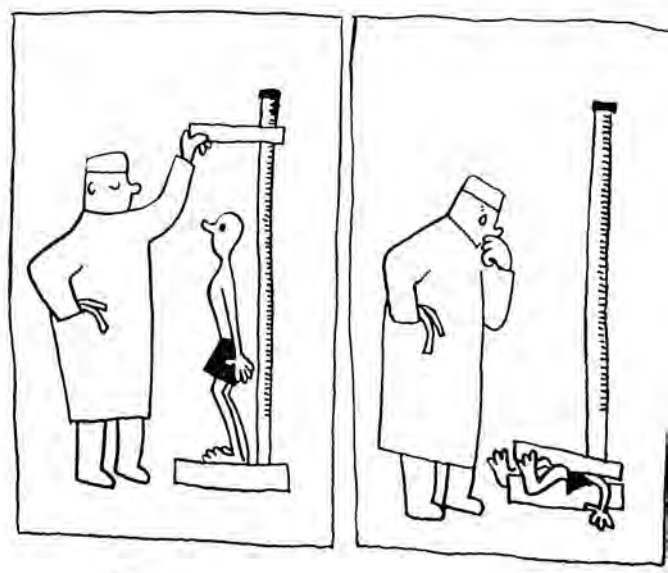
Question: And my last question. What critical comments do you have regarding this visit?
Answer: I had several opportunities to observe student self-government through discipline by the collective. I was very impressed by how seriously the young people accept their responsibility. At the same time I did feel that the amount of social pressure that was being brought to bear on the youngsters was often too great. I wondered whether it wasn't a little too much.

I would say that social psychology, my field, is relatively undeveloped as yet in the Soviet Union. But this is, in part, the heritage of the Stalin period, and from everything that I can gather, this particular shortcoming is going to be rectified in the years to come. I suspect that the time is not far off when we will be learning about social psychology from the Soviet Union. ★

HUMOR







BY NIKOLAI GRIBKOV AND ALEXANDER MANDRUCHIN

PHOTO BY ALEXANDER MOKLETSOV

THE CITY HAD TWO

TOMORROW another man would be sitting in this office where he had spent six years of his life. Mayor Sergei Dunichev, Chairman of the City Soviet of Working People's Deputies, felt a little sad at the thought. In this office he must have talked to thousands of fellow townspeople, had hundreds of conferences with deputies to the City Soviet, argued innumerable civic problems.

And yet his dominant feeling was not sadness but satisfaction, even pride in himself and the men and women who had helped him govern the city. It was the feeling a man might have who had traveled a long road with a heavy burden. The going had been hard, the road full of blocks, but how good it was to look back and see how much easier the walking was now for others.

He had done a good job, everybody said, had justified the confidence of the voters who had elected him Chairman of the Vladimir City Soviet. During the election campaign he had not heard a single word of disparagement. The first session of the newly elected City Soviet had expressed its appreciation of his work. He knew that the appreciation was due many other people besides himself, but still it was pleasant that his contribution to the city's welfare had been noticed.

In his six years of office the city had pushed way past its old limits; it had also pushed up vertically with its multistoried buildings. The population had grown from 124,000 to 183,000, the number of school children from 16,000 to 25,000. Public health expenditures had increased from 1.9 million to 3.2 million rubles. Six years ago there had been 18 miles of trolley-bus routes, now there were 35. When he took office not a single apartment in town had gas for cooking; today 19,000 apartments had it. About 17,000 modern apartments had been built in the period and scores of schools, kindergartens, nurseries, clubs and Houses of Culture. There was a big park now on the banks of the Klyazma River.

Vladimir is no longer the provincial town described in the Brockgauz and Efron Encyclopedia published in 1914. A candle factory was the town's industry then, and its population of 29,000 had grown by only 1,000 in the previous 15 years. Vladimir is now an important industrial center, a culturally awake city with schools—both secondary and college level—clubs and theaters.

The direction of all this Dunichev was to transfer that day to his successor, the new mayor, Robert Magazin. Did he feel hurt or sorry? Not at all. After three successive terms in office, as many as the law permitted, he was making way for new blood.

The newly elected mayor is young, but he is a man who has gathered his experience in a good school—work. He started as a lathe operator, became a foreman, then shop superintendent. He studied by correspondence at a machine-building institute, graduated and was appointed assistant director of a big plant. An energetic, efficient, clear-thinking, friendly man. A worthy successor!

HERE they are receiving the townspeople together. This is Dunichev's last reception day and Magazin's first. It was the new mayor who insisted on this joint reception. It would help him over the first hurdle, he said. On a new job it is reassuring to have someone more experienced standing beside you.

People come to see the mayor with the most varied requests and proposals. It is interesting how much the requests have changed in the past six years. With the housing problem on the way to being solved and with retail trade and municipal services improving, fewer people come in with complaints and more with suggestions.

A group of pensioners, former librarians, have come with a proposal that another library be opened.

"I think we have enough for a city our size," Dunichev says. "About a hundred."

Outgoing mayor Sergei Dunichev (left) and architect Vladimir Arvutsky (center) show incoming mayor Robert Magazin a model for a new housing project.

MAYORS THAT DAY

"Not if you take into consideration how much people are reading," insist the librarians.

"But the City Soviet hasn't budgeted anything this year for a new library."

"We're not asking for money. We'll contribute our own books. That way they'll get to more readers. And other people have promised us their books. We're not asking for salaries either. We're all on pension and we get along. What we do want are quarters."

"What do you think, Robert?" Dunichev asks. "Finding quarters shouldn't be too hard."

"I'm for it," the new mayor decides.

After the librarians, Dean Tyshchuk of the Uspensky Cathedral and several of his parishioners come in. The church has an administrative body, elected by the parishioners, to handle such secular affairs as physical maintenance, finances, salaries for the clergy, the frequency of services, and so on. Relations between the Dean of the Cathedral and the administrative body have been strained of late, and he has come to the mayor for advice.

In the Soviet Union church and state are separate, and the government does not meddle in the church's internal problems. But why not give advice when it is asked for? And the new mayor suggests:

"Why don't you call a meeting of your congregation and thrash the thing out? That's what we would do in the Soviet."

"We'd rather not make it public if we can help it."

"It's generally the best cure for a malady."

The clergyman is followed by an old worker, Ivan Ustinov. He has come on behalf of his neighbor, a woman with children. Her husband left her, and she is too proud to demand that he provide for the children. Ustinov wants the mayor to see that the children are placed in a boarding-school and that the father pay for their maintenance there.

A few more people to see and then it's time for the old mayor to prepare documents for the transfer of office and for the new one to go to a meeting of chairmen of the standing committees of the City Soviet. The mayor tells them that the powers of their committees has been enlarged, that they are to take over some matters formerly dealt with by the boards and sections of the City Soviet.

"For example, your committee, Zinaida," he says to the chairman of the cultural and educational committee, school director Zinaida Selina, "will now assign children to boarding schools and kindergartens and budget the money the government gives us for education."

The chairman of the public health committee is surgeon Yuri Astrozhenkov, Merited Doctor of the Republic. This is his second term on the City Soviet and the second time he has served as chairman of the committee. His committee sees to it that the city stays healthy. It checks on sanitation, does preventive work, supervises nurseries and approves disability and old age pensions.

The powers of the various other committees—city improvement, housing, communications, finance, retail trade, industry, and public utilities—have all been increased. The committees' decisions on matters within their competence are mandatory on all departments, organizations and institutions over which the City Soviet has jurisdiction.

One of the documents by which the City Soviet and its committees are guided is a continuing list of things the voters have asked their deputies to look into.

Here is one. With the city and its population growing, the number of cars on the streets—state-owned and private—has created a real traffic problem. In the previous election, when the City Soviet was voted in, it was instructed by the voters to divert downtown traffic. This was no easy task since there are prized historical monuments in the center of city—the famous Golden Gate and ancient cathedrals. But the City Soviet got down

to the job and a whole program of measures was worked out. One overpass has been built and another started. A new road is also under construction to ease some of the load.

Another example. There is a beautiful park on the opposite side of the Klyazma, but transport facilities connecting it with the city were poor. Voters suggested building a trolley-bus line. Today it runs from the center of the city to the park, three miles, a pleasant four-kopeck ride to a lovely spot for an evening breather or a Sunday outing.

Many kindergartens, nurseries, Houses of Culture, libraries and schools have been built at the suggestion of the voters. At one of the schools classes are conducted in English. Vladimir people are very much interested in the life of the American people, their culture and industrial achievements. Foreign languages, and especially English, are taught at all Soviet schools. But many Vladimirers wanted their children to have a more thorough knowledge of the English language than provided for in the regular secondary school curriculum. They suggested to the City Soviet that a school be opened where children would be taught in English.

The members of the newly elected committees of the City Soviet are now studying a new list of suggestions and proposals made by their electors. Each of the committees takes the list into consideration in drawing up its plan of work for the year.

The members of the committees will not be working alone. They will have the help of house and neighborhood committees; parents' committees at schools, kindergartens and nurseries; library councils; societies of nature-lovers and others of the 2,000 organizations in town.

AFTER dinner they met in the office again. Magazin looked through the formal transfer of office Dunichev had signed.

"Here is the key to the safe, what you might call the key to the city," the retiring mayor said. "But before I give it to you, keep me company on my last official tour."

The car brought them to Yamskaya Street. Vasili Shulgin, a well-known public figure in czarist Russia—he was once an emigré leader—mentioned this street in his "Open Letter to Russian Emigrants" (in the United States it was published in the Newspaper *Russky Golos* on September 18, 1960):

"I live in the town of Vladimir on the Klyazma, not far from the memorable Yamskaya Street. It still has remnants of the old courtyards and houses where coachmen lived in the old days. People past 50 will remember how at Shrovetide or Christmas troikas with bells raced along this street, trying to outstrip each other. Today numberless cars speed along the asphalt road. . . .

"The patriarchal little houses are living out their last days. Here, too, will soon be rising the huge stone buildings like those which have already filled the outskirts of Vladimir."

Multistoried buildings are ousting the dark little houses. New houses, whole new streets, are in construction—Gagarin, Maxim Gorky, Peace streets.

The car drove into the part of town called Maryinka where one of the future eight microdistricts is being built. Each district will have its own stores, restaurants, laundries, dressmaking and tailor shops and, of course, schools, kindergartens and nurseries, motion picture theaters, recreation areas for adults and playgrounds for children.

The car continued on its way through the city. There was hardly a block without scaffolding.

Dunichev says, as though he were showing a visitor around, "That will be the new House of Culture . . . and there is the Zarya Hotel . . . and a polytechnic institute, another secondary school, boarding schools, a wide-screen movie house."

The car drove over the ferroconcrete bridge across the Klyazma, leaving the noisy city streets behind. Now the road lay through a virgin pine forest, but here, too, buildings for a new hospital were going up.

On their way back the two mayors stopped at the ancient monuments. What Russian does not know the Golden Gate and the Uspensky and Dmitrievsky Cathedrals? They have been standing here for eight centuries, testaments to the architectural genius of our ancestors, reminding us of the valor and glory of the Russian people. The Soviet people guard them carefully. And now the two mayors looked them over for cracks warning of the destructive work of time.

Their last stop was a visit to city architect Vladimir Avrutsky. Here the old mayor acquainted the new with the general plan for city development. Much still has to be done before the city takes the shape outlined by the plan.

"I should warn you," Dunichev advises Magazin, "that some of the plant directors will probably be wanting to build housing projects for their workers near their factories. Don't permit it. At first glance it looks good—people living nearer their work. Actually it means living close to factory chimneys and far from the city's cultural centers. Besides, it's harder to supply such scattered settlements with modern conveniences. Laying sewage systems and gas and water mains is very expensive. Directors come and go, but the city is here to stay. It must be a single and a beautiful whole for healthful, convenient, good living. So you be firm."

The day was ending. For one of them it was the last day in public office, for the other the first. Dunichev shook the hand of his young successor and heartily, with the full measure of good will that is the mark of a generous man, wished him success in the hard but challenging job of serving the people. ★

OUR HUMAN VALUES, material and spiritual, began to take shape when men first grouped together in a primitive society. True, because of their very low productivity at the time man could acquire only the scantiest of material values in the way of food, clothing, shelter and tools. But even then his values were in the process of changing.

As he improved his tools, gathered experience and developed a division of labor, he was able to produce more and more material values. When he had enough to store for future use and even had a surplus, he could take time out from producing the necessities of life for creative activities, which assumed various forms of social expression: political, legal, scientific, esthetic, moral, etc. Thus did the accumulation of material values foster the growth of spiritual values.

We call this system of spiritual values or, to

OUR

be more exact, forms of social consciousness, ideology. Marxist philosophers hold that every socioeconomic formation (primitive society, the slave-owning system, feudalism, capitalism and socialism) has its own ideology. The material foundation out of which a specific ideology of primitive society grew was the common ownership of the means of production and articles of consumption and the absence of exploitation of man by man.

With the appearance of private ownership and the division of society into classes, ideology assumed class coloration, since every class forms its own ideas, views and theories, *i.e.*, creates its own inherent ideology. This is explained by the fact that each class, by reason of its economic and political position in society, has its own goals. For instance, the classes that possess the means of production, *i.e.*, the basic material values, as well as all political rights, seek ideological justification for their economic and political domination of society, while the classes that are deprived of these basic material values strive to rectify this social injustice. Thus in every society where private ownership is sovereign we inevitably find two ideologies, one for the propertied class and another for the unpropertied.

With the victory of the socialist revolution Marxist ideology, for the first time in history, became the dominant ideology of a state. This ideology was more than a justification for the economic and political rule of Russia by its workers and peasants; out of it evolved a scientific program for building a communist society. It cemented the will and actions of millions of Soviet people and assured the success of their labor. No wonder that this ideology is so precious a spiritual value for us!

Political Ideas

We have said that ideology is the totality of the various forms of spiritual life. Let us consider some of these forms—political ideas, for one—their formation and their role.

Political ideas express the interests and aims pursued by a class. They are generalizations of the methods and means it uses in the struggle to realize and defend its interests. These political ideas are embodied in constitutions and laws, in party programs, in scientific works. For example, Article 123 of the Constitution of the USSR on the idea of political equality: "Equality of rights of citizens of the USSR, irrespective of their nationality or race, in all spheres of economic, government, cultural, political and other social activity, is an indefeasible law." And further: "Any direct or indirect restriction of the rights

of, or, conversely, the establishment of any direct or indirect privileges for, citizens on account of their race or nationality, as well as any advocacy of racial or national exclusiveness or hatred and contempt, are punishable by law."

The Constitution of the USSR also gives expression to the political ideas of the alliance of industrial workers, farmers and intellectuals; the friendship among the multinational peoples of the country; the peaceful foreign policy of the USSR. A special act of the Soviet parliament prohibits war propaganda. The possibility of the peaceful coexistence of states with different social systems, the basic principle of the Soviet Union's foreign policy, is validated in the works of Vladimir Lenin, the founder of the Soviet state, and recorded in the Program of the Communist Party of the Soviet Union.

As regards the origin of political ideas, Marxists say that it is to be found in the economics of a society, particularly in the forms of property ownership.

Lenin wrote that policy is a concentrated expression of a nation's economy. For instance, *public ownership* in socialist countries absolutely precludes the possibility of exploitation of man by man and manifestations of racial or national oppression. Hence the policy of alliance, cooperation and mutual assistance between the classes, the policy of friendship and equality between the large and small nations of a country. One of the fruits of that policy is the monolithic unity of the Soviet people—the workers, farmers and intellectuals of more than a hundred nationalities. And thus it follows that the profound love of peace and internationalism implicit in the Soviet Union's foreign policy is a reflection of its domestic policy.

HUMAN VALUES

BY VICTOR AFANASYEV

Art and Truth

Among the spiritual values created by man are the arts. By the use of imagery in reflecting the world, the arts, in the judgment of Marxists, not only help people understand their world correctly, but also serve as a means of communication, educating them politically, morally and esthetically.

The arts came into being in the process of man's practical working activity at the time of the dawn of human society. In the course of this labor man acquired a sense of the beautiful in his environment and in his artistic creations. We maintain that the mission of the artist is to find the beautiful in reality, to generalize it, to express it truthfully and esthetically, and to bring it to people. Thereby are man's esthetic needs satisfied, his appreciation of the esthetic developed, and the ugly and decadent exposed.

The arts, a part of ideology, reflect class interests in a class society. Their inestimable influence, both intellectual and emotional, makes it a powerful weapon in the social struggle, used by the classes as a vehicle for their ideas, political, ethical and otherwise.

We believe that every class creates an art that conforms to its own interests, views and requirements. Many works of art, however, outlive their class and epoch, and become part of the spiritual heritage of all mankind. In this treasury are the finest works of the ancient Greek sculptors, of the artists of the Renaissance, the music of famous composers, and many other such great artistic achievements.

With the victory of socialism, socialist realism emerged in the Soviet Union and other countries. In socialist realism we have a new and bold artistic portrayal of reality combined with the use and further development of all the progressive values and traditions of world culture.

The great virtue of socialist realism lies in its profound kinship with the people. This is an art which serves the people, truthfully reflects their work and life, the heroism and romance of their revolutionary struggle for a new society.

"The arts belong to the people," Lenin said. "They must strike deepest roots in the very thick of the masses of the working people. They must be understandable to these masses and loved by them. They must unite the sentiment, thought and will of these masses; they must elevate them. They must awaken and develop artists in them."

The socialist system has made the best of world culture the genuine property of the people, giving meaning to labor and grace to everyday living. More than 10 million Soviet people are active in leisure-time amateur arts pursuits. Never have so many people, amateurs and professionals, participated in the arts. This large-scale amateur art fellowship finds expression in the people's theaters and symphony orchestras, factory art studios, amateur film-making groups, and in a multitude of other forms.

The kinship of socialist art with the people is a direct reflection of its Party spirit. This means that Soviet artists are called on to picture both the positive and negative aspects of life, to do so truthfully, honestly and from a life-asserting point of view. Soviet people hold that formalism, abstractionism and decadent art are incompatible with that spirit of truthfulness and kinship with the people.

Kinship with the people accounts for the enormous popularity of a whole galaxy of Soviet artists and their creations: the music of Dmitri Shostakovich and Sergei Prokofiev; the paintings of Pavel Korin and Alexander Deineka; the books of Mikhail Sholokhov, Alexander Tvardovsky and Konstantin Fedin; the films of Grigori Chukhrai, Sergei Bondarchuk, Mikhail Kalatozov; and many others. Audiences in all countries applaud the art of the Bolshoi Ballet, the Moiseyev and Beryozka dance companies, the violinist David Oistrakh, the pianist Emil Gilels, the singer Galina Vishnevskaya, to name only a few. In recent years Soviet musicians have taken part in 78 musical competitions and won prizes in 58 of them. The Soviet arts have formed and matured under socialism, giving every man the opportunity to develop his interests, abilities and talents. The Soviet arts have won an inalienable place in man's culture.

Communist Morality

As human society developed, so did its moral code. Each man is a member of a group—a society, a nation, a family—which makes specific demands on the individual. These demands take shape as moral standards. They are not immutable but change as society develops and changes, as the people's relationships change in the process of producing material and spiritual values. In primitive society moral standards were the same for all its members. With the appearance of private ownership and classes, these standards began to express the interests of a particular class. Thereupon morality, a form of social consciousness, also assumed a class character. And so it is that under private ownership we have one morality for the economically and politically dominant classes and another for the dominated classes.

But in addition to these moral standards which express the interests of this or that class, there are unchanging ethical values, rules of conduct common to people of different classes and different historical periods. They comprise the elementary rules of social behavior without which society cannot function. These rules protect people against the murderer, the rapist, the thief and the delinquent. They call for gentleness toward women; respect for one's elders; love for children; help for the weak, the ailing and the distressed; and so on. These elementary rules are usually observed by all people, irrespective of class.

Besides these commonly accepted rules, people have, in the process of labor and in the course of their struggle with the forces of nature, set up other and higher moral standards, such as the dignity of labor and respect for work, love of country, honesty and integrity, courage and self-sacrifice.

Derived from material values, ethical values are related to every aspect of the life of society. The people's attitude toward labor and property will tend to influence their economy. For instance, communist morality, having declared socialist property sacred and inviolable, thus guards the economic basis of socialism. Morality is also directly related to politics; every political act is subjected to moral appraisal, to approval or disapproval by the members of society. The fact that the overwhelming majority of people ardently support a policy of peace and security becomes a major guarantee that the cause of peace will eventually triumph.

The communist morality of the Soviet Union and the other socialist countries has assimiliated all the ethical values created in the course of mankind's development and enriched them with new content. Marxists have reason to claim that communist morality is the morality for all people, for all mankind. Communist morality demands the well-being and happiness, not of particular classes—as has been the case till now—but of all the world's peoples, of every individual. And so we find in communist morality patriotism, a love of the motherland, combined organically with internationalism, with the fraternal solidarity of the working people of other countries, with all the peoples of the world, with respect for the peoples of large and small countries alike. Communist morality demands that every member of society work with good faith to increase the wealth owned in common. It asserts collectivism and comradely mutual assistance—one for all and all for one. It is a profoundly humanistic morality, proclaiming truly human relations and mutual respect among people: "Man is to man a friend, comrade and brother." Honesty and integrity; moral purity; modesty and simplicity in social and private life; intolerance of injustice, parasitism, money grubbing and self-seeking ambition—these are the moral principles of Soviet man.

In our consideration of spiritual values, we have reviewed only a few of the forms that comprise an ideology. But even these are sufficient for drawing the inevitable conclusion that ideologies and their forms are rooted in class relations, that the struggle between ideologies is a natural dialectical process of the development of social consciousness and in no way negates the possibility of the peaceful coexistence of states with different social systems.

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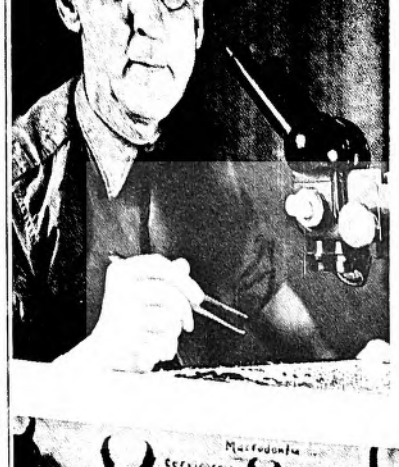
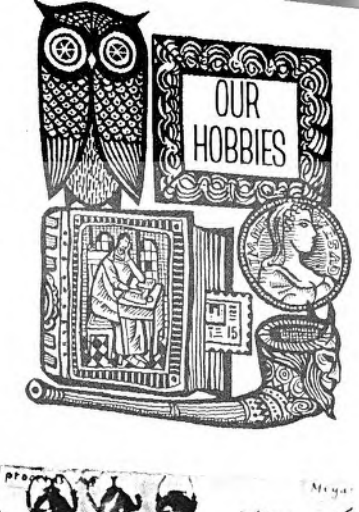
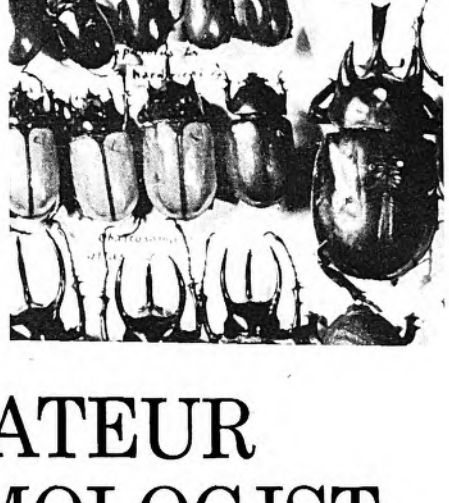


Nikolai Filippov has one of the biggest insect collections in the world.





AMATEUR ENTOMOLOGIST

BY YURI GURYEV

NIKOLAI FILIPPOV is completing a comprehensive book on insects. Sixty-seven years old and on pension now, he is still working hard at the hobby he came to like when he was ten.

Nikolai Filippov's job as diplomatic courier took him to every corner of the world, providing valuable opportunities for collecting specimens. Over the years he has built up a colossal collection of three million insects. Many of them represent important scientific findings. Some are associated with dangerous adventures.

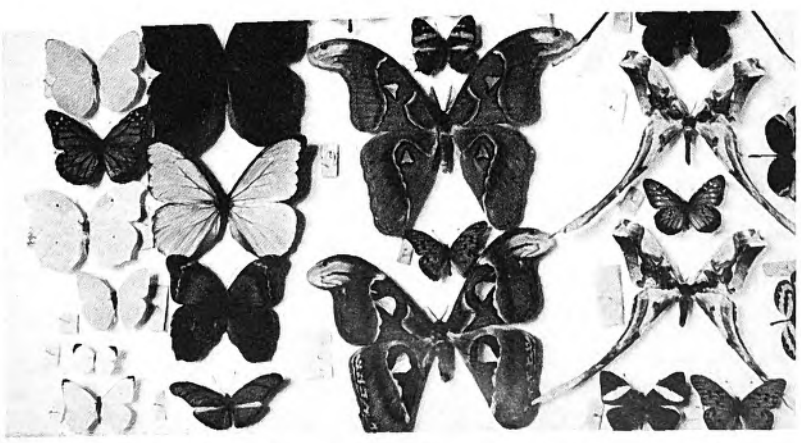
On one occasion he hung precariously against a cliff face stuffing the lining of birds' nests into a pouch slung round his neck. Below him the breakers of the Sea of Okhotsk roared greedily, and around him wheeled angry cormorants, lunging savagely at his unprotected head.

The nests of these birds were swarming with encephalitis-carrying ticks, and Filippov needed them for his research, a contribution to the battle against this dread disease.

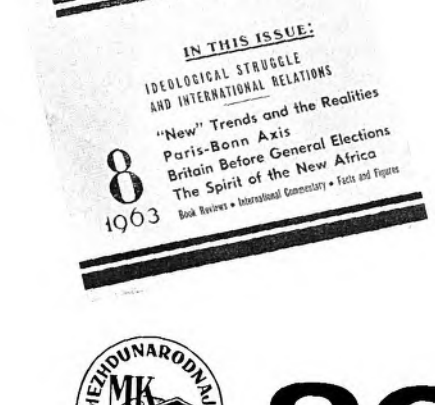
On another occasion, in southern Greece, he came across a tiny gray bug of the genus Tingis. First discovered in India, the insect had not previously been known in Europe. Filippov's find was more argument to counter those who believe that Asia and Europe have lost all the characteristics they once had in common.

Farmers have reason to thank Filippov for his studies of the Coccinellidae family—or ladybugs, as they are more popularly known. Some are friends of man, destroying plant lice. Others are pests themselves. Filippov's clash with one of these, the potato ladybug in the Far East, was fatal for this pest which conventional chemical insecticides could not control. Filippov and a group of biologists studied the behavior and the development of the potato ladybugs and discovered that they were affected by poison only in the late stages of pupation. With this finding, effective controls could be developed.

Despite his age Filippov is still full of youthful vigor. He receives hundreds of letters from people at home and abroad who are interested in his travels and discoveries. ★



(Above) Largest of the Attacus atlas butterflies and poisonous varieties. (Upper left) The Cerambycidae infest forests in Asia, Africa and America. (Upper right) The Dytiscidae. Its habitat is Asia, Africa and Indonesia.



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SOVIET

Dear Readers,

Mezhdunarodnaya Kniga, the Soviet book distribution agency, is presently taking 1964 subscriptions to newspapers and periodicals through its distributors abroad.

Foreign readers are offered a wide choice of publications in Russian, Ukrainian, Byelorussian, Lithuanian, Estonian, Latvian and other languages of the USSR, as well as in foreign languages.

Mezhdunarodnaya Kniga's export catalogue lists more than 1,000 newspapers and magazines.

The leading Soviet dailies are *Pravda*, *Izvestia*, *Literaturnaya Gazeta*, *Trud*, *Sovetskaya Kultura*, and *Komsomolskaya Pravda*. In many capitals of the world these newspapers are available on the day of issue.

Moscow News (annual subscription rate $2.00 for 52 issues) is a weekly published in English, French and Spanish which covers major domestic news and foreign policy and developments in science, the arts and sports. Special supplements give the full texts of all important documents and speeches.

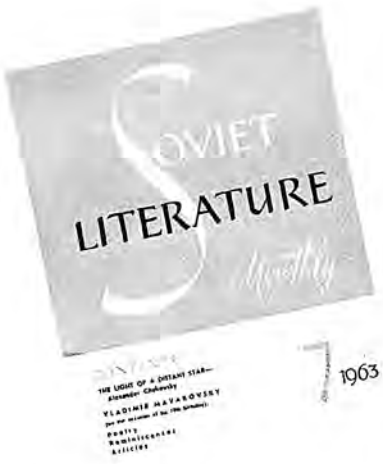
The magazines *Soviet Union*, *Soviet Woman*, *Soviet Literature*, *Culture and Life*, *International Affairs*, *Soviet Film* and *New Times* are published in both Russian and foreign languages.

The most popular is **Soviet Union** (annual subscription rate $2.50 for 12 issues), an illustrated monthly printed in 17 languages including Russian, English, French, German, Spanish, Arabic, Finnish, Serbian-Croatian, Chinese, Rumanian, Vietnamese and Mongolian. Supplements with condensed translations are issued for Swedish and Dutch readers in their respective languages.

With the writers and photographers of the magazine *Soviet Union* you can take an armchair trip to the big construction projects in Siberia and Central Asia; glance inside the laboratories of famous Soviet scientists; go through a factory; visit a school, theater, museum; see a soccer game; learn how Soviet people live, work and spend their leisure time.

Sports in the USSR (annual subscription rate $.40 for 12 issues) is the *Soviet Union* supplement devoted to information on the most interesting sports competitions, stories about outstanding Soviet sportsmen, the system of training in the USSR, etc. It is published in Russian, English, Spanish, French, German and Chinese.

Soviet Woman (annual subscription rate $2.50 for 12 issues) is an illustrated monthly published in Russian, English, Chinese, Korean, Spanish, German, Japanese, Hungarian and Hindi. As its name indicates, the



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1963

PERIODICALS

magazine gives a comprehensive picture of the activities of women in the USSR—as workers, mothers and fighters for peace. Features include fashion trends and recipes.

Soviet Literature (annual subscription rate $2.50 for 12 issues), which appears in English, Spanish, German and Polish, introduces the foreign reader to the work of contemporary novelists, short story writers, poets, playwrights and critics. Each issue also contains reproductions of paintings and drawings by noted Soviet artists.

Oeuvres et Opinions (annual subscription rate $2.50 for 12 issues) is an illustrated literary monthly published by the USSR Union of Writers in French.

Culture and Life (annual subscription rate $2.50 for 12 issues) is devoted to Soviet literature, theater, cinema and painting. Contributors include prominent Soviet scientists, writers, artists and civic leaders. Some of the material is written especially for foreigners studying the Russian language. The magazine appears in Russian, English, French, Spanish and German.

Soviet Film (annual subscription rate $2.00 for 12 issues) contains articles on new Soviet screen productions, reviews and profiles of popular actors and actresses, film directors and cameramen. The magazine is published in Russian, English, French, German and Arabic.

New Times (annual subscription rate $3.50 for 52 issues), a weekly printed in Russian, English, French, German, Czech, Polish and Rumanian, comments on the vital issues of our day and on current international affairs.

Soviet foreign policy present and past, international political and economic relations and the foreign policy of other countries are dealt with in detail in **International Affairs** (annual subscription $3.50 for 12 issues), a scholarly monthly printed in Russian, English and French.

Novy Mir, Oktyabr, Moskva, Zvezda, Znamya, Neva, Nash Sovremennik and other magazines printed in Russian publish current Soviet literature.

There is a wide range of world-famous Soviet scientific and technical periodicals, among them the journals and bulletins of the USSR Academy of Sciences.

Preschool children will enjoy *Vesyolye Kartinki*. For younger schoolchildren there is *Murzilka*, and for the older children *Kostyor, Vozhaty* and *Pioner*.

For teen-agers we suggest the popular *Smena, Vokrug Sveta, Tekhnika Molodyozhi* and *Znanie-Sila*.

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USSR

SOVIET LIFE TODAY

NOVEMBER 1963
25 Cents

LESSONS OF HISTORY page 4
ROAD OF COMMON SENSE page 12
FREEDOM FROM FEAR page 30
PUBLIC DISTRIBUTION page 40

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TO LIVE AS GO

. . . "Now that America and the Soviet Union have recognized each other politically, it is important that they do so culturally and intellectually. . . ."

"I have been told that the average tourist spending six weeks in Russia takes out with him exactly what he brings in. If he comes prejudiced against communism, he can still find some things about which to complain—that is bound to be the case with a country still in the process of building an entirely new social and economic life. But if he comes, on the other hand, unprejudiced, he will find much that is admirable."

Kermit Roosevelt, Jr.
(grandson of Theodore Roosevelt and distant relative of Franklin D. Roosevelt)
. . . stated in address over Moscow radio station VZSPS
July-August 1934

Just as the human organism has vitally important centers whose normal functioning determines a man's well-being, so the political well-being of the world is determined by Soviet-American relations, one of the most sensitive and vital plexuses of the international organism.

I have been in the United States many times. On my first visit, in 1944, as a military surgeon, I was interested in the methods used by American military hospitals for treating the wounded. I was received everywhere as a friend. Then came the years of peace and new medical problems. In 1957-59 I visited the United States to lecture on the treatment of cancer in the Soviet Union. In 1960 a Soviet-American anticancer conference was held, and that same year I again gave a series of lectures at Columbia University.

I have had many cordial meetings with distinguished American medical people here in Moscow as well. I am sure that my friends and colleagues—Dr. Stanley of California, Dr. Heller of New York, Dr. Endicott of Washington and Dr. White, who was recently elected a Member of the USSR Academy of Sciences—also recall these meetings with pleasure. We in the medical profession take pride in the fact that this cooperation is already giving results and has saved many a human life.

NIKOLAI BLOKHIN
President of the Academy of Medical Sciences

We, artists in the motion picture industry in Hollywood, meeting tonight to honor and celebrate the glorious resistance of the brave Russian people to the brutal attack of our common enemy —Hitlerism, greet you on the anniversary, honoring your heroic deeds with all our hearts. We send our deepest admiration.

JACK WARNER
WILLIAM WYLER
ALEXANDER KORDA
MERLE OBERON
ROSALIND RUSSELL
JOHN GARFIELD
EDWARD G. ROBINSON
NUNNALLY JOHNSON
ROBERT ROSSEN
LEWIS MILESTONE
CATHERINE BELLAMY
ROUBEN MAMOULIAN
RONALD COLMAN
MIRIAM HOPKINS
FRANK TUTTLE
WILLIAM MORRIS
WESLEY RUGGLES
FRANCHOT TONE
EDWARD SUTHERLAND

Beverly Hills, Calif.
June 22, 1942

It is thrilling to learn that the annual Shakespeare Conference will be held in Moscow commemorating the anniversary of the great dramatist.

By this celebration, the people of the Soviet Union prove that the march of culture and democracy cannot be stopped by Hitler's book-burning hoodlums.

It is our deep conviction that only through the triumph of democracy can culture be preserved. And we, writers, directors, actors, musicians, ask you Mr. Ambassador, to convey our warmest greetings to our colleagues, the men and women of the Moscow Shakespeare Conference.

CHARLES CHAPLIN
EDWARD G. ROBINSON
SIR CEDRIC HARDWICKE
DAME MAY WITTY
THOMAS MANN
BEN HECHT
DIMITRI TIOMKIN
MARC CONNELLY
EDWIN MEYER
ERIC KORNGOLD
IRA GERSHWIN
ELLIOT PAUL
GREGORY RATOFF
MIRIAM HOPKINS
JAMES HILTON
ROBERT ARDEN
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EUGENE SOLOW
TAMARA GEVA
JOHN EMERY
ALLA NAZIMOVA
EDWARD CHODOROV
LEWIS MILESTONE
ALEXANDER KORDA
AKIM TAMIROFF
MAX REINHARDT

It is important that such leading countries as the USSR and the United States expand their cultural contacts in whatever way possible. I have visited the United States twice and made friends with many American musicians. I have seen how interested Americans are in Soviet culture and what truly unlimited possibilities for contacts and exchanges our countries have. I am convinced that only through the joint efforts of the Soviet and American people can we build a better world for ourselves and for future generations. Soviet cultural workers are devoting all their energies to this great task.

DMITRI SHOSTAKOVICH
composer

Friendship between peoples requires that they get to know each other, and this develops gradually into an understanding of each other's interests and aspirations. So far as Soviet-American relations are concerned, it is my feeling that the first link in this chain is still weak. We must get to know each other better. I came to the conclusion, after talks with friends who have visited the United States, Britain and France, and from meetings with foreign tourists, that our people know much more about the Western countries than the peoples of these countries know about the Soviet Union.

What we must do is learn more about each other. A teacher of journalism, I want to stress the importance of objective information, for the way journalists report on events shapes the readers' attitudes toward a country. It would be helpful if our country were visited not only by newsmen from the bigger American papers but also by those from newspapers with a only a state- or city-wide circulation, and if Soviet journalists met more often with Americans. This kind of personal contact is a sure road to friendship.

VLADIMIR YAROSHENKO
Moscow State University

It was a great privilege to return to the Soviet Union after my three visits some 20 years ago and to see the astonishing progress which has been made despite the devastating war years. I was glad to see the higher standard of living in food, clothing, homes and transportation. The universal 10-year school represents an unprecedented educational undertaking; no other country has ever done what you are now attempting. Your achievement in other fields makes one expect that you will find solutions to the many difficulties in this new program.

GOODWIN WATSON
Professor of Education
Teachers College,
Columbia University

New York
3 December 1957

OD NEIGHBORS

Soviet scientists and the research institutes of the USSR Academy of Sciences are in fairly close touch with scientists abroad, including our American colleagues. We have exchange agreements with the National Academy of Sciences of the United States and many other American scientific bodies. Soviet and American scientists are both active in the Pugwash Conferences, working for peaceful coexistence and an end to the war threat. We must say, however, that we have fewer—and in some fields very much fewer—scientific contacts with the United States than with other Western countries. The Soviet Union and the United States are the two most advanced scientific nations in the world. In some fields we are more advanced, in others the United States is in the lead. The exchange of ideas, information on projects under way and research findings in many of these areas would be extremely useful. We are all aware that there are serious differences between our countries. But these differences should not discourage efforts by both our peoples to develop cooperative relations and to strengthen the friendship between us.

ACADEMICIAN
YEVGENI FYODOROV
Hero of the Soviet Union

Who would have dreamed that a people so recently released from autocratic czarist tyranny would themselves, after only 25 years, offer their all to release the whole world from Nazi enslavement? Twenty-five years in the light of the sun is but the flicker of an eye, yet in that brief time you, our Russian comrades, have so learned to cherish freedom that you offer all—your lives and the lives of those you love, your homes—to save Russia first of all, of course, and through Russia the whole world.

CHARLES ERSKINE
SCOTT WOOD

Los Gatos, Calif.
Oct. 27, 1942

I send you my warmest greetings and my earnest hope that the same effective military cooperation on what has begun to emerge will soon be transformed into the peaceful cooperation of reconstruction.

JOHN GARFIELD
movie actor
Hollywood, November 1942.

Through the Women for Victory meeting I send my most cordial greetings to the women of Russia, for whom it is impossible to adequately express my admiration. They have written an epic page in the history of this war, and the story of their heroism will live forever.

Text of message from
MRS. DWIGHT D. EISENHOWER
to a Women for Victory meeting
March 6, 1944
at Carnegie Hall

. . . I do not know of any people in the world that have any greater desire for peace than the Soviet Union.

Under Secretary of State W. AVERELL HARRIMAN
July 1963

APPEAL

to Public and Cultural Organizations, People Engaged in Science and the Arts, Representatives of the Business World, and All Citizens of the United States Working for Universal Peace and Mutually Beneficial Cooperation between the United States and the USSR

***A LITTLE OVER A MONTH** has passed since the treaty banning nuclear tests in the atmosphere, outer space and under water was signed in Moscow. All peoples of the world are now under the influence of this historic event which is an important success for the forces of peace and reason.*

In the course of the past month a sort of referendum was held in all the countries, and its result is sufficiently clear and eloquent. The overwhelming majority of the peoples of our planet have come out in support of the treaty.

The Soviet-American Relations Institute, which embraces in its ranks representatives of Soviet public, scientific and cultural organzations, people working in industry, agriculture, science and the arts, wholeheartedly supports and approves the partial nuclear test-ban treaty recently signed in Moscow. We are happy that clouds of atomic fallout will no longer darken the sky over mankind, that water will continue to carry life, and that the path of the cosmonauts, the greatest explorers of our day, will not be barred by a deadly barrier.

The mass support the treaty is receiving is explained by the fact that it conforms to the most vital interests of the peoples throughout the world. Its principal significance consists in the fact that it opens up possibilities for settling many important problems agitating the world and is a good beginning on the way to banning all nuclear tests, completely banning and destroying nuclear weapons, and solving the main problem of the day, general and complete disarmament.

The signatures affixed to the treaty by representatives of states with different social systems convincingly show the viability of the policy of peaceful coexistence.

During the Moscow Three Power talks the Soviet Government advanced a program of concrete and urgent measures for eliminating the danger of thermonuclear war. It proposed that a nonaggression pact be concluded between the NATO and Warsaw Treaty countries, and once again urged that the vestiges of the Second World War be abolished, that a German peace treaty be concluded and on its basis the situation normalized in West Berlin.

Appraising the importance of the Moscow treaty, N. S. Khrushchev declared that the "first shoots of international trust have now appeared, and the Soviet Government will continue to do everything in its power that these shoots may grow."

It is gratifying to know that the overwhelming majority of American people, their public organizations and their statesmen value so highly the Moscow treaty, which President Kennedy called a "victory for mankind" and "first important step, a step on the way to peace, a step on the way to reason, a step away from war."

The members of the Soviet-American Relations Institute are convinced that the signing of the treaty banning nuclear tests offers new opportunities for improving Soviet-American relations and promoting Soviet-American cooperation.

This year will be the thirtieth anniversary of the establishment of diplomatic relations between the USSR and the USA. This is an important landmark in the history of relations between the two great countries.

History demands that our states seek and find ways and means of settling outstanding issues through negotiation, for promoting cooperation, and expanding connections and cultural exchange.

A major role in the promotion of these relations undoubtedly belongs to the peoples of our countries. The Soviet-American Relations Institute is making its own contribution to this important endeavor and is prepared to exert every effort toward promoting cultural contacts and friendly relations between the peoples of both countries.

We hope that the public and cultural organizations, people engaged in science and the arts, representatives of business circles, and all citizens of the United States working for mutually beneficial cooperation and good-neighbor relations between our countries will observe the significant date, the thirtieth anniversary of Soviet-American diplomatic relations, and treat with favor our appeal for multiplying the efforts of the peoples of our countries for the sake of establishing an atmosphere of genuine trust and mutual understanding, and will assist more actively the achievement of agreement between our countries on the most important international problems, the solution of which the peoples of the whole world await.

We shall be glad to receive requests and suggestions in connection with this appeal at the following address:

Board of Soviet-American Relations Institute
14 Kalinin Street
Moscow, USSR

September 20, 1963

"We would like to believe that the time will come when Soviet-American relations will improve and this will have a favorable effect on the whole international situation."

From Chairman Nikita S. Khrushchev's speech in Luzhniki
June 15, 1961

"Let us not be blind to our differences—
but let us also direct attention to our common
interests and to the means by which those
differences can be resolved."

From President John F. Kennedy's speech
at American University, Washington
June 10, 1963

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Front Cover: A former miner, Chairman Khrushchev, and machinist Ken Jackey of the Mesta plant exchange a few good jokes.

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TO LIVE AS GOOD NEIGHBORS

THE LESSONS OF HISTORY SHOULD NOT BE FORGOTTEN

BY BORIS GEORGIEV
MASTER OF SCIENCE (HISTORY)

"THE KREMLIN, MOSCOW, August 5, 1963. The Foreign Ministers of the Soviet Union, the United Kingdom and the United States sign the nuclear test-ban treaty."

That stirring piece of news swept across the planet like lightning. But how long and weary a road of negotiation went before it! The passions that had to be subdued before these first signatures could appear together beneath this "treaty of hope"—as the world public has called this cardinal document opening up the way to the peaceful adjustment of other ripe international issues!

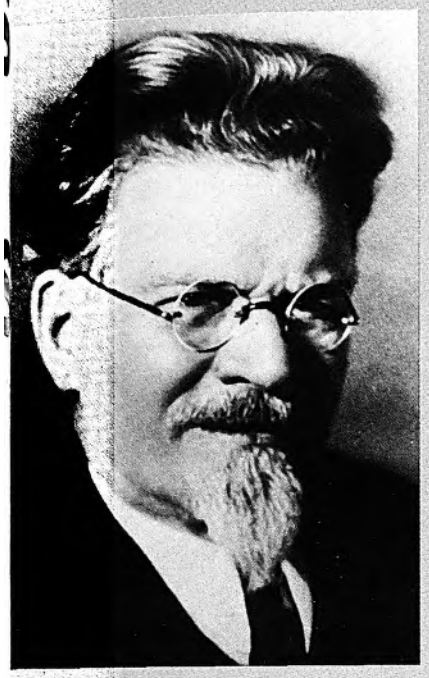
Yes, it was on August 5, 1963, that the "peace relay" started off from the Kremlin en route to most of the states in the world. By subscribing to the treaty, they gave confirmation once again of the justice and viability of that policy of the peaceful coexistence of states with different social systems which Vladimir Lenin proclaimed at the birth of the Soviet republic.

As I watched the U. S. Secretary of State affix his signature and exchange friendly handshakes with the Soviet leaders, I couldn't help recollecting another historic relay several decades ago when recognition was extended to the world's first socialist state, a relay keynoted by passions every bit as intense: 1933, of course, when the United States finally established diplomatic relations with the Soviet Union.

After 150 years of amicable ties, official relations were broken off for 16 years when the working people of our country took power into their own hands in the socialist revolution of October 1917 and began to fashion a new life. The world's first socialist state stood for peace and peaceful coexistence from the very beginning. The very first act passed by the workers' and peasants' government was the Decree on Peace, in which the young Soviet republic offered to end the World War at once and conclude a fair, democratic peace.

However, as the Russians say, "you can't throw the words out of the song." The rise of the new system in Russia was hostilely received by the leaders of the rest of the world. When, despite lavish outside support, domestic counterrevolution initially failed to strangle the young socialist republic, open armed intervention began. However, every effort to strangle the first socialist power in its cradle was abortive. In defiance of incredible chaos, starvation and the blockade, Soviet Russia's workers and peasants upheld their right to govern the new state as they saw fit. The Soviet people will never forget that among the hundreds of millions of ordinary people who called for "Hands off Russia!" in those years and supported us in our struggle for independence and freedom was the working class of the United States.

The chapter of recognition began soon after the Civil War and foreign intervention ended. Britain, France, Germany and other Western countries established diplomatic relations with us. The reason, as Vladimir Lenin repeatedly emphasized, was their interest in trading with the young Soviet republic. Meanwhile the Soviet Government attached great importance to the normalization of relations with the West, America in particular. Back in the autumn of 1919, Lenin emphasized: "We resolutely advocate economic understanding with all countries, especially America." Subsequently, through its representatives, the Soviet Government repeatedly reaffirmed its readiness to establish diplomatic relations with the USA. Unfortunately, these bids fell on deaf ears for quite a while.



MIKHAIL I. KALININ, President of the USSR:

"There is no doubt that the difficulties that exist or arise between two peoples can be solved only when they have direct contact with each other."

(From Kalinin's *Correspondence with Roosevelt*)

FRANKLIN D. ROOSEVELT, President of the United States:

"And I cite as an illustration in the field of foreign policy something that I am proud of. That was the recognition in 1933 of Soviet Russia."

(From Roosevelt's *Public Papers and Addresses*)

However, in the twenties Soviet-American economic relations, often initiated by American businessmen, developed considerably. "Some 30 years ago, when our country started building a large-scale industry," Nikita Khrushchev noted in his address to the Economic Club of New York in 1959, "good economic contacts were established with leading U. S. firms. Ford helped us build the motor works in Gorky. Cooper, a prominent American specialist, acted as consultant during the building of the hydroelectric power station on the Dnieper, which in those days was the biggest in the world. Your engineers helped us build the tractor works in Volgograd and Kharkov. Americans, along with the British, were consultants during the construction of the Moscow subway. We were grateful to your specialists for their cooperation, and many of them returned home with Soviet decorations and letters of thanks, to say nothing of material remuneration."

Trade with the USSR and the fulfillment of Soviet contracts became particularly important to American industry in the twenties and thirties. Thus of the total U. S. exports in 1930 and 1931 the USSR accounted for respectively 50 and 77 per cent of the tractors, 37 and 57 per cent of the metal-cutting machine tools, and 35 and 18 per cent of the oil industry equipment. Not without good reason did *Business Week* note on February 15, 1930, that politically unrecognized Russia had come to the aid of the crisis-stricken American economy.

The "nonrecognition policy" collapsed. Soviet delegations actively participated in major international conferences, working for peace and total disarmament. By early 1933 the USSR had diplomatic relations with more than 20 countries. Voices clamoring for recognition of the Soviet Union rang out more and more loudly in the United States as well. This demand was made not only by factory hands, scientists, farmers and office clerks but also by politicians and businessmen. And the U. S. Chamber of Commerce advocated it.

The movement for recognition of the Soviet Union reached its peak in 1933. It took the United States, as Nikita Khrushchev correctly pointed out in a speech made in America, "16 years to make up its mind. However, it simply had to recognize this new thing that had come into being without anyone's leave and that had begun to live on its own."

On October 10, 1933, President Roosevelt proposed in a message to Mikhail Kalinin, the Soviet President, that normal diplomatic relations be established between the two countries. The Soviet Government agreed to negotiate in Washington. The talks between President Roosevelt and Soviet representative Maxim Litvinov were successfully culminated on November 16, 1933.

We have always paid homage to the wise statesmanship of President Franklin D. Roosevelt, who played such a pre-eminent role in establishing normal relations with the Soviet Union. The act of recognition officially recorded one of the basic principles of peaceful coexistence—that of non-interference in each other's internal affairs. The two governments pledged that they would neither establish, subsidize nor support military organizations or groups having the purpose of conducting armed struggle against the other side.

As Mikhail Kalinin put it, this event ushered in "an era of versatile, fruitful cooperation between our two peoples." In the first place, it contributed to the extension of mutually advantageous trade. In the five years following 1933, Soviet exports to the USA doubled while U. S. exports to the USSR increased almost eight times over. By 1937 the USA was leading in Soviet imports, being ahead of Britain, Germany, France and Japan. Under the agreement of August 4, 1937, both sides recognized the most-favored-nation principle, which created the necessary conditions for further extending mutually advantageous economic cooperation.

Trade was not the only field in which Soviet-American relations actively developed. Cultural and scientific contacts got under way, and useful exchanges were started in the field of medicine, education and the performing arts. The nonstop flight made by Valeri Chkalov and Mikhail Gromov in 1937 graphically demonstrated that our two countries were really not so far apart.

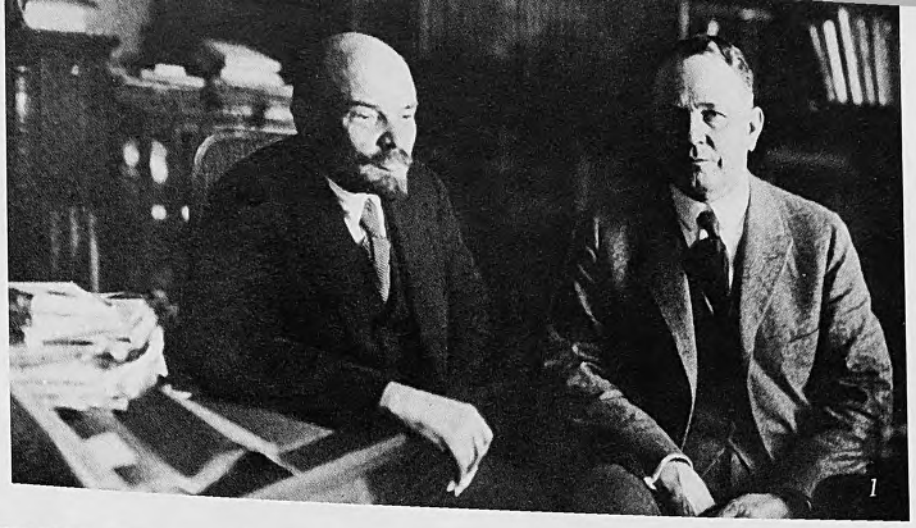
The normalization of Soviet-American relations was particularly important and necessary in view of the evidence of the first hotbeds of war emerging in the Far East and Europe. Realistic politicians could not but realize that Soviet-American cooperation to maintain world peace could develop into a force capable of curbing the aggressive appetites of the fascist Axis Powers.

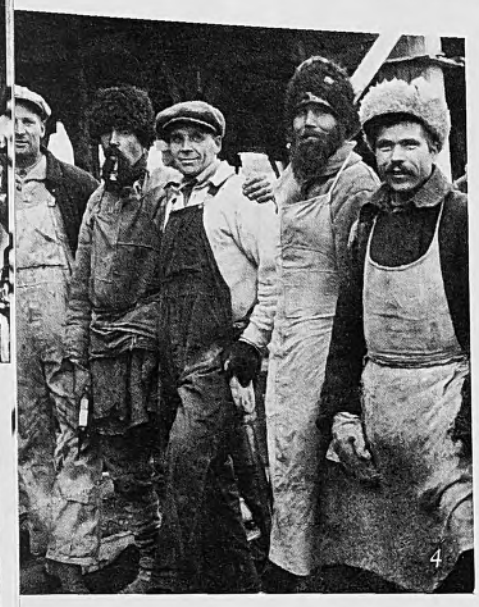
Throughout all this period the Soviet Union advocated giving the fascist aggressors a determined rebuff. The Government of the USSR repeatedly urged the Western Powers to establish a system of collective security to prevent aggression. Unfortunately, the USSR and the USA as well as certain other Western Powers did not take advantage of the opportunities available for taking joint action against the mounting war danger. The influence of the Western circles who reckoned on being able to destroy the first socialist state through the fascist aggressors was too great. Their myopia was later realized when the Axis Powers unleashed the Second World War and struck at the West first. In the meantime the USSR, left all alone with the fascist aggressors, was obliged to do what it could to put off their inevitable attack.

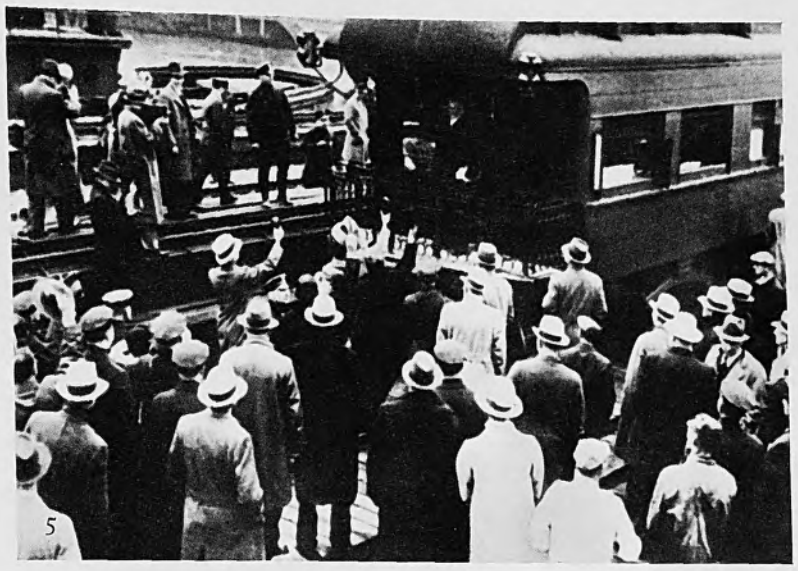
On June 22, 1941, the Hitlerite hordes fell treacherously upon the USSR. The entire Soviet people rose to defend their socialist motherland, to fight the Great Patriotic War. On that same day British Prime Minister Churchill said that the danger threatening Russia was the same danger threatening Britain and the United States, that the cause of every Russian fighting for his hearth and home was the cause of free people and free nations the world over. Let us learn the lessons, he said, that we have already had through such bitter experience.

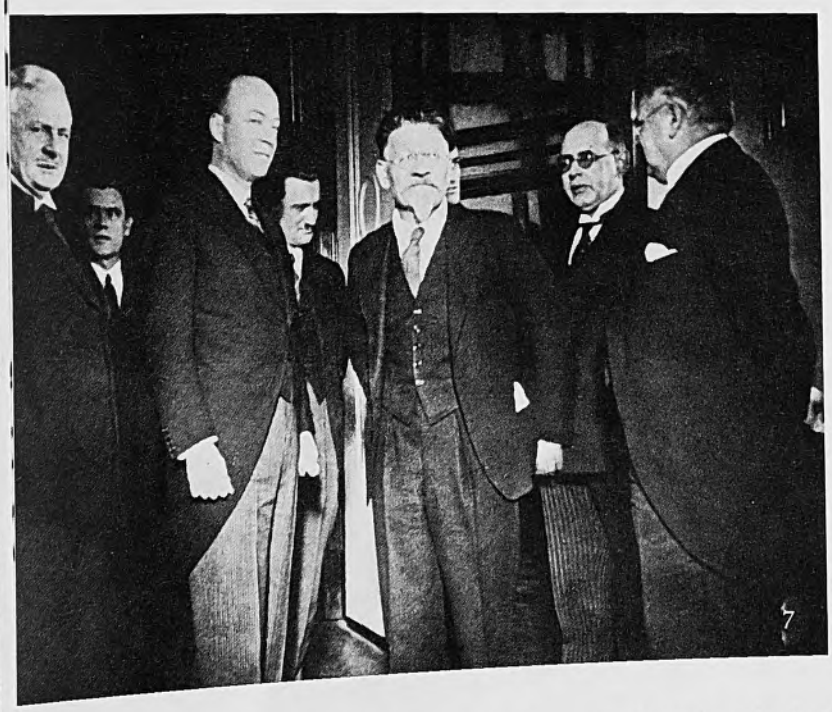
The Soviet people spared no effort and made incomparable sacrifices in repulsing the aggression and upholding their own independence as well as the freedom and happiness of all mankind. Again, as had already happened before, the argument ran rife in the West as to how to treat the USSR. Should the socialist land overrun by the fascist invaders be helped or not? We shall never forget that it was President Roosevelt, taking sober stock of the situation, who recognized the Soviet Union as the force that could smash Hitler's war machine. The Soviet people well remember that at the time there was in the USA a broad popular movement to help our country. However there were also rather influential personalities who openly staked on the destruction of the socialist state by the fascist aggressors.

By autumn it was clear that Hitler's blitzkrieg against the USSR had failed: the Soviet people had stood firm. On September 29, 1941, at a conference in Moscow representatives of the USSR, the USA and Britain









1. *Vladimir Lenin with the American economist T. Christensen at the Kremlin in 1921. The founder of the Soviet state advocated a policy of friendship with the Americans.*
2. *Recognizing the vital necessity of contact, the Soviet Union, even in the absence of official diplomatic relations, was host to an American workers' delegation in 1927.*
3. *The outstanding achievements of the USSR were a big factor in its recognition by the USA. This American postcard commemorates the Moscow-to-New York flight in 1929.*
4. *In 1930 American workers were helping the Soviet people build the Gorky Auto Plant, one of their first. Now it is the largest in Europe for passengers cars and trucks.*
5. *In November 1933 Maxim Litvinov left for Washington to negotiate the establishment of Soviet-American diplomatic relations with President Franklin D. Roosevelt.*
6. *A. Troyanovsky, first Soviet ambassador to the USA, congratulates airmen Chkalov, Belyakov and Baidukov in 1937 on the first nonstop Polar flight from Moscow.*
7. *Diplomatic relations between the two countries were established in November 1933. President Mikhail Kalinin receives William C. Bullitt, first U.S. ambassador, in Moscow.*
8. *The Soviet Pavilion at the 1939 New York World's Fair. The American people were able to see for the first time something of what the USSR had accomplished in 22 years.*

proclaimed Great Power unity in the struggle against the fascist aggressor. Meanwhile the agreement on mutual deliveries of armaments and raw materials initiated in practice comradeship in arms.

May 1942 saw a new agreement concluded in Washington between the USA and the Soviet Union "on the principles applicable to mutual assistance in fighting the war against aggression." It served to further strengthen cooperation among the Great Powers. As the upshot of the Washington talks, full agreement was reached with respect to the urgent tasks of opening a second front in Europe in 1942.

Unfortunately, it was not opened in 1942 or in 1943. The Soviet people and their armed forces had to wage singlehandedly a life-and-death struggle with the main forces of the armies of Hitler and his satellites. The historic victories won by Soviet troops in the Battle on the Volga and the Kursk salient, and the crushing blows dealt on the other fronts, turned the tide in the entire course of the war. The backbone of the Hitler war machine was broken.

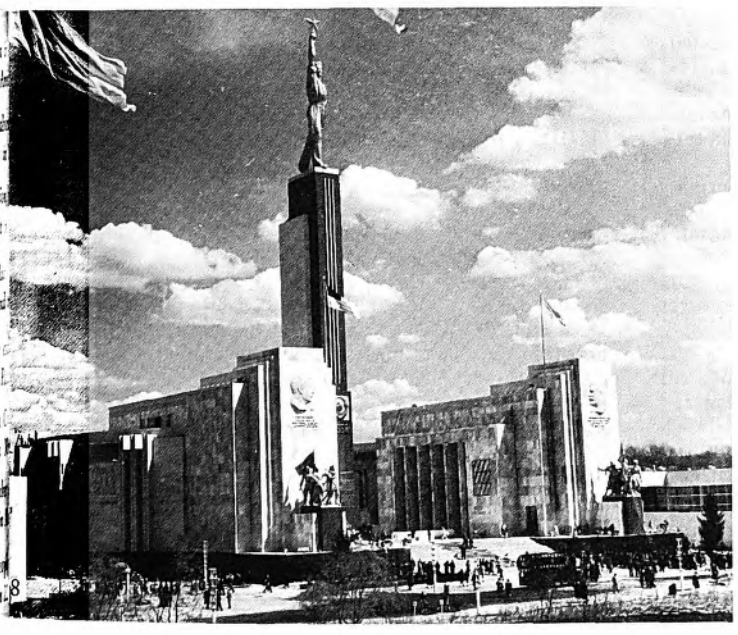
On June 6, 1944, the Allies landed in Normandy. At last the Second Front was opened. The Nazi armies found themselves between the hammer and the anvil. Meanwhile Soviet armies beat back the main forces of Hitler, thus helping the Allies to repulse Nazi counterattacks in the West.

The Soviet people have not forgotten the support the American people gave them in the grim war years and prize it highly. In the 1941-1945 period the United States gave the Soviet Union lend-lease aid approximately equivalent to four per cent of Soviet wartime production. In an evaluation of American wartime aid to the USSR, U. S. Secretary of State Edward Stettinius said he thought the Americans had received twice as much: the Russians, he said, had already made their contribution in the shape of millions of fascist soldiers routed and captured and a colossal amount of military equipment destroyed.

In February 1945, at the Yalta Conference in the Crimea, plans for the complete and final rout of Hitler Germany were coordinated and decisions on the postwar development of Germany as a peaceful democratic state were taken.

On April 25, 1945, Soviet troops linked up with advance American units on the Elbe, in the heart of Germany, near the small town of Torgau. Then on May 8, 1945, in the presence of representatives of the armed forces of the USSR, the USA, Britain and France, representatives of the Hitlerite command signed the act of unconditional surrender. The war in Europe was over.

On August 9, 1945, the Soviet Union, honestly discharging its Allied commitments, entered the war against Japan and soon utterly smashed the million-strong Kwantung Army deployed in Manchuria. As American troops advanced in the Pacific—every step costing much blood, U. S. President Truman wrote in his memoirs—it grew more imperative for Russia to enter the war as this meant hundreds of thousands of American lives would be saved.



On August 14, 1945, Emperor Hirohito ordered the cessation of hostilities, and on September 2 the act of Japan's unconditional surrender was signed aboard the U.S.S. *Missouri*.

The course of the war once again confirmed the vital importance of cooperation between the Soviet Union and the United States, which is just as necessary for maintaining universal peace in the postwar years. Franklin Roosevelt realized that full well when he set forth as a cornerstone of UN activity the principle of Great Power unanimity in deciding cardinal issues for the maintenance of peace. It was Franklin Roosevelt who said what is just as topical today. "I trust," the President said, "that the relations now established between our peoples may forever remain normal and friendly, and that our nations henceforth may cooperate for their mutual benefit and for the preservation of the peace of the world."

The same point was emphasized by Nikita Khrushchev when he said: "Scarcely does anyone doubt that international developments generally depend largely on how relations develop between the United States and the Soviet Union, the world's two mightiest powers."

The history of the past few decades shows that when they act jointly for universal peace and strive for coordinated and mutually acceptable solutions, our two countries can live in friendship and cooperate successfully. It is precisely this path of businesslike cooperation and consolidation of mutual trust, of joint efforts for peace that accords with the national interests of our two peoples. ★

OUR TRENDS

Soviet People's Holiday

Every year on November 7 and 8 the Soviet people celebrate the anniversary of the birth of Soviet power. This year will be the forty-sixth.

For anyone who has not been in the USSR during these holidays it is hard to imagine the generally festive atmosphere which prevails throughout the country. The entire population of 220 million celebrates in a body. At the same time each family has its own festivities, as a rule, marking an outstanding labor achievement, a wedding, the acquisition of a new apartment and other such special occasions. Every Soviet citizen considers the holiday incomplete without his participating in the rally which is always held on November 7.

The Soviet people's high esteem for their national holiday has a deep foundation. The events which took place in Petrograd on October 25-26 (November 7-8) 1917 were truly decisive in the destiny of Russia, as they opened up before the whole country the path to prosperity and power under conditions of genuine democracy.

The Soviet people owe their present high material and cultural standards to the October Revolution, which introduced the new social system. That is why to every Soviet worker, peasant and intellectual this anniversary is a very precious thing.

The profoundly humanist principles of the October Revolution are absolutely clear to the Soviet people. It eliminated the power of the propertied class, which had compromised itself by countless crimes against the people, putting the power into the hands of the people. It came out resolutely against the humiliation of man, against inequality in political and social rights. It made the working people masters of the values they create. Finally, it proclaimed peace as the only worthy form of relations between nations.

Thanks to all this the October Revolution was one of the greatest triumphs of mankind. With Lenin at its helm, the Revolution was carried out by the proletariat of both town and countryside, pioneers of the noblest social transformation in human history.

The Soviet people have traversed a hard and difficult road. The forces which in the course of decades waged an almost continuous struggle (open and secret, diplomatic and military, economic and ideological) against our socialist country, against the very spirit of the October Revolution were too numerous and too arrogant.

But it appeared that this spirit only grew stronger and loftier in trials. Having overcome all obstacles, the Revolution reached such a stage of development that today, only 46 years later, it is already nearing its highest stage—communism.

The new civilization, the foundations of which were laid in October 1917, was the cradle of transformations which would have been unthinkable in the traditional societies. And the most important of these amazing social changes probably is that the rank and file, tens of millions of ordinary workers and peasants, have risen to the level of political leaders. They efficiently take part in the management of the affairs of society and the state.

In the new society public education has been organized in such a way that no talent is overlooked, however remote the section of the country and however modest the family in which it appears. This has enabled the Soviet Union to reach the vanguard of progress in a number of decisive branches of science and engineering. The phenomenon, which has become known to modern historians and artists as the "Russian miracle," is nothing else but the natural result of the complete emancipation of the working masses, as foreseen by Lenin and his Party.

The Soviet people also clearly see that the ideas of freedom and justice which were the heart and soul of the October Revolution had, and continue to have, a most favorable influence the world over. The transfer of power to the hands of the working people in a number of European and Asian countries, the appearance of dozens of independent states in what were formerly colonies, the growing awareness that war can be avoided—all these are historically rooted in the October Revolution.

The October Revolution shifted the Golden Age from the past to the future, turned it from a dream into the object of a tangible plan. The Soviet people look to the future with great hope. And the holiday commemorating the October Revolution presents to them each year a vantage point from which they see their future ever more brightly and clearly as a fine, sunny day of peaceful work and creation, full of the joy of living. ★

WORKING TOGETHER

Among the Americans who went to the Soviet Union in the thirties to help train Soviet industrial workers were Messrs. Bennett (right, upper photo), Kashkap and Ross (lower photo, left). Under their capable tutelage the pupils soon surpassed their teachers.

THE STALINGRAD TRACTOR PLANT IN 1931

BY ILYA SHEINMAN

The Stalingrad Tractor Plant was the Soviet Union's first major machine-building project. It was completed in the early thirties, during the first five-year-plan period. Its equipment was the most modern available, but the greater part of its workers were yesterday's farm youth.

Working with the Soviet personnel were a few American specialists. This excerpt from the book* What I Saw in America; What I Did in the USSR *(1934) gives some of the atmosphere of the time. The author was head of the hammer mill at the big plant.

YESIN, who works on the differential crown, has asked me to transfer him to the crankshaft section. He will be apprenticed to the American Hartman.

Hartman does not look like a smith. He's broad-shouldered, fat, wears horn-rimmed glasses and a Vandyke beard, and looks more like a doctor or a banker. He grew the beard in Russia, probably thinking that's the Russian custom. He is noisy, energetic and restless. He lets no one come near the hammer and yells at the repairmen, the foreman, the workers when they do, gesturing and moving about all the while.

Up to now he and another American, Berger, no thinner than Hartman—they take alternate shifts—were at the hammer, making crankshafts. But for some days now they have been training workers, themselves punching only for demonstration, with Yesin repeating every motion.

Berger is a big good-humored man, always laughing. He is of Indian descent, but he doesn't look it; he looks like any other American. Instead of chewing tobacco, he takes snuff. Berger is a quiet man; he bustles about much less than Hartman, only now and then approaching a worker to correct his work. He feels responsible for every movement of his workers.

The American Burgoyne is a different type of fellow. Tall, flabby-faced, he likes to take it easy every so often. He is an industrious and conscientious chap, but he is accustomed to having someone supervise him all the time, and since we do not have enough supervisors, Burgoyne takes advantage of the situation. But he is a good worker and can do nearly any kind of forge work.

Luke works at the light hammer mill. A fussy fellow, he is never satisfied with the way things are being done, is always brimming over with suggestions. He runs into my office or gets hold of me in the shop and starts shooting suggestions at me. He also chews tobacco—instead of using snuff he simply bites off chunks of a cigar.

Blakelock works in the tool-making and die-punching department. He is one of the best workers and knows all the ins and outs of his job. He follows the drawings quite well and is an expert in the hammer mill process and on the punch press. He has had a lot of experience designing the most varied kinds of forge work. He is an agile, boisterous fellow and speaks so fast that even the Americans can't make out what he's talking about half the time.

Yesin is getting better at the punch every day. He now handles the hammer like a real smith, and in two weeks he will be getting his first bonus for making 36 crankshafts in a working shift.

The standards set by the Americans for the front axle have been met. In the production of the distribution shaft we have even surpassed American standards.

We are celebrating the fact that we have raised the standards for basic forged parts. There will be a party in the dining room for the engineering and technical personnel and the best hammer mill workers.

HE TOOK PART IN IT

BY A. SERBIN

Among the many American tourists who visited the Soviet Union in 1956 was engineer George Morgan, well-known to Muscovites as one of the builders of the first section of the Moscow Metro.

He was welcomed by many old friends and was received by Chairman Khrushchev.

This article appeared in the July 1956 issue of* Ogonyok *magazine.

THE paper has grown yellow with time and is worn at the folds. Some careful hand has pasted it together on the back. It reads:

"Heard: on the composition of the Scientific and Technical Board of the Presidium of the Moscow Soviet."

This is an extract from the minutes of the session of the Moscow Soviet Presidium dated December 26, 1935. The list of names of members of the Scientific and Technical Board includes "Comrade Morgan, engineer, chief advisor of Metrostroi."

Another extract is from the minutes of a session of the Moscow Soviet Presidium which awarded the honorary badge of the Moscow Soviet of Workers', Peasants' and Red Army Servicemen's Deputies for "outstanding work in the construction of the Moscow Metro to engineer George Morgan, citizen of the United States."

Both these documents Morgan brought with him to Moscow. He also brought the Order of the Red Banner of Labor he received in 1936 for his part in building the first section of the Moscow Metro.

Our interview began with the first time George Morgan came to our country. He had been working as an engineer with the American firm of Arthur G. Mackie and Co. By agreement between his firm and Soviet agencies Morgan came to the USSR in 1931 to help build the Magnitogorsk Iron and Steel Plant. He worked in Magnitogorsk for two years and then returned home.

The United States was in the midst of a depression. Morgan returned to Moscow as a tourist and offered his services to Metrostroi.

"I told them this: 'Let me work for you for three months. If we suit each other, we'll sign a real working agreement.' And we suited each other handsomely. We worked together for five years: from 1933 through 1935 I was an advisor to Metrostroi, then I worked for the People's Commissariat of Railways. I left in 1937 when the first section of the subway was completed and work was under way on the second."

I asked Morgan what changes he noticed in Moscow since he saw it last.

"You don't have to go far to see the changes: just look out of the hotel window. This used to be a narrow street with little houses called

Tverskaya. Now it's a wide avenue with big buildings—Gorky Street.

"The first thing I did was to take a ride around Moscow. Yes, you've made a big leap forward. I saw new houses, new districts. There was no such building as the university when I lived here, and that says volumes. And take traffic. At that time horses did most of the hauling. Today, if you want to see a horse, you probably have to go to the circus.

"The people's appearance has also changed. They wear much better clothes now. This is the result of industrialization, replacing hand labor by machinery. I visited your exhibition and had a look at Soviet engineering equipment. I saw very good models of various kinds of equipment—tractors, cranes, excavators. Of course, there are things that can be criticized, but you're on the right road. There was a time when you had to sacrifice for the sake of industrial development. Now you are beginning to reap the fruits of your sacrifice."

American George Morgan was awarded the Order of the Red Banner of Labor for helping to build the Moscow subway.

The telephone rang. A Western correspondent apparently wanted to know the details of Mr. Morgan's stay in Moscow. Putting the receiver back, Morgan said:

"The man wanted to know if I discussed political problems with Nikita Sergeyevich. I am not a politician, I am an engineer."

George Morgan recalled having met Nikita Khrushchev frequently in Moscow in the thirties.

"I always thought he was a sympathetic man," Morgan said, using the Russian for the last two words. "This time when Nikita Sergeyevich Khrushchev received me we talked for more than an hour. When I worked in Moscow, we had very good business relations. Now we met as old friends. Of course, we talked over mutual acquaintances and the problems that bothered us at the time. Nikita Sergeyevich asked my impressions of Moscow. Then he told me what was being done in your country to improve the life of the people. I told him I had seen the improvement with my own eyes. It was a very pleasant talk." ★

WE REMAIN FRIENDS

BY ALEXEI MARESIEV

HERO OF THE SOVIET UNION
AND
SECRETARY, SOVIET WAR VETERANS COMMITTEE

Airman Alexei Maresiev was the idol of a whole generation of teen-agers. In February 1942 his fighter plane was shot down over enemy-occupied territory, and for two weeks he crawled through the snow-blanketed woods of Byerlorussia to get across the front line. Partisans finally found the wounded flyer and got him to safety. Both his feet were frostbitten and had to be amputated. He learned to use artificial limbs, returned to active service, bagged another 18 Nazi planes, and was honored with the title of Hero of the Soviet Union. Boris Polevoi wrote a book about Maresiev,* The Story of a Real Man; *it was made into a motion picture of the same name, then into the libretto of an opera composed by Sergei Prokofiev.

IN THE SPRING of 1955, a group of American veterans of the Elbe Link-up came to Moscow to meet their old battle friends for the first time in 10 years. A lot of water has flowed under the bridge in those 10 years, water that unfortunately was not always crystal clear. That was the reason for this incident that comes to mind.

One of the Americans said he was afraid that he would meet hostile glances in Moscow streets and hear unfriendly remarks from Soviet people. My expansive friend, the writer Boris Polevoi, at once bet his whole year's earnings that none of the Americans would encounter even a semblance of bad will. Somebody took up the bet. Some of the men thought it would not be surprising if Polevoi lost his money, considering all the years of mutual recrimination.

Now, so far as I know, he did not lose a cent. And I have my doubts as to whether he could have ever managed to prime all the people living in the various parts of Moscow for the American veteran Joe Polowsky and his friends' visit. It's simply that the traditions of comradeship on the field of battle, cemented by the blood shed in a common cause, are much more strongly rooted in the minds of my countrymen than any feeling of bitterness. Common goals bring individuals and whole peoples together even though they have their differences. To achieve our common goal in the past war, the defense of democratic rights, we went through the crowning stage of cooperation, of comradeship in arms, when we were ready to risk our lives for each other.

In those grim initial years of the war we always knew that we were not alone in this life-and-death struggle with fascism, that we had friends forging the sword of victory with us. During the war some of our Soviet pilots flew American aircraft and said they were very good. But for all of us the strongest point about these planes was their invisible "made by friends" markings.

To feel that you have a comrade at your side is a wonderful thing. This was one of the secret weapons we shared, one that largely helped us win the war. Our enemies knew how important that friendship was and repeatedly but vainly tried to set us at loggerheads.

It is a great pity that once we reached our common goal, we let that friendship die by attrition. I am sure that millions of people on both sides of the ocean feel as I do.

I still remember many of the touching details of the visit I made to the United States in 1958 at the head of a delegation of Soviet war veterans.

Our small group went to see a baseball game in Washington. When the announcer said there were five Russian veterans of the Second World War in the grandstand, there was a burst of applause. It was not for us as individuals, of course. The words "war veterans" had reminded everyone there of the time when our countries had joined forces to fight off the danger that threatened us both.

I think it remarkable that although the American veterans of the Elbe link-up, at least all those I know, have gone back to peacetime pursuits as engineers, shopkeepers, businessmen or farmers, they still remain the same good friends in peace they were during wartime.

Some people say that we joined forces only because we had the same goal: to fight against fascism. But have we no common goals today? Isn't friendly aid to the peoples who have thrown off their colonial chains our common cause? Isn't a decisive onslaught on cancer, which takes a toll of two million lives annually, a common task? Isn't the awesome breakthrough into outer space, the flight of earthmen to other worlds the cause of all civilized nations? And is not the movement to rid humanity of the nightmare of radioactive death our common concern?

War veterans know what war means better than most people. Too many Soviet and American soldiers are buried between Normandy and the Volga to permit the past to repeat itself or to permit something infinitely worse. The contacts between our war veterans demonstrate that we can be, and must be, friends even in these present days of nuclear suspicion.

I know my people. They are workers who become soldiers only to defend their socialist country. I also know that the American people have the same deep love of peace, that they want to build, not destroy. And I do not believe that in a fit of blind hate our countries would at any time take irreparable action against each other.

The men and women of my generation, the generation that went through the war, still hold a dominant place in the political and public life of both countries. I am sure that while that generation lives, it will be strong enough and rational enough to prevent another madness. ★

TWO SOLDIERS

A Soviet War Veteran's Song

1.
There on one ocean shore rises Vladivostok,
On the other there stands San Francisco.
Mighty waves on that ocean make ships roll and rock.
Long the run from my port to your 'Frisco.
Though your states are so distant, I know you're alive.
Both our hearts are in unison beating.
We were allies and friends in the year forty-five,
Look back, soldier, recall our first meeting.
REFRAIN: "Hi there, brother!"
Two tough soldiers,
By the Elbe we hugged one another,
We both left our Automatics,
"Home and work now!" we told one another,
"We'll have kiddies when we're back there."
My son Ivan, your son Jack there,
Let them sleep all night in peace,
Let them sleep all night in peace.
We, the soldiers, won that peace!

2.
Let's stand guard so that peace will be threatened no more.
Our great dream was of peace on our planet,
So no blood should be shed on the pathways of war.
That great dream will come true if we plan it.
So no madman can set off a push-button war,
Life will bloom and sweet breezes be blowing,
Lovely Vladivostok will shine bright evermore,
Frisco's beauty will always be growing.
REFRAIN: "Hi there, soldier!" . . .

3.
Two great ports are our cities that gaze out at sea,
Let them learn from us soldiers, my brother.
We both knew what we thought, without words, you and me.
Open hearts understand one another.
You'll learn Russian, in this I am sure I'm not wrong.
We shall learn how they talk in old 'Frisco.
All of Vladivostok will be singing your songs,
Russian songs will ring out in your 'Frisco.
REFRAIN: "Hi there, brother!"
Two tough soldiers,
By the Elbe we hugged one another.
We both left our Automatics,
"Home and work now!" we told one another,
"We'll have kiddies when we're back there."
My son Ivan, your son Jack there,
Let them sleep all night in peace,
Let them sleep all night in peace.
We, the soldiers, won that peace!

Translated by Tom Botting

Words by Yefim Gerts
Music by Leonid Tarnovsky

A historic event recorded for posterity—American soldier Buck Kotsebu and Soviet soldier Ivan Numladze meet at the Elbe River in May 1945. From this moment it was only a matter of days until the "invincible" Nazi army was routed and brought to its knees.

The link-up of our soldiers at the Elbe will live on in the history of mankind as an enduring symbol of friendship, good will and mutual respect between our peoples. Today, as ten years ago, we declare our determination to work for friendship between the American and Soviet peoples and the establishment of a peaceful world.

JOSEPH POLOWSKY

SECRETARY, AMERICAN VETERANS OF THE ELBE RIVER LINK-UP

Chicago 13, Illinois
February 6, 1958

From Letter of Invitation
to the Soviet Veterans of the
World War II Elbe River Link-up

TO LIVE AS GOOD NEIGHBORS

It is with the highest respect and admiration that I am sending my sincerest congratulations to the 25th anniversary of the Red Army and Navy who so powerfully protected the astonishing achievements of Soviet culture and industry and who has removed the deathly menace for the future development of human progress.

Albert Einstein
February 6, 1943

THE ROAD OF COMMON SENSE

BY SPARTAK BEGLOV
APN FOREIGN AFFAIRS COMMENTATOR

I HAPPENED to spend the last week of October 1962 in the United States —that very same unforgettable week that the world was precariously balancing on the brink of a thermonuclear war. It is quite doubtful that many people paid attention at the time to the press reports from the small college town of Andover, Massachusetts, where representatives of the Soviet and the American public were continuing their talks on the prospects for peaceful coexistence.

The two preceding conferences of this kind were held in Dartmouth (USA) and in Nizhnyaya Oreanda (USSR). These were not diplomatic conferences or meetings of other official representatives. The participants in these discussions had no power to conclude any agreements, but they did have an opportunity to tell each other, without any diplomatic beating around the bush, what they thought about the current world situation and the ways and means of solving matured problems. Quite a number of people who enjoy high prestige in their countries participated in this beneficial dialogue. The cochairmen of the Andover meeting were Norman Cousins, editor of the *Saturday Review;* Yevgeni Fyodorov, Member of the USSR Academy of Sciences; Philip E. Mosely, director of studies at the Council of Foreign Relations; and Yuri Zhukov, *Pravda* commentator.

Our meeting in Andover opened on October 21, and on the very next evening the U. S. Government's decision to launch the blockade of Cuba was announced in the USA. An hour later we, 24 Americans and Russians, gathered at the conference table. I must admit that this was the gloomiest moment of our discussions.

"Well, gentlemen," the Soviet cochairman addressed his American colleagues, "you are our hosts. . . . It is up to you to decide whether we are to continue our get-together, our talks, or not." The American cochairman looked around the hall and said: "We shall ask the Americans themselves. Who's for continuing our talks with the Russians?"

And every single member of the American group, including a professor of law, a banker and a former chief of an information agency, raised his hand. The Soviet participants in the discussion were also unanimous in their wish to go on. The questions we discussed were: strengthening peace and world law and order; disarmament; the role of the UN; the peaceful coexistence of countries with different social systems.

Today, too, these problems are on the agenda; mankind is waiting for constructive replies to them. I am deeply convinced that mutual understanding and friendly cooperation between our two countries would play a very important, if not the decisive, role in their solution. It must be said that the year that passed after the alarming days of last autumn has brought very encouraging advances. I shall refer only to the two main events: the peaceful settlement of the Caribbean crisis and the Moscow treaty on banning nuclear weapons tests in the atmosphere, outer space and under water.

Both these acts, and many other recent facts as well, show an encouraging tendency in American-Soviet relations that bases itself on common sense, on the sober comprehension of the real state of affairs. Its triumph leads to the establishment of stable, peaceful coexistence between countries with different social and economic systems, the only reliable foundation for general peace in the present conditions.

But to achieve this it is necessary to overcome the other tendency, which denies the possibility and the wisdom of peaceful coexistence. This is precisely what has engendered international tension and what spurs on the arms drive, while those defending it are pushing humanity toward the abyss of thermonuclear annihilation.

The root of the present-day contradictions is the difference in the social systems. In the prewar period and after 1945 the leaders of the West never came to a final decision as to what approach to take to the Soviet Union.

Today the matter concerns a whole group of socialist countries. One course is to acknowledge the historical changes that have taken place and to approach positively the solution of any controversial problems in the relations between states. The other course is to deny the states with a new social system the right to existence. It is this very erroneous conception* of the laws of history that is responsible for the threat of new catastrophic conflict in the postwar period.

It is regrettable that even after the Second World War, when cooperation between the peoples of the USSR and the USA went through a grim, history-making test, the advocates of "nonrecognition" were able for some time to exert considerable influence on U. S. policy. True, diplomatic relations were maintained with almost all the socialist countries, but this was only the formal side of the matter. Actually, the doctrine negating peaceful coexistence, which found expression in numerous negative foreign policy moves aimed not at seeking cooperation with the new states, but essentially at fighting them, had an adverse affect on our association and exchanges in the fields of economy, science and culture.

In present-day conditions this negative policy has given rise to dangers which were unknown, and could not be known, in the prewar period. The time has now come to speak of the essential qualitative changes which have taken place. In prewar years this negative policy was aimed against only the Soviet Union, the world's first socialist country, whereas now it concerns an all-out war against a whole group of socialist states. Those who contrived this policy tried to give it a planned, and, I would say, total, nature.

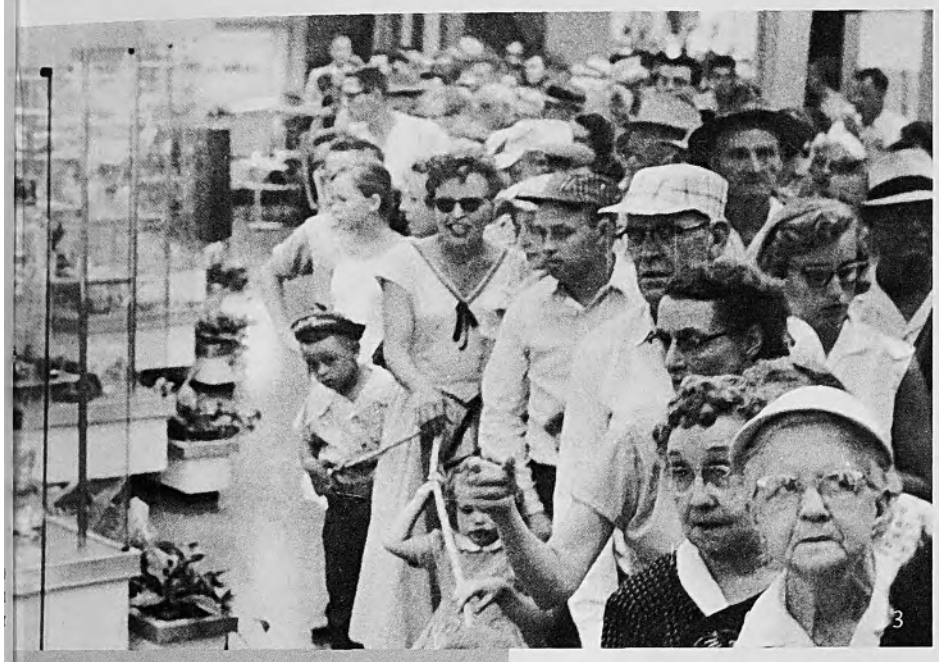
The facts show that this policy had no future and spelled danger from the very beginning. The balance of forces on the world scene has changed in favor of socialism. Both sides now have nuclear missiles. This has erased all boundaries and has made the old conception of warfare obsolete. Any state that dares to use such weapons has to take into account all the ensuing consequences. It is also impossible to ignore the fact that a large number of countries have no desire to be drawn into any conflict.

Under the new balance of forces and the existence of a new kind of warfare, every local clash can develop into a global disaster.

Last autumn's alarming events graphically showed how vital it is to be guided by the principles of peaceful coexistence in relations between all states, both large and small. The Cuban incident caused many people to cast off the spell of stereotype propaganda, under which they had remained for many years, and to make a more sober appraisal of the advantages of settling outstanding issues peacefully, through negotiation. There is increasing realization of the fact that peaceful coexistence is the only real way to wipe out the danger of war. The unacceptability of a negative policy is becoming more obvious to an increasing number of people.

It is indisputable that the turn toward the policy of peaceful coexistence

*A classic example of such a reactionary delusion raised to the status of state policy was the Holy Alliance at the beginning of the nineteenth century, with whose aid the heads of feudal states in Europe actively tried to implement a policy of nonrecognition of the victory of the bourgeois social system, unquestionably more progressive than the feudal, in a number of countries.



1. *American orders being awarded to Soviet officers in Leipzig, May 1945.*

2. *General Eisenhower at Moscow's Tretyakov Art Gallery in August 1945.*

3. *Soviet consumer goods display at the Oklahoma Semicentennial Exposition.*

4. *Moiseyev dancers doing the Virginia Reel at a New York folk dance club.*

5. *A group of Soviet newspapermen visiting the United States in 1955 get a good view of the New York sky line from the top of a skyscraper.*

6. *A discussion on space travel held in Washington, D. C. on May 4, 1962 was attended by scientists and astronauts of the USA and the USSR.*

7. *The USSR Exhibition at New York's Coliseum in 1959 gave Americans an idea of how Soviet people live, work and spend their leisure time.*

8. *The American Exhibition in Moscow. This exchange was the first real opportunity for Soviet and American people to learn about each other.*

will inevitably lead to a radical improvement in Soviet-American relations. This, in turn, will create a basis for the gradual settlement of all matured problems.

What then do Soviet people understand by peaceful coexistence?

First of all, the unquestionable rejection of war as a means of settling matured problems between states; all disputes must be settled only through negotiation; all countries must commit themselves to strict respect for each other's sovereignty and territorial integrity, and there must not be any interference in the internal affairs of other countries for the purpose of changing their system, way of life or for any other reason.

After all, the basis of peaceful coexistence is the recognition of another social system's right to exist, a social system that differs from one's own. The people of any country have the inalienable, sovereign right to have the form of government they choose.

It would be an illusion, of course, to assume that the policy of peaceful coexistence guarantees that everything in the world will remain unchanged. Nobody can stop the course of history, and changes are inevitable. But these processes must not lead to clashes between states. The choice of one's mode of life is strictly the internal affair of each nation; today it lives under one system, and tomorrow it may choose another. There must be no "export of revolution" or "export of counterrevolution."

Recognition of this aspect of peaceful coexistence and the firm, unswerving implementation of this principle, especially by the Great Powers, is a guarantee of the success of the entire policy.

But this is only the initial step. Beyond it lies a vast and almost boundless area for cooperation, primarily in settling matured problems, the main one being that of general disarmament under strict international control. In the Soviet Union the treaty on banning nuclear tests in the atmosphere, in outer space and under water signed in Moscow is considered the starting point of a long road that has to be traversed by advancing step by step to this main goal.

The program of general and complete disarmament, advanced by the Soviet Union at the UN General Assembly in 1959, remains on the agenda as before. The signing of the Moscow treaty was assessed by all the Soviet people and the people of the overwhelming majority of countries of the world as the first step toward the implementation of further concrete measures on easing and eliminating international tensions. We hope that the signature of the United States under the Moscow treaty is the first swallow heralding a turning point to stable peaceful coexistence.

Of course, peaceful coexistence means that not only political but also economic relations have to be based on complete equality of all the partners to their mutual advantage.

The problem of normalizing commercial relations between countries with different social systems has long been awaiting solution. This is a problem now not only for the capitalist and socialist countries but also for the nonaligned states which are asserting their economic independence. Peaceful coexistence must put an end to discrimination and boycott in trade.

Cooperation and exchanges in science, technology and culture have as good, if not better, prospects than any other area of relations. The boundaries of such cooperation will, of course, expand in direct proportion to each new step toward the consolidation of peaceful coexistence, toward general and complete disarmament. Even now, under existing conditions, cooperation in this field could bring considerable benefit to the peoples of our countries and to other peoples as well.

Neither peaceful coexistence nor cooperation can alter the difference in the systems, in world outlook. We Soviet people are convinced that our ideology, which is based on a new and more progressive production method, on new relations between people, will eventually draw all mankind to its side. But we understand that many people in the West think otherwise. That is their right. And the only thing that is required is not to emerge beyond the framework of the ideological struggle and not to attempt to prove the correctness of one's ideas with the aid of arms. Let the peaceful coexistence of the two systems show which of them is capable of better satisfying man's material and spiritual needs.

I believe that every person with common sense will agree with the following suggestions made by Nikita Khrushchev: "Are we to test through war which of us is right? That would be a barbaric method of checking. After all, both we and the Americans are living people; we wish to live and let live. So let us live wisely and stop anyone who tries to start a war, let us make use of our strength to ensure peace throughout the world, let us vie in developing our economies and in creating the values of life for our peoples."

It is precisely such an approach toward Soviet-American relations that opens up prospects for peace and further progress, not only to our peoples but to all mankind.

1. *Chairman Nikita Khrushchev is met at Andrews Air Base by President Dwight Eisenhower on his first visit to the United States in 1959.*

2. *Americans expressed their warm feeling for the envoy of the Soviet people in flowers, placards and even inscriptions on house walls.*

3. *In a manner characteristic of youth, the students of Iowa State University loudly chanted: "Comrade Khrushchev, Nikita, Welcome!"*

4. *Khrushchev conveys the Soviet people's greetings to the American people. The visit was an example of peaceful coexistence in action.*

5. *A delegation of Soviet railwaymen, headed by Boris Beshchev, Minister of Railways, on a tour of the yards during their visit to the USA.*

6. *The Bolshoi Ballet performed Prokofiev's* Romeo and Juliet *to a most appreciative overflow audience at the Metropolitan Opera House.*

7. *A delegation of American farmers headed by Charles Kellogg (extreme right) on a visit to one of the state farms in the Uzbek Republic.*

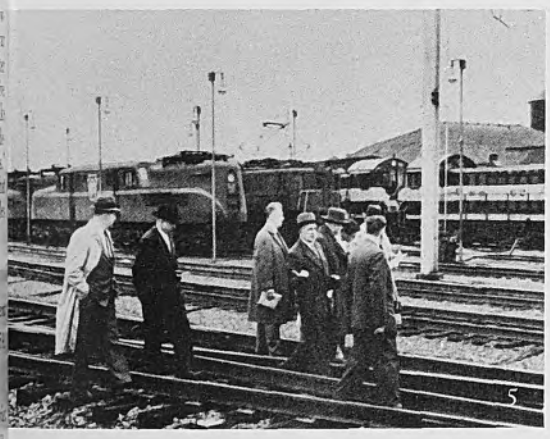
8. *The Institute of Soviet-American Relations was founded in 1961 to facilitate communication between the people of the USA and the USSR.*

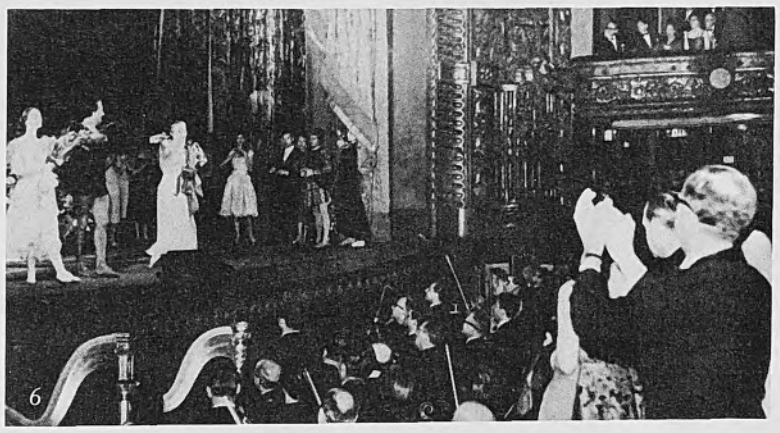
9. *A U.S. delegation of steel and railway experts visit the Magnitogorsk Iron and Steel Mill in the Urals on their tour of the Soviet Union.*

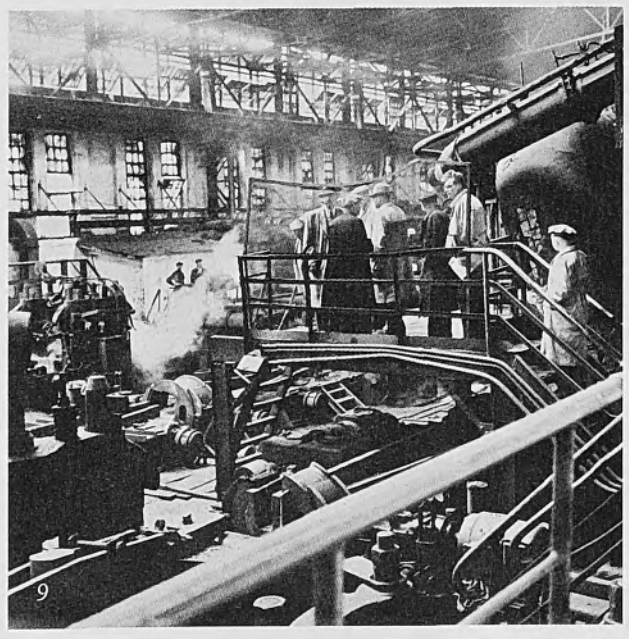
10. *First Deputy Chairman Anastas Mikoyan greeting the newsmen who attended his press conference at the United Nations in January 1959.*

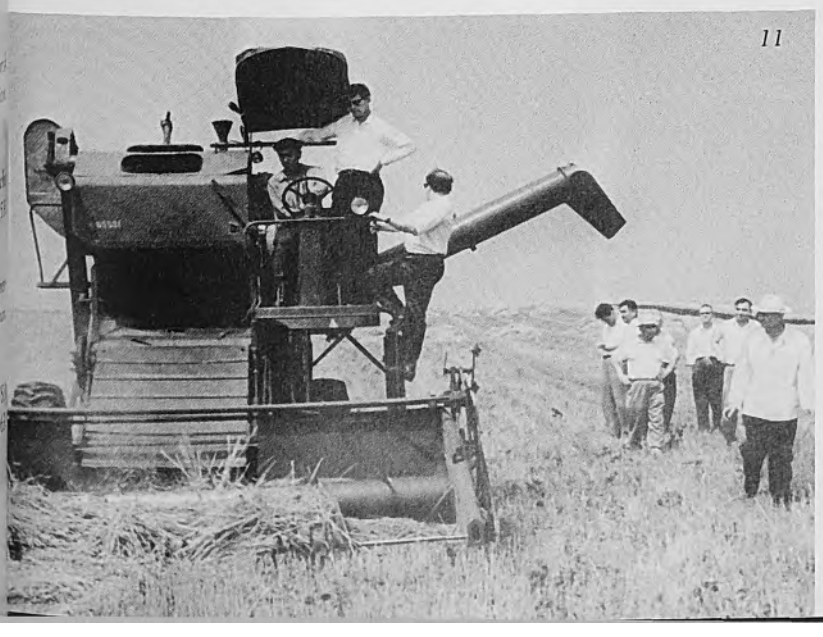
11. *Recently Soviet collective farmers were host to a delegation of American farm experts headed by Orville Freeman, shown here in the Kuban.*

12. *Glenn Seaborg (left) and Andranik Petrosyants signing a USSR-USA agreement on the joint peaceful uses of atomic energy in May 1963.*









THE NECESSITY OF OUR TIME

BY SERGEI ROMANOVSKY

IN A TALK I had last summer with ex-Senator William Benton, now the U.S. representative to UNESCO and head of Encyclopaedia Britannica, I mentioned the fact that it was only since the 1958 agreement that USA-USSR exchanges in science, technology, education and the arts had really begun to develop. Before then our cultural contacts were limited, and with very few participants.

When Mr. Benton returned to the United States, he wrote an article for the *Saturday Review* entitled "Should We Continue Cultural Exchanges with the USSR?" He was asking the same questions many other people were. In my opinion there can be only one answer: Yes, we should. We are for cultural exchange. That answer follows logically from the contacts we have had ever since our countries established diplomatic relations 30 years ago this month.

Aside from the Moscow Art Theater's tour of the USA, the showing of Eisenstein's film *Potemkin* and other such random exchanges, we had no cultural contacts to speak of prior to that time.

The first steps after diplomatic relations were established showed the desire of the two nations to get to know each other better. Typical of the thirties were the organization of lectures and travelogues, the exchange of exhibitions, artists and film workers, the reciprocal visits of scientists and joint research work. Although these exchanges were not numerous, they were very important because they paved the way for the further development of our contacts. However a very different kind of cooperation was required by the Second World War.

The problem of setting up regular and diversified contact and exchange arose with the peace. Unfortunately, the "cold war" atmosphere interfered. The abnormality of this situation—two great powers, each with major contributions in

1. Eleanor Roosevelt was pleasantly surprised when a Leningrad Young Pioneer addressed her in English.

2. Soviet and U.S. scientists compare notes during a break in the American Rocket Society Congress.

3. The cold is no barrier to cooperation—an American scientist at Mirny, Soviet Antarctic station.

4. Soviet newsmen interview American industrialist Cyrus Eaton, a frequent visitor to the Soviet Union.

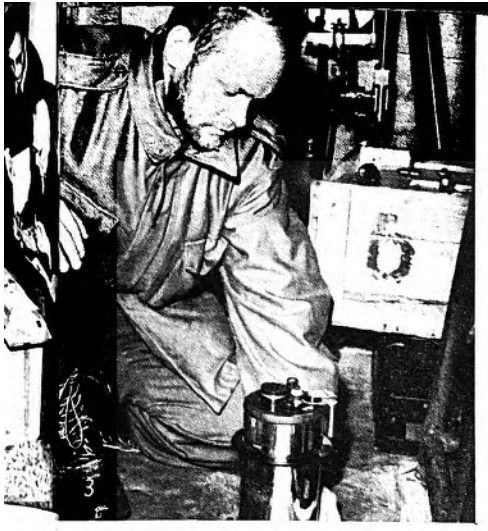
5. Four Soviet servicemen are rescued by the American aircraft carrier Kearsarge *in March 1960.*

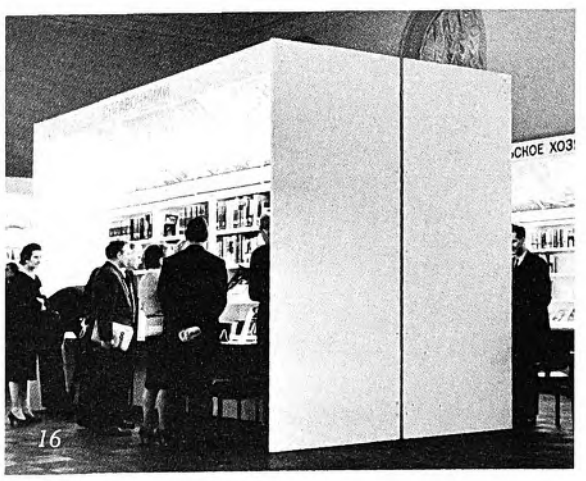
6. The participants of the San Francisco-Moscow peace march arrive in the USSR in September 1961.

7. Muscovites listening to Van Cliburn, winner of the 1958 International Tchaikovsky Piano Contest.

8. A delegation of American power engineers on a visit to the Yuzhnaya station not far from Moscow.

9. Dr. Fyodor Uglov illustrates his talk on surgery for a visiting group of American physicians.





science, technology, education and the arts but without organized contacts or cultural exchanges—became more and more obvious.

The USSR and the USA concluded the first two-year agreement on exchanges in science, technology, education and the arts in 1958, the second in 1959 and the third in 1962.

These agreements regularized Soviet-American exchanges. Since 1958 they have expanded and now include the various fields of science, technology, industry, transport, construction, trade, agriculture, health protection and medicine, education, art, films and the film industry, publications, exhibitions, radio and television. Today there is no significant area of activity in science, technology and culture where our countries do not have exchanges.

In the period covered by the agreements the Soviet Union sent to the United States 350-odd delegations and separate groups—all in all, about 4,000 people. The USA, in turn, sent to the USSR approximately the same number of delegations, with 5,000 people taking part. The following figures show the rate at which our contacts have grown. In 1954 three groups of Soviet scientists and two group of athletes, a total of 22 people, visited the USA. At the present time some one thousand Soviet people go to the USA every year on the exchange program.

It is gratifying to note that contacts between our countries in science, health protection and education (especially exchange of professors and students) have been developing steadily these past several years.

We hardly need to emphasize the great and reciprocal interest our music and dance exchanges have elicited. Igor Moiseyev, Galina Ulanova, Maya Plisetskaya, David Oistrakh and Svyatoslav Rikhter are familiar names to American concertgoers, as familiar as the names Van Cliburn, Yehudi Menuhin, Roberta Peters and Byron Janis are to Soviet audiences. American symphony orchestras, the New York City Ballet and other visiting companies were a great success in our country. Cultural and scientific contacts are an important part of Soviet-American relations, but my story would be incomplete if I failed to mention that these exchanges, though growing, are not proceeding altogether smoothly.

Not too long ago there were many pessimistic people who maintained that Soviet-American cultural exchanges would have a short future. There are fewer of these pessimists today. Representatives of both countries understand the mutual benefit of these contacts and their valuable service in promoting understanding.

The expansion of contacts between our countries is a reflection of the general tendency of all countries to broaden their area of international contacts. The Soviet Union has exchanges with more than 100 countries. Every year tens of thousands of foreigners visit the Soviet Union, and approximately the same number of Soviet people go abroad. These contacts and exchanges are a necessity for our world today.

The Soviet Union wants the widest exchange with all countries regardless of their social systems. This is peaceful coexistence in practice. ✶

10. Soviet artist Igor Goryayev presents a souvenir to Rockwell Kent, much admired in the USSR.

11. Kim Novak is interviewed by the staff of Izvestia *before leaving the Soviet Union for home.*

12. When Robert Frost was in Moscow in 1962, he and poet Kornei Chukovsky exchanged mementos.

13. Soviet composer Andrei Balanchivadze with his American brother, choreographer George Balanchine.

14. American performers answer curtain calls after a successful run of My Fair Lady *in the USSR.*

15. Composer-conductor Igor Stravinsky was warmly received on his concert tour of the Soviet Union.

16. The American technical book exhibition in Moscow evoked the interest of everybody in the field.

17. People from all over the world visit the Soviet capital. Tourists from Hawaii in July 1963.

IN THE VITAL INTEREST OF

Moscow, August 5, 1963

MANKIND

The USSR Minister of Foreign Affairs Andrei A. Gromyko, U.S. Secretary of State Dean Rusk, and Principal Secretary of State for Foreign Affairs Lord Home signing the treaty banning nuclear weapons tests in the atmosphere, in outer space and under water. The signing ceremony was attended by Chairman Nikita S. Khrushchev and leading statesmen of the Three Powers as well as numerous representatives of the Soviet and foreign press, radio and television.

USSR-USA
ECONOMIC COMPETITION

BY YURI POKATAYEV

CHIEF, DEPARTMENT FOR PROBLEMS OF ECONOMIC COMPETITION BETWEEN THE TWO SYSTEMS
ECONOMIC INSTITUTE OF THE USSR STATE PLANNING COMMITTEE

ON THE EVE OF the First World War Lenin wrote: ". . . Russia remains an unbelievably, unprecedentedly backward country, poverty-ridden and semibarbarous, with modern implements of production equal to only one-fourth those of Britain, one-fifth those of Germany, one-tenth those of America."

Less than 50 years after these words were written the Honorable Hubert Humphrey said from the high rostrum of the Senate of the United States that it was small wonder the Soviet Union was growing like a giant, considering its emphasis on planning and technological development.

Between these two statements lies a whole epoch of changes for the Soviet Union. On the eve of the Revolution Russia ranked fifth in the world and fourth in Europe in industrial output. Today it stands second only to the United States.

Had their peaceful labors not been interrupted by wars forced upon them, the Soviet people would have been much farther ahead in their economic, scientific and cultural development. The country emerged from the First World War and the Civil War that followed with its economy completely destroyed. Industrial output had dropped by 1920 to one-seventh of the prewar peak of 1913. In 1941 war once again laid the country waste. Almost 2,000 cities and more than 70,000 villages were razed by the fascists. Scores of thousands of factories, collective and state farms, schools and hospitals were reduced to rubble.

The war took a toll of twenty million Soviet lives.

President Kennedy noted in his speech to the graduating class of American University that "no nation in the history of battle ever suffered more than the Russians suffered in the course of the Second World War."

But again, like the phoenix, the Soviet economy arose from its ashes. Factories, farms, laboratories, schools were rebuilt, and the Soviet people placed their country's signature on the first man-made satellite, the first lunik and the first spaceship.

What explains the Soviet Union's viability, its progress?

Some people argue that the Soviet Union would develop as rapidly if its economy were capitalist.

To verify this in practice is obviously impossible. But our data says otherwise. They point to the conclusion that without a socialist revolution we would never have been able to reduce the economic gap between our country and the United States, to say nothing of approximating the American level.

Take the period between 1900 and 1913, when Russia kept falling behind the United States more and more. In 1900 Russia produced 78.7 per cent less steel and extracted 25 per cent more oil than the United States. In 1913 its oil output was 73 per cent and its steel production 84.4 per cent less than that of the United States.

There is other evidence of Russia's economic lag behind the United States at the turn of the century. Data in *Industrialization and Foreign Trade*, published by the League of Nations in 1945, shows that Russia's industrial output in 1870 was 15.9 per cent of the American level and that in 1913 it had dropped to 15.4 per cent.

The Conditions of Economic Progress (1957) by Colin Clark, a noted British economist, also affirms that in 1910-13 Russia was farther behind the United States than in 1895-99.

What explains the "miraculous" leap the country made in a few decades from the age of the wheelbarrow to the age of the atom?

From the purely economic viewpoint, the explanation is that the socialist system raised the organization of the production process to a new level.

Ask the head of a big enterprise, be it the president of an American company or the director of a Soviet plant, what high output hinges on, and the answer will be: "On the organization of production." The present-day level of division of labor and technology requires that the production process be organized on the scale of the entire society, that is to say, all those methods of rational economic management which under capitalism have been applied only within the framework of individual enterprises must be applied to the economy as a whole.

That is what socialism does. The USSR State Planning Committee is, in a manner of speaking, the planning department of an enterprise which comprises the entire economy.

The government agencies for supply and marketing, to continue the analogy, constitute the supply and marketing department of one gigantic enterprise, the economy of the USSR. And so on, and so forth.

The organization of production on a nationwide scale makes it possible to dovetail all the producing units of society, to plan the development of science and technology, to train and use manpower most efficiently. This, in turn, makes possible planning not only for tomorrow, but for the day after tomorrow and for five, ten, twenty years ahead, without fear of crises or depressions.

The Soviet Union's headway in several areas of research, notably in space exploration, came as a surprise to many people abroad. But, really, there is nothing surprising about it. A socialist country can concentrate immeasurably greater forces on promising developments in science and technology than can other countries, and to greater effect.

Of course, not everything is ideal in a planned economy. Even a family economy cannot be run without its ups and downs—unforeseen expenditures arise (more rarely, unexpected income is found). Occasionally the refrigerator will go out of commission, and you have to drink your beer warm. Dozens of other such troubles pop up.

All this applies, in infinitely greater degree, to the economy of a whole country. And the Soviet Union is a very big country, not to speak of the fact that this is the first such experiment in economic planning in mankind's history. We do have our occasional bottlenecks and irregularities of supply, but all these deficiencies can be and are being remedied.

There are those abroad who find it offensive when Soviet statesmen and economists with the experience of their country's development behind them speak of the superiority of a planned economy and the inevitable victory of socialism in economic competition. But isn't it natural for people who live in a socialist society to believe that socialism will triumph? American Democratic Party leaders made the same claim for capitalism in their 1960 election program when they said, in effect: Rulers of the communist world, we accept your challenge to compete in every field of human endeavor. . . . We believe your communist ideology is sterile, baseless and doomed to failure.

We will have to leave it to history to pass judgment.

We are in competition for high industrial and farm production, for technical progress, for improved living standards, a competition in which everybody stands to gain.

Why, it is sometimes asked, does the Soviet Union consider the United States its major rival in this competition? For several reasons. First, American capitalism is the most productive in the world, and socialism can prove its superiority only by surpassing the record performances of capitalism. Second, the USSR and the USA are very similar in territory and population; they are both well-developed countries, industrially, scientifically, technologically and culturally.

The immediate objective is to match the high American living standard. For this the Soviet Union must have as productive an industrial and agricultural base and its per capita output must be as high as that of the United States.

Is this a realistic goal?

It is, Soviet economists say. By the end of the 1960's the Soviet Union will match the United States in per capita output.

This confident statement stems from a comparison of the economic development of the two countries. It stems from scientifically based calculations of the rate of development of the Soviet economy, an economy, as we said previously, where everything is dovetailed—industry's suppliers with industry's consumers, jobs to be filled with manpower resources available, funds at hand with citizen income and expenditure, consumption with accumulation, and so on. Finally, it stems from the foreseeable rate of development of the American economy.

Soviet planners have calculated that by 1970 Soviet industrial production will have grown by about 150 per cent as compared with 1960, and will be at least 50 per cent higher than the present level of the United States.

As for the likely rate of American industrial growth, my calculations show that with the inevitable recessions taken into consideration, it will be growing annually by an average of two to three per cent and will have risen, toward the end of the decade, by about 30 per cent above the present level.

Since Soviet industrial production will then be approximately 50 per cent higher than the present American level, *per capita* output in both countries by 1970 will be about equal, the population of the Soviet Union being larger than that of the United States.

It may be that American industry will be developing faster (or perhaps more slowly) than we estimate; consequently the evening-up period may come somewhat later (or perhaps sooner). But this is not of any great importance: a year or two is a very short span of time as history figures it.

Even the high level of productivity of the United States will eventually be exceeded. Chairman Khrushchev says: "While competing, we do not consider America our model for economic development. . . . Having won the economic competition with the United States, we shall merely have completed the first stage of communist construction. The level of economic development achieved at this stage is by no means the terminal for us; it is only a passing siding where we will overtake the most developed capitalist country, leave it at this passing siding, and move on ahead."

This movement ahead was concretized in figures and dates at the Twenty-second Congress of the Communist Party of the Soviet Union. Here are some of the Soviet production figures planned for 1980, compared with the 1962 level of production of the United States.

	USA 1962	USSR 1980	Per cent to 1962 U.S. level
Electricity *(billion kilowatt-hours)*	1,000	2,700-3,000	270-300
Steel *(million metric tons)*	90.8	250	275
Oil *(million metric tons)*	360	690-710	192-197
Gas *(billion cubic meters)*	386	680-720	176-188
Artificial and synthetic fibers *(thousand metric tons)*	1,017	3,100-3,300	305-324.4
Leather footwear *(million pairs)*	620	900-1,000	145-161

These figures are part of the Soviet Union's economic development plan for 1961-1980, a two-decade plan for bringing the country's productive forces to a level that will guarantee abundance. ✱

LENIN'S FIRST INTERVIEW with an AMERICAN CORRESPONDENT

The victory of the October Revolution and the founding of the world's first workers' and peasants' state in Russia made the land of the Soviet the focus of world attention.

Many foreign journalists tried to meet and interview Vladimir Lenin, the founder of the Soviet state and the head of the government. The first to succeed was Gregory Jarros, an Associated Press correspondent. This is his story of the interview.

I SAT down near Lenin's study and started to wait. My assignment was to interview Vladimir Lenin on the results of the November 12, 1917, elections to the Constituent Assembly in Petrograd, in which the Communists had been successful. Seeing the Red Guardsman on duty at the door stand at attention, I rapidly crossed the room and was at the door just as it opened and Lenin appeared, several written sheets in his hands.

Meeting me face to face, he stopped, somewhat surprised, and asked: "Are you waiting for me?" I introduced myself and briefly explained the purpose of my visit. Lenin said simply: "If you will write out your questions, I'll answer them."

I, of course, didn't waste a minute but right there and then tore out a sheet from my notebook, jotted down several questions, and gave it to the secretary. Within 20 minutes I received my sheet with Lenin's answers in his own handwriting, signed: "Vladimir Ulyanov (Lenin)."

And here is the interview.

"In connection with the results of the elections in Petrograd in which the Bolsheviks won six seats, the Associated Press correspondent interviewed Lenin, Chairman of the Council of People's Commissars, who was elated over the great victory of their party.

"'What do you think of the results of the elections to the Constituent Assembly?' the correspondent asked.

"'I think that these elections have proved a great victory for the Bolshevik Party. The number of votes cast for it in the elections in May, August and September increased steadily. To get six seats out of twelve in a city in which the bourgeoisie (Cadets) is strongest means to win in Russia.'

"Developing his idea, Lenin added that 'together with the Left Social-Revolutionists we shall constitute a majority in Petrograd (seven out of twelve).'

"'What parties will enter into the new Council of People's Commissars?'

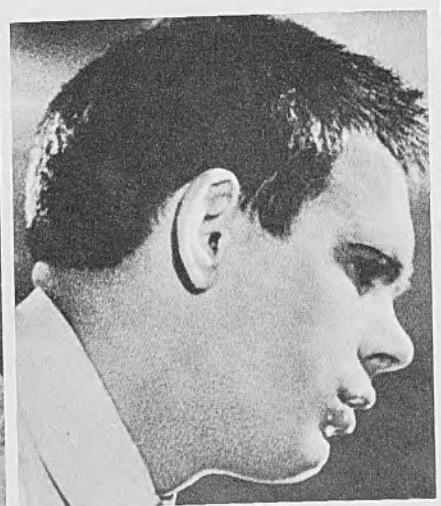
"'I do not know positively, but I think that only Left Social-Revolutionists, besides the Bolsheviks.'"

A typewritten copy of this historic document is in the USSR State Central Archives of the October Revolution in Moscow.

Courtesy of the magazine Za Rubezom

The fathers went through the flames of revolutionary struggle, overthrew the czar, established and defended Soviet power. They set an example for . . .

their sons, who fought the Civil War, repulsed the intervention, created the five-year plans, paid with their blood for the victory over fascism . . .



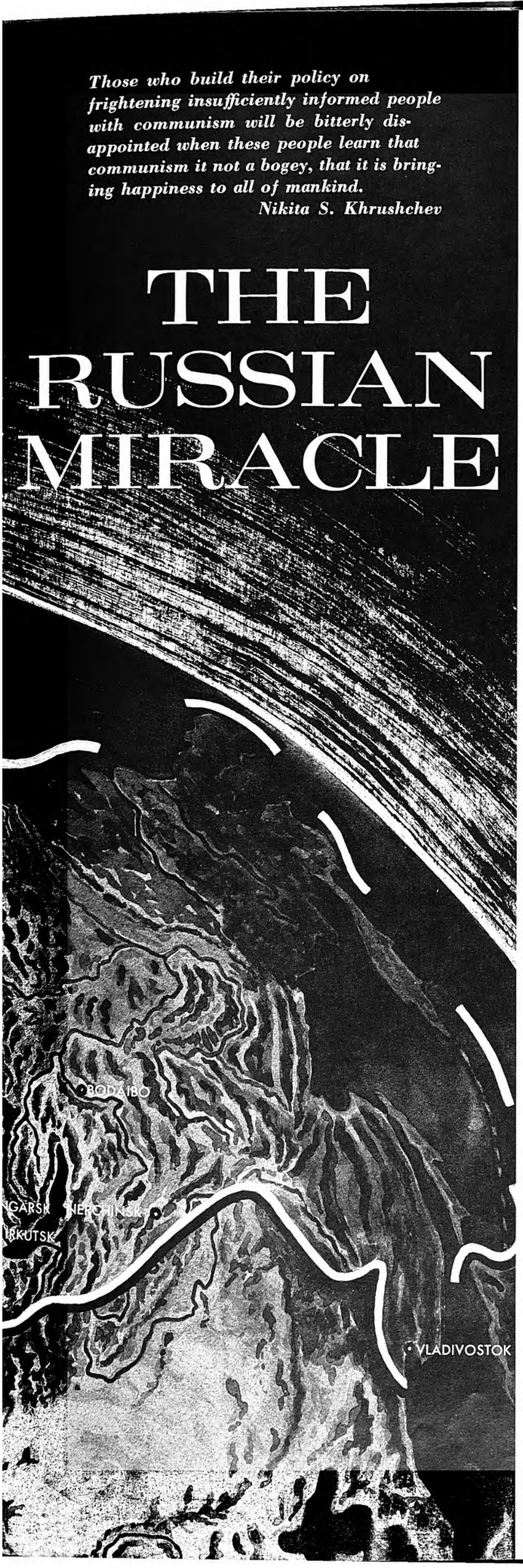
and their grandsons, who pioneered the virgin land regions and Siberia, raised high the banner of Soviet science and culture, blazed a trail to outer space.

MURMANSK
ARKHANGELSK
NORYLSK
NIZHNY TAGIL
MOSCOW
SVERDLOVSK
KYSHTYM
ODESSA
CHELYABINSK
BRATSK
OMSK
MAGNITOGORSK
NOVOSIBIRSK
LENINSK-KUZNETSKY
NOVOKUZNETSK
KARAGANDA
LENINOGORSK
CHILIKEN
ALMA-ATA
TASSY

Those who build their policy on frightening insufficiently informed people with communism will be bitterly disappointed when these people learn that communism it not a bogey, that it is bringing happiness to all of mankind.

Nikita S. Khrushchev

THE RUSSIAN MIRACLE



BY ANNELIE AND ANDREW THORNDIKE

GERMAN FILM DOCUMENTALISTS

THE EPIGRAPH is from a speech Nikita Khrushchev made in Leipzig in 1959. It gave us the idea of making a film that would show through facts, documents, fragments of reality what communism is, what it has in store for people. We decided to exemplify it by the Soviet Union, where the people had carried out the experiment which the Western world has for 46 years been referring to as "a phenomenon," "a mystery," "an enigma."

It took us a while to choose the title *Russian Miracle*. It came to us after we had viewed and selected, in 36 archives of many countries of the world, 100,000 meters of documentary historical films; 4,000 photographs, hitherto unknown; and 400 valuable documents we found in offices, private collections and Siberian museums of local lore. Those films and photo documents showed us the Russia that was inherited by the Communists.

The year 1918 was the first year of the Revolution and the first year of the rule of the people. The country was backward, poverty-stricken and ravaged by war into the bargain. Seventy-six per cent of its population was illiterate, for the czar, who stinted nothing for his pleasure, earmarked only 80 kopecks a year per pupil. And that was not all. The iron ring of the battle fronts was tightening around the throat of revolutionary Russia. The well-trained, well-clothed and well-armed regiments of the White Guards and the even better trained, better clothed and better armed regiments of the interventionists were fighting against workers who were rationed to 50 grams of bread a day, against a people armed only with rifles.

One of the biggest Western newspapers predicted the doom of the young republic 92 times within three years. Theoretically, as the armchair politicians saw it, the young republic could not hold out for long. But it did. And that was the "miracle."

The Civil War ended. The interventionists were driven out. They left water-flooded mines, ruined blast furnaces, smashed bridges. There was practically no skilled labor. There was a shortage of engineers; they had either left the country or were sitting it out waiting to see what it would all finally come to. The economy had been thrown back 200 years, to the days of Peter the Great. A foreign economist who visited the country at the time wrote that Russia could not even make razor blades without help.

Years and five-year plans went by. The people, whose strength should have been sapped by war, intervention and starvation, were building Europe's biggest power plants and steel mills, the world's longest canals. And they were building everything with their own hands, for no one lent them a kopeck. More years went by, and Communist Yuri Gagarin became the world's first spaceman.

Theoretically, from the point of view of an armchair economist, all that was impossible. The country should have ceased to be, or should at least have fallen victim to the economic domination of the West. But something quite different had happened. The Soviet Union had advanced to the first place in Europe and second place in the world. That was the "miracle."

The Russian Communists themselves never thought of it as a "miracle." They called it simply Marxism, the science of communism, in action. They said they had approached history scientifically, had designed the future scientifically and had built it scientifically.

The armchair theoreticians who talked of the "Russian miracle" had overlooked two things that the Communists had not. The first was the tremendous inner energy of the people once they take their destiny in their own hands; the second, the fact that the Revolution had made the workers the owners of all the country's productive forces. The result: a single plan, rapid rates of economic growth, the elimination of economic crises.

Scientific foresight and a faith that the communist ideal worked were the anchor of salvation in many desperate situations.

These are the secrets of the "Russian miracle" that we reveal in our two-reel film. We included only a fraction of what we found and collected in our four-year search. To see it all would mean spending five and a half days in a movie theater. We chose what was most typical. What we were interested in was not the historical sequence of events but the stages of development of a new kind of man, Socialist Man, who was maturing, intellectually and spiritually, in labor battles at factories, collective farms and on construction sites. And that was no less important than miles of railways or kilowatts of electricity generated.

The road to communism in Russia was not an easy one. But it would be wrong to show it completely strewn with thorns. The Revolution and communist construction were effective immediately. We found films that were history: the first electric bulb in a village, bringing tears of joy to the eyes of old folks; the first tractor, which made the peasants, petty owners in their heart of hearts, turn to socialism. Now the results of the Revolution and communist construction are plain enough for everyone to see. A third of the country's population has moved into new housing in the last five years. Fifty million people attend schools, colleges, universities, specialized educational establishments. Every person is entitled to an old age pension.

We wanted to see people in everyday activity, without their feeling that a camera was watching them. That's why we often resorted to concealed camerawork. In Omsk we set our camera up behind a mirror in front of which girls and boys who had come for a party in their factory club were combing their hair and primping, and came up with a ten-minute gallery of portraits. Ten minutes is a long time for a sequence, but no one gets tired of seeing those screen portraits of strong, inwardly beautiful and spiritually healthy young people.

We covered 500,000 miles traversing the country. We saw many such faces. Involuntarily we kept comparing them with the emaciated faces of the downtrodden peasants of old Russia. In this world of cinema, a world of constant comparisons, analogies and moods, one sees with particular clarity how communism has changed the country and the people in the lifetime of one generation.

Through centuries of enslavement, degradation and poverty the Russian people dreamed of a better life. Only the Communists showed them the way to that life.

This was once a common sight—the women harnessed to this heavy barge are towing it down the Volga. The development of the Russian economy was just as slow and reluctant.

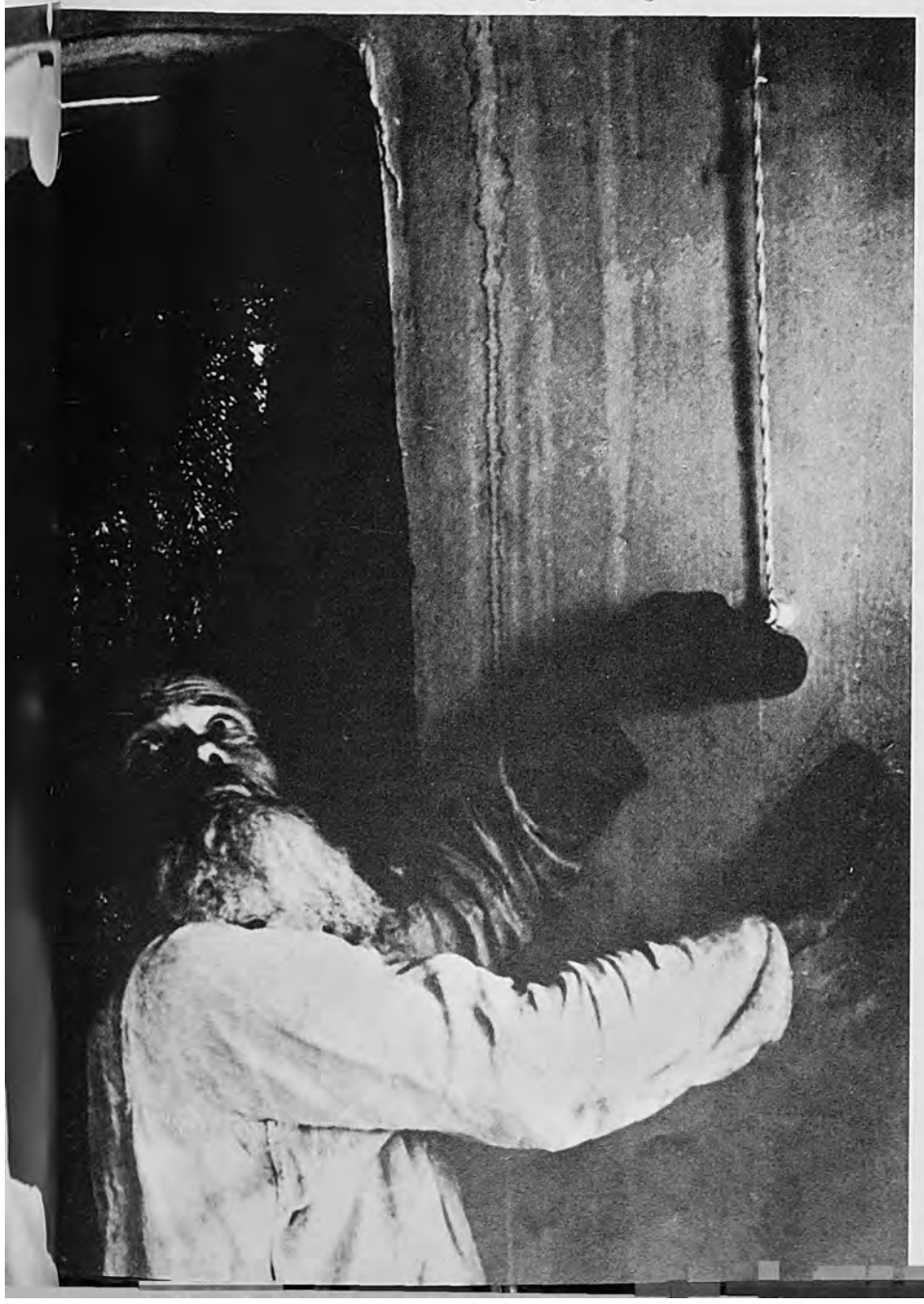
Two-thirds of Russia's population were peasants. They worked the land with horses, wooden plows and hoes—the level of Russia's technology at the turn of the 20th century.

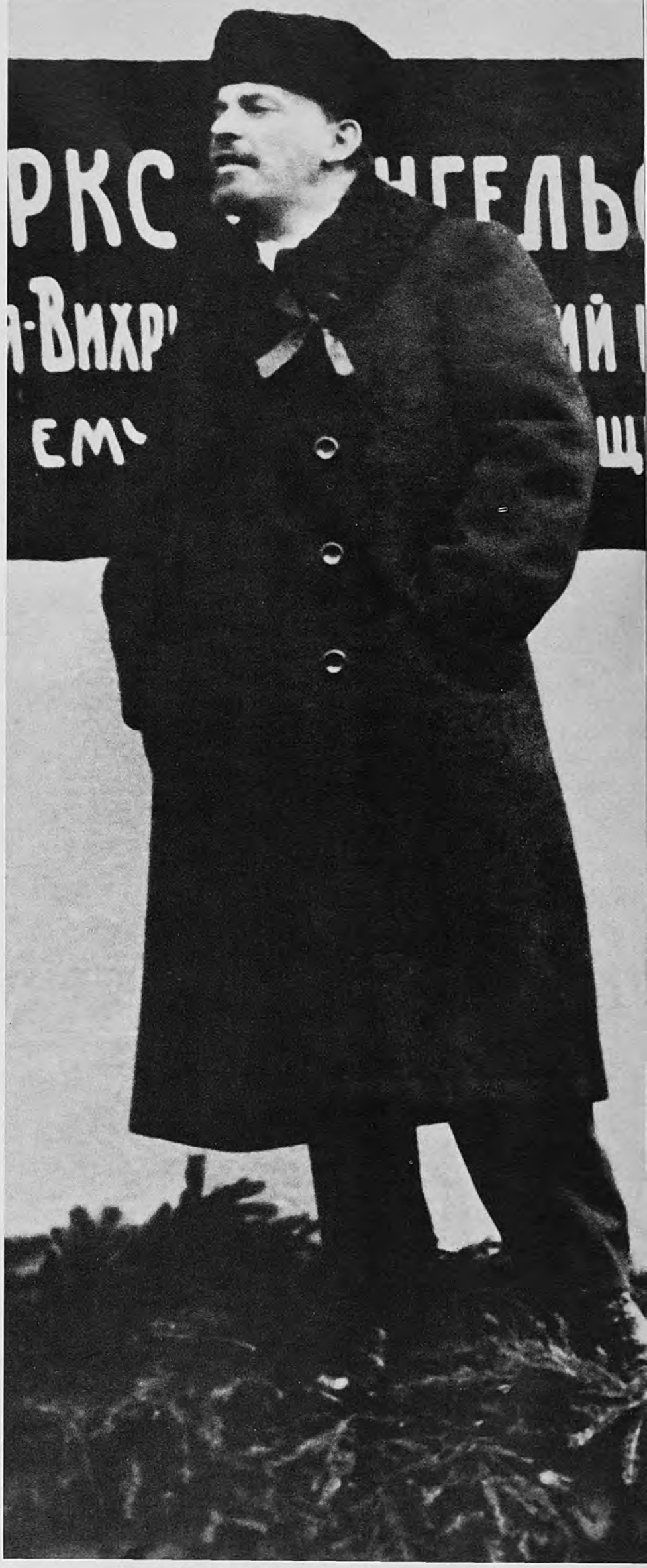
Russia was not the master of her own wealth. Nine-tenths of her factories, mines and southern oil fields were the property of foreigners. The workday was 12 to 14 hours long.

The road along which czarism drove to exile those who fought for a better life, for the social and economic regeneration of Russia. Thousands of Communists walked this road.

The first tractor, collective property. Thousands like it rolling onto the fields swung the peasant over to communism.

The peasants called the first electric bulbs "Ilyich's lamps," for Vladimir Ilyich Lenin, the man who brought them light.



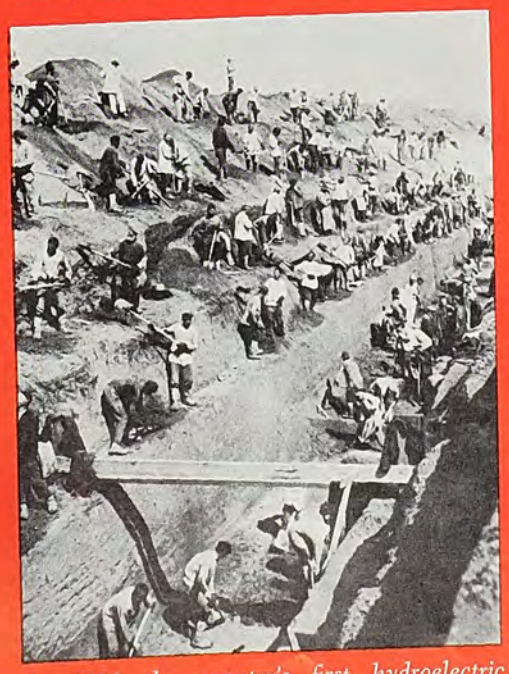


"We are living in the happy time when the great sociologists' forecasts are beginning to come true," Lenin said in 1918.

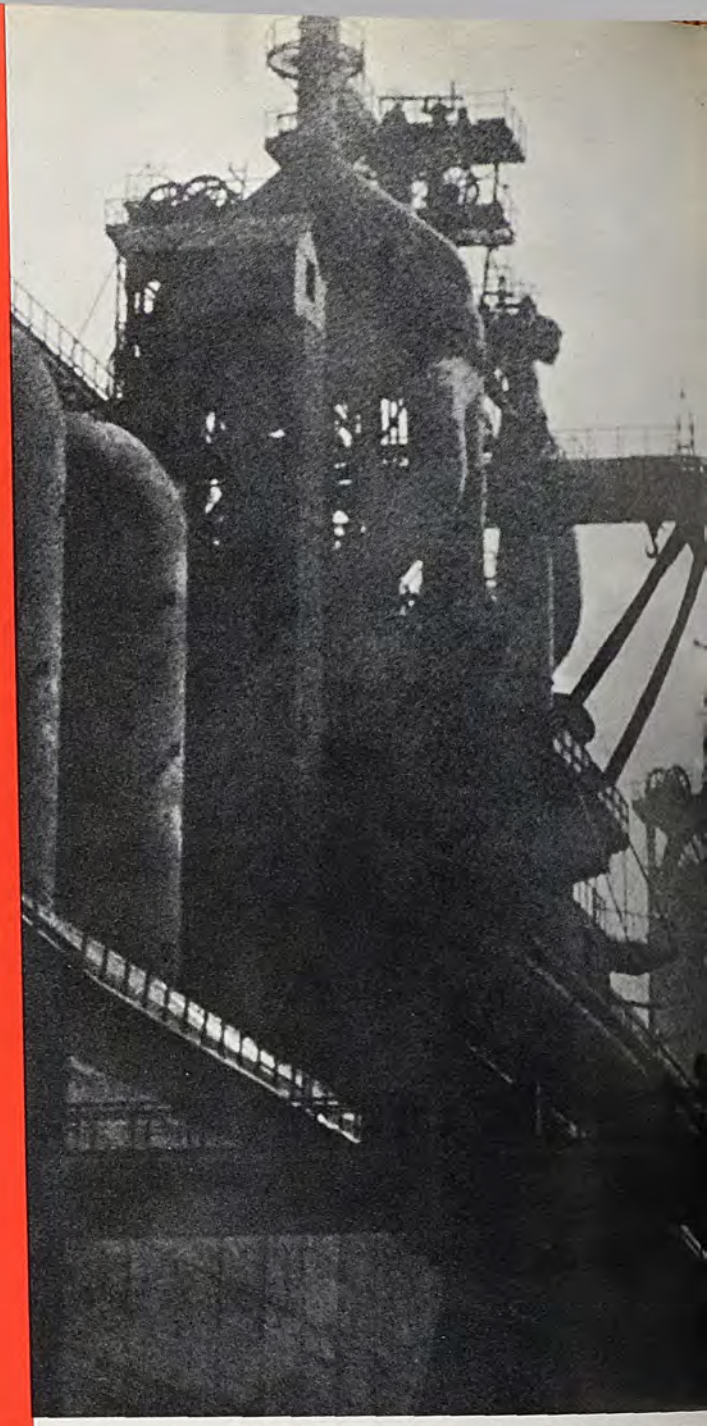
The Civil War had just ended. The country was gripped by economic chaos, unemployment and hunger. Four hundred thousand Communists, themselves taking on the most difficult and hazardous jobs, aroused the people to rebuild the country.

The interventionists had left the country in ruins. Factories had to be rebuilt, jobs had to be found for the workers who flocked to the employment agencies set up by the state.

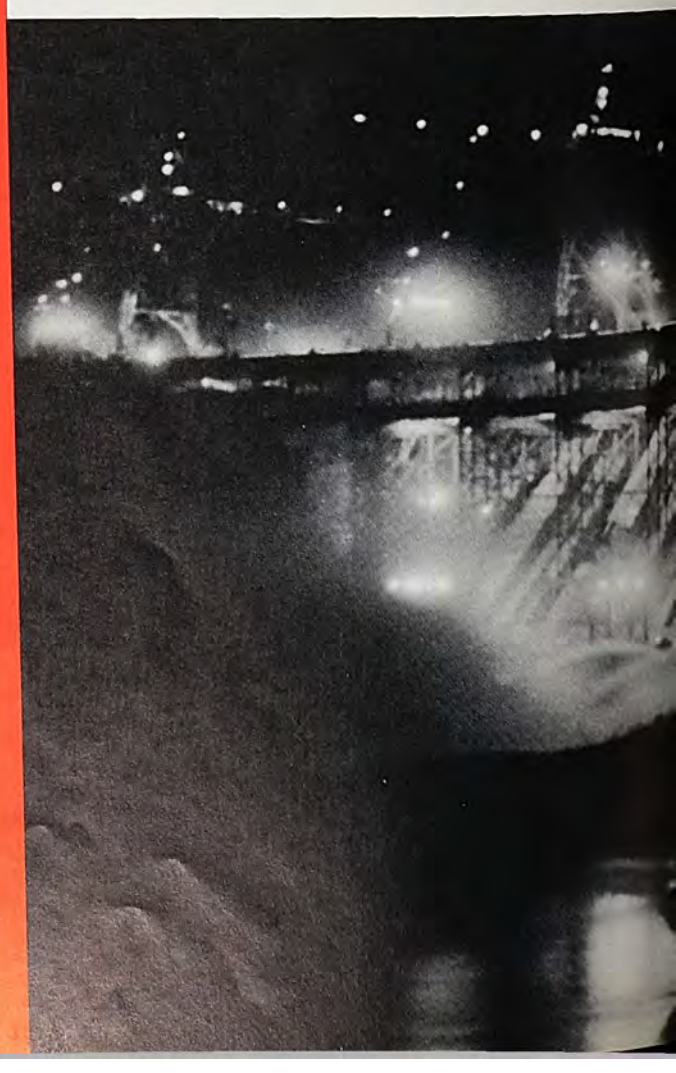
Poverty, cold, failing crops; three million people left without shelter; hundreds of thousands of children homeless—this was the picture of Soviet Russia after the Civil War.



In 1921 the country's first hydroelectric power plant was built on the Volkhov River. Electric power per worker in Russia was one-tenth of that generated in the United States.

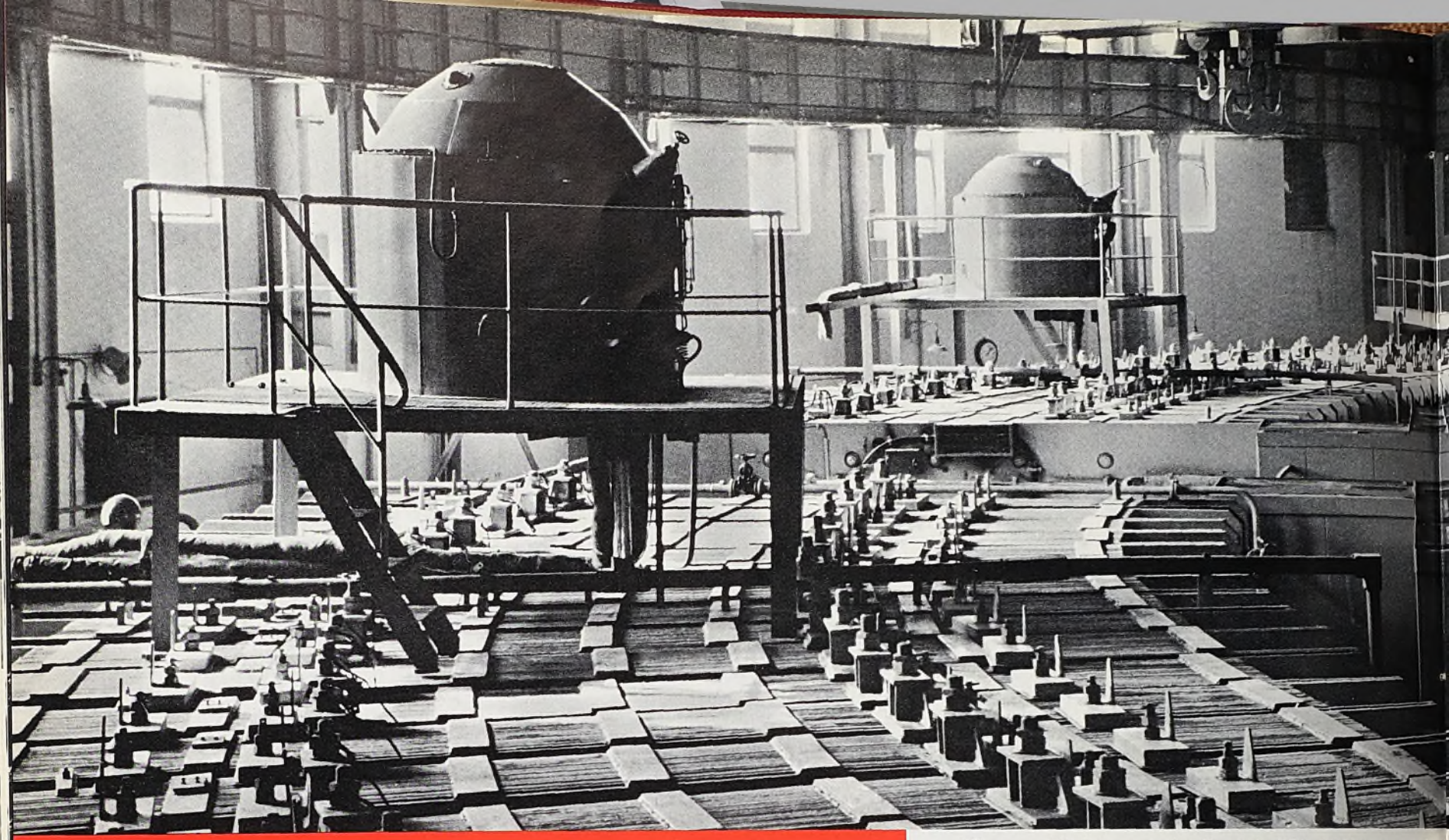


Built in 1932, Magnitogorsk, the first Soviet iron and st mill, smelted more steel than all the mills of old Rus



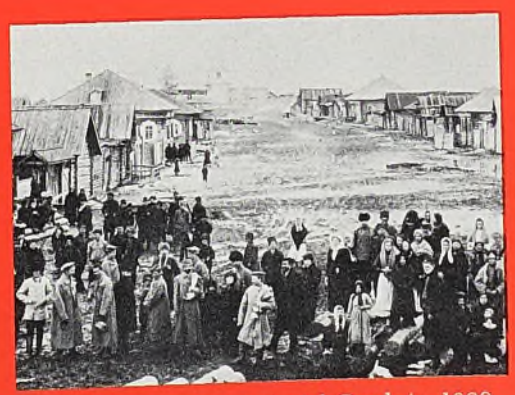
The destiny of all Russia's workers changed with Soviet power. All Magnitogorsk steelworkers now have a secondary education.

The Bratsk Hydroelectric Station—capacity 4.5 million kw.—is part of the bold plan to harness Siberia's fast-running rivers.

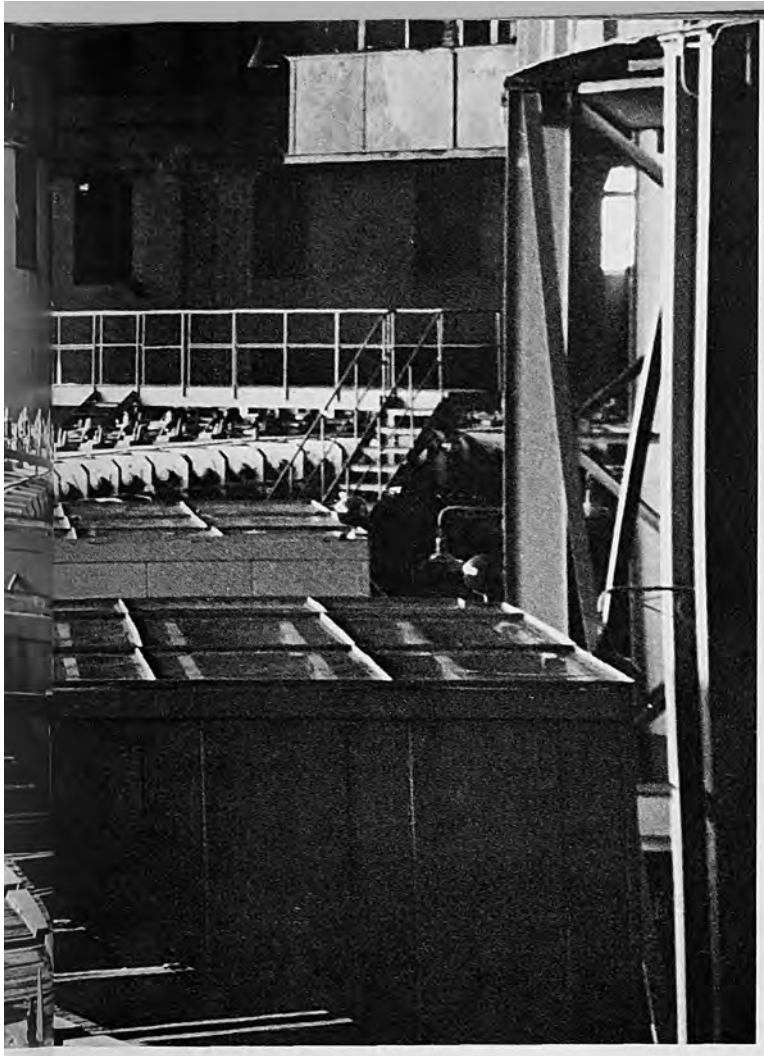


There are 70 times more intellectuals. This 10-Bev atom smasher, one of the world's largest, was built by Soviet scientists.

In a world sorely troubled by what tomorrow may bring, in a world shaken by crises, the Soviet people look to the future without fear. Led by the Communist Party, they are building a society of abundance.



A typical street in provincial Omsk in 1900. (Below) The same street in new Omsk—new houses, new people, new industries. Today Omsk is a chemical and machine-building city.



Russia was 100 years behind advanced capitalist countries. Only four decades later the USSR sent the first ships into space.

Here are these new people in a factory club built on the site of the wooden house where the writer Dostoyevsky lived in exile.

Thousands of grateful Soviet citizens visit the Lenin Mausoleum daily to pay homage to the man who founded their socialist state.

FREEDOM FROM

THE PAST retreats before the realities of socialist society. In the short span of 46 years the Soviet people have crossed from a world of fear and apprehension to a world in which every working citizen looks ahead to the future secure and unafraid.

Mankind, to paraphrase Thomas Jefferson, is forging ahead, leaving fear behind. Is not the history of civilization one long process of liberation from the innumerable fears that burden man's life, his work, his pleasures?

Science tells us that in the thousands of years of his social development man has essentially not changed biologically. But what astonishing changes have taken place in his perception of the world! When our ancestor for the first time became aware of his identity, how he must have clung to the walls of his cave! The world outside, he must have thought, lay waiting to exterminate him. He felt himself a speck of dust in a seething vortex of life. A host of real and imaginary dangers beset him at every step.

In the process of historical development man evolves into a civilized being. By changing his environment in collective labor, multiplying his strength through scientific, economic and social progress, he rids himself of the onerous burden of fear and governs his life ever more confidently and intelligently.

Soviet society may well be proud of its contribution to this great historical process.

Immortalized in the Russian classics is a gallery of victims of fear—either tragic (as in Fyodor Dostoyevsky's novels) or grotesque (as in Anton Chekhov's stories). Their "little man" was afraid of everything: A whim of nature could mean crop failure and starvation; the landlord's frown, the slightest ailment could bring ruin, unemployment, the all-powerful policeman's bellow. Even when he was lucky, his happiness was so superficially and weakly rooted that fear darkened even his brightest moments and turned his natural love of life to superstition or hatred.

No wonder that our older people take such pleasure in the self-confidence of the new generation, its squared shoulders and bold step. Recalling the past, these elderly people (I saw such a scene recently in a quiet street in old Gomel) just shake their heads in wonderment: to think how many fears used to beset them, how many nights they lay sleepless. What if the boss closes the shop, if my boy has to leave school, if this twinge is the beginning of a serious illness which will lay me up for months, if an economic crisis should come, if. . . . How many swords of Damocles hung over their heads?

To the Soviet people these swords are just so many museum pieces. Gone are the circumstances that bred these threats, gone is the soil that nourished most of these fears. The freedom from fear that is characteristic of the outlook on life of 200 million-odd people is becoming more assertive and powerful.

Obviously, this freedom cannot be legislated. It must arise from actual conditions of living.

To begin with, no one in our country can be left without a means of subsistence. No one has to be unemployed; every person has a choice of jobs and picks the one he is best suited for by interest, knowledge and skill. Leningrad, only one of the many Soviet industrial centers, alone can give more jobs to many thousands of workers.

We abolished unemployment permanently as soon as our planned economy based on the public ownership of the means of production was established. One guarantee that it has been abolished forever is our fast-paced economic growth.

We will continue to cut working hours as our productive forces grow, spurred by advances in technology. Academician Nikolai Semenov, Nobel Prize winner and honorary member of the U.S. National Academy of Sciences, recently said in one of his reports as he pondered the progress of our country: "Over-all automation of production will cut the working day to three or four hours. The individual will devote the rest of his time to sports, gardening, amateur art activities—theater and literature among them—and especially to scientific and engineering research at well-equipped public laboratories which will become centers for mass scientific development." It is with this prospect in view that the further economic progress of the Soviet Union is being planned.

Soviet society has also done much to blunt the attacks of another foe of life and well-being—disease. First of all, the patient no longer suffers that terrible feeling of hopelessness. Each Soviet citizen, regardless of his personal means, is sure that everything Soviet medicine can do (and the USSR is second to none in the number of physicians and medical institutions) will be done. Finally, Soviet society has freed the patient from the burden of paying for his care. All medical services, including the most complicated operations, are free. Patients who hold jobs are entitled to 50 to 90 per cent of their wages.

When a citizen cannot work on account of ill health or old age, he retires on pension with, of course, free medical aid. There are institutions working on the problem of longevity. Any elderly citizen can live, if he so wishes, at homes for the aged maintained by the state for workers in the arts, textile workers, collective farmers, etc. In other words, an elderly citizen is never reduced to a nuisance or a burden, no matter how unfortunate his circumstances.

We know no fear for the future of our children. They can move ahead as far in the occupations they choose as their individual abilities permit. They all can get a thorough education free and learn any trade or profession they have the ability and ambition to pursue. Our country's progress in public education is as rapid as, if not more rapid than, its economic progress, and the scope of secondary and specialized education keeps expanding and its standards keep rising.

It goes without saying that young people can try their hand at any vocation they feel drawn to. An extensive system of scholarships complements free education and does away with the troublesome problem of "giving our children a chance." Society takes care of that. More than four million students of specialized secondary and higher schools, the population of a small country, live on state scholarships.

The Soviet citizen feels more secure against the blows of fate and can weather such blows more easily because socialism has realized the great principle of humanism: "Man is to man a friend, comrade and brother."

Everything, from customs and ethical principles to laws and regulations, supports an honest man in our society and helps him to weather personal troubles. Surely there is no greater misfortune than losing one's father and mother in childhood. Soviet orphanages, with the help of the community, do everything they can to make an orphan feel he has a second family. Academician Veksler, a world-famous physicist, Corresponding Member of the Academy of Sciences; Sifarov, a leading authority on radio electronics; Reshetnikov, a well-known painter, member of the Academy of Arts; and many other Soviet people eminent in science, the arts and public life were brought up at orphanages.

As a general rule, the feeling of confidence with which my compatriots see the future long ago replaced any expectation of hard times. Nor is this confidence simply a feeling; it rests on realities and proceeds from the whole experience of our people since the 1917 Revolution. Discounting the bitter years of the war imposed on the Soviet Union, for which it paid more than all the other countries involved put together, the graph of our country's economy shows a steady rise. Every year finds our industrial and agricultural production growing and our capital investments expanding. In 1962 alone we spent nearly as much to develop the national economy as we had in all the postwar years. This year our country is taking another long step toward the economy of abundance projected by the new Program of the Communist Party of the Soviet Union.

The essence of our efforts and plans was aptly put by Chairman

FEAR

BY MARK VISTINETSKY

Khrushchev in his talk with I. Pietra, publisher of the Italian newspaper *Giorno*: "We are creating a new society. We are people of this earth, and we do not want to hide from its realities. We are trying to fix it so that the working man will live better tomorrow than today and still better the day after tomorrow." The truth of these words is experienced by every Soviet citizen. Every 24 hours more than 7,000 families move into newly built, well-appointed apartments (the rents average no more than 7 to 12 rubles a month, and even less for pensioners and for those in the low-income brackets). Every month the output of manufactured goods increases. Every year the national budget earmarks more money to build cities and villages, clubs, theaters, stadiums, libraries. A more productive Soviet society means more free services and higher living standards for millions. Our awareness of the direct connection between the destiny of our great country and each of its citizens naturally lends a special coloring to the thoughts and feelings we have about our personal future.

We have replaced the old social partitions and national restrictions with equality in every aspect of living and have thereby enhanced the dignity of every individual. Abuses of power as a result of the Stalin personality cult ran counter to the gains of the Revolution, to the spirit and letter of Soviet democracy. They could not undermine the Soviet social system or stop its progress. When the consequences were eliminated, the country made rapid headway in every sphere of activity, including a larger extension of democratic rights.

None of this is to imply that the Soviet Union is inhabited by angels. Among rank-and-file workers as well as executives there are people hard to get along with. There have been cases where executives have tried to encroach upon the rights of their subordinates. But the executive who lets his authority run away with him is sure to come to grief sooner or later. The press, the trade unions and the Soviets of Working People's Deputies zealously safeguard the citizen's rights. Any encroachment on the rights of a single citizen, no matter what his social status, nationality or religious belief, is considered a challenge to every citizen, to all society, to the Communist Party.

In recent years there have been several instances when a militia man overstepped his powers and held suspects without proper legal grounds; those found guilty of such offenses were punished. Each of us knows that a powerful bulwark guards the rights and interests of the individual. Its most important component is control by the people of the whole machinery of the state in the Leninist tradition, a control that has now happily been restored. There can be no fear of the administration if it must hold itself accountable to the people. Justice always triumphs on Soviet soil.

But what about fear No. 1, the fear of fears, the fear of an atomic war? Well, Soviet society has not been able, of course, to free its citizens from this fear, for unilateral efforts are not sufficient to stave off the danger of war, but it has been doing everything in its power to dig up the roots of this tough and deadly growth. Objective visitors have frequently commented on the fact that although the Soviet people are perfectly aware of the danger of a thermonuclear war they do not lose their optimism and do not suffer from war hysteria. They know that their country does not want war and is doing everything possible to prevent it. They believe in the progressive course of history, in the creative power of mankind. They believe man's reason will eventually reject war as a way of settling debatable issues.

It is this belief, the humane and noble ideal of socialism, that frees us from fear. Time and again foreign observers have expressed their wonder that the Soviet people have come through their many trials so strong and confident.

As the sun dissipates the mist of night, so the reality of socialism dissipates the fears born of the weakness, the ignorance and the illusions of man's past. ★

our calendar

November 7, 1917. The people, under the leadership of the Communist Party, overthrew the Provisional Government. The Soviets of Workers', Soldiers' and Peasants' Deputies took power. This day, commemorating the Socialist Revolution, has been observed as the national holiday ever since.

November 8, 1917. The Second All-Russian Congress of Soviets announced the transfer of power to the Soviets and adopted decrees on peace and land. The Decree on Peace annulled all treaties concluded by czarist Russia whose aim was the annexation of foreign territory. It asked all belligerent countries to start immediate negotiations to conclude a democratic peace. It declared war "the greatest crime against mankind," and called for new principles of international relations that would condemn war as a method of resolving disputes. That first Soviet decree was based on Lenin's idea that states with different social systems could coexist peacefully.

The Decree on Land transferred all land to the people. Land became state property.

November 10. Soviet Militia Day. The Soviet people's militia (police force) was founded in 1917, on the third day after the Soviets had taken power, to maintain revolutionary order. Its function is to safeguard the rights, dignity and security of the citizen and to prevent crime. Soviet Militia Day is observed by the militia as well as by the citizens' voluntary public order squads, Comrades Courts and other public organizations that have been taking over many of its duties.

November 10, 1918. Vladimir Lenin completed work on the pamphlet *The Proletarian Revolution and the Renegade Kautsky*. It was a reply to articles and the pamphlet *The Dictatorship of the Proletariat*, written by the theoretician of the German Social Democrats, Karl Kautsky, which distorted Marxism.

The essence and meaning of Soviet power, Lenin pointed out, lay in the fact that it enlists the broadest masses of people in constant, indispensable and decisive participation in the democratic governing of the state. The Soviets are the direct organization of the toiling and exploited masses themselves, which help them to organize and administer the state themselves in every possible way.

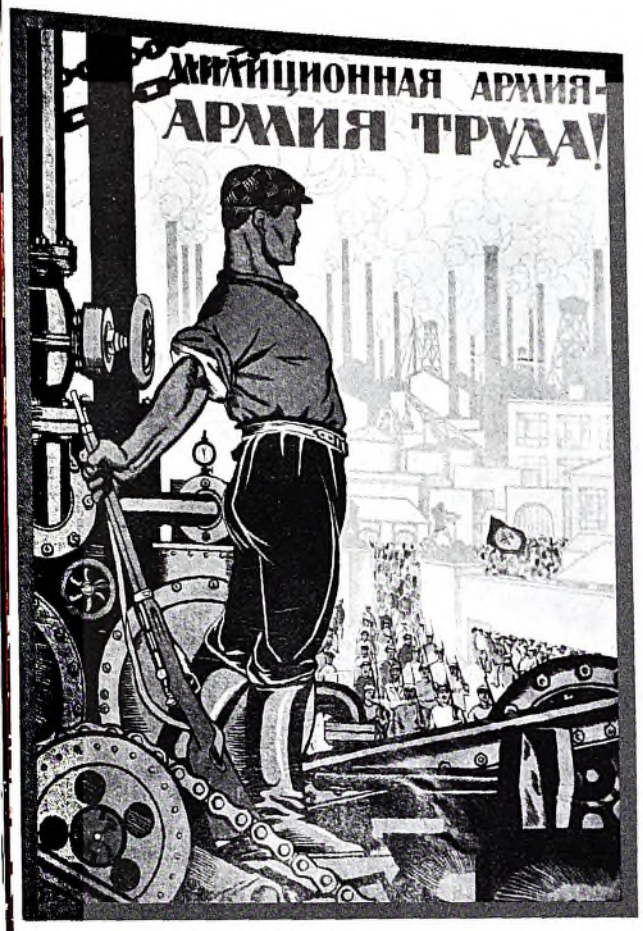
The new Program of the Communist Party of the Soviet Union reflects the changes in the country's development. "The state, which arose as a state of the dictatorship of the proletariat, has in the new, contemporary stage, become a state of the entire people, an organ expressing the interests and will of the people as a whole."

November 15, 1917. The "Declaration of Rights of the Nations of Russia" was adopted. It announced the equality and sovereignty of all the nations that inhabited the country, their right to self-determination, including the right to secede and to form independent states. It abolished all national and religious discrimination.

November 16-19, 1957. A conference of Representatives of the Communist and Workers' Parties of more than 60 countries of the world took place in Moscow. The conference adopted a Peace Manifesto which read in part: "Neither the Communist Parties nor any of the socialist countries have any motive or reason for launching wars or military attacks on other countries, for seizing alien soil. . . .

"From now on, let countries with different social systems compete with one another in developing their science and technology for peace. Let them demonstrate their superiority not on the field of battle but in competition for progress and for higher living standards."

November 17 is celebrated as International Students' Day by more than 60 national student organizations, including Soviet students. On that day in 1939 the Hitlerites butchered the students of occupied Prague when they rose against fascist terror. A year later student representatives from 14 countries dedicated that day to the international student movement. ★



Nikolai Kochergin. **"Militia army—army of labor!"**

BY GALINA DEMOSFENOVA

ART CRITIC

THE REVOLUTIONARY POSTER

TO evaluate the Russian revolutionary poster and its place in both history and art we must review the state of the country before and immediately after the Revolution.

It had been ruined by the imperialist war. Reaction, domestic and foreign, joined all its forces to strangle the young Soviet republic. On the verge of starvation, the people were fighting a desperate Civil War, beating back the counterrevolutionaries and the foreign interventionist armies. "The whole of Russia's body has been covered with wounds by the war; the people resemble a man who has been nearly beaten to death," said Lenin at the Fifth Congress of Soviets.

Strength had to be found to fight off the internal and foreign enemies, and to rebuild the ruined economy in the shortest possible time. The life of the socialist republic depended upon the ability of the Communist Party to lead the mass of the working class and the poorest section of the peasantry. Between the two fighting camps stood the great mass of Russia's peasants, politically immature and vacillating. And it was to this group primarily that the Party had to explain the advantages of the new socialist system and what communism stood for.

Every possible medium, especially the graphic, was used to popularize these ideas. The poster, because it combined picture with words and could be reproduced quickly and in quantity, became an indispensable educational tool for the Party. Posters appeared everywhere: on house walls, in shop windows and factories, at railway stations and in trains —large posters and small, produced in print shops or done by hand. "Anyone who tears down this poster or posts a bill over it commits a counterrevolutionary act." That succintly expresses the important role of the political poster in popularizing the cause of the Revolution.

In simple and understandable form the artists pictured the advantages of the workers' and peasants' government over the regime of the czar, the landlords and the capitalists. They called the people to battle against internal and foreign enemies, explained the imperative need for strengthening the alliance of workers and peasants, urged them to speed the restoration and development of the country's industry and agriculture. Many posters called for an all-out fight against illiteracy and infectious diseases.

The Soviet political poster, although new in form, had historical basis. The traditions of progressive Russian art of the late nineteenth century (its vital interest in the ordinary man, in the way the people—and the peasantry especially—lived) left their imprint on the political poster. Poster artists creatively assimilated the graphic qualities of the Russian cartoon, particularly the cartoon of the period of the First Russian Revolution of 1905. They found a fountain of inspiration in folk songs and fairy tales, in proverbs and adages. Notwithstanding all this, the revolutionary

RSFSR

WORKERS OF ALL COUNTRIES, UNITE!

A Story About Scones and a Hag Whom the Republic Disowns

BY MIKHAIL CHEREMNYKH

1. In a republic, one fine day,
Bent low under her heavy ware,
A woman hurried on her way
Toward the village fair.

2. Then something made her stop and grunt,
The tramp of many feet—
Red soldiers marching to the front
White war lords to defeat.

3. Say, Auntie, won't you give a scone
To a hungry soldier?
Even one, no more than one?
The foe's at our border.

4. Without grub it's hard to fight
The well-fed, bulging boss,

5. Imagine the republic's plight,
He'll walk right over us.

6. Get going man, leave me alone,
You and your republic,
You won't get a single scone.
I sell them to the public.

7. Lean, but brave, our men did fight,
True to their cause and mettle,
Crushed by the war lord's well-fed might
They lost the first big battle.

8. Many workmen did the war lord slay,
Blood dripped from his sword and boot,
The market being on his way,
He stopped in to grab some loot.

9. Espying 'mid the market folk
The fat and greedy crone,
The war lord swallowed in bulk
The hag and every scone.

10. Not a peasant nor a loaf in sight
In the market square today,
Feed your defender before the fight,
Or there'll be hell to pay.

11. Then rush to the Red Army men
The badly needed bread,
Lest you lose all of your precious grain
Together with your head.

Р.С.Ф.С.Р.

ПРОЛЕТАРИИ ВСЕХ СТРАН СОЕДИНЯЙТЕСЬ!

ИСТОРИЯ ПРО БУБЛИКИ И ПРО БАБУ НЕ ПРИЗНАЮЩУЮ РЕСПУБЛИКИ

1) Сья история была в некоей республике- Баба на базар плыла а у бабы бублики.

2) Слышит топот близ ее. Бить на фронте плановье музыкою веется мчат красноармейцы

3) Кушать хоца одному говорить ей-тетя – Бублик дай голодному! Вы-ж на фронт нейдете?!

4) Коль без дела будет рот- буду слаб как мощи

5) Пан республику сожрет- если будем тощи

6) Баба молвила ни в жисть не отдам я бублики! Прочь служивый отвяжись чорта ль мне в республике?!

7) Шел наш полк и худ и тощ Паны-ж все саженные. Нас смела панова мощь в первом же сражении.

8) Мчится пан и лют и яр смерть неся рабочим К глупой бабе на базар влез он между прочим.

9) Видит пан бела-жирна баба между публики. Миг,-и сѣдена она. И она и бублики.

10 Посмотри на площадь выйдь! ни крестьян ни ситника Надо вовремя кормить, красного защитника!

11) Так кормите-ж красных рать! Хлеб неси без вою Что бы хлеб не потерять вместе с головою!

Alexei Radakov. **"An illiterate man is a man that's blind: He walks into pitfalls of every kind."**

poster was an entirely new art form, a profoundly national contemporary mirror of the Revolution and its achievements.

A particularly interesting development in political poster art was the ROSTA (Russian News Agency) Satire Windows. Initiated by the Russian satirist Mikhail Cheremnykh (1890-1962), this unique news form inspired the very active cooperation of the noted poet Vladimir Mayakovsky (1893-1930) who not only wrote the text but designed many of the posters displayed in the Windows.

A few hours after the telegraph dispatches were in, and even before the newspapers were out, the ROSTA Window had a display and comment on the latest war news and what was happening on the home front.

Following the example of Moscow, other cities in the Soviet republic introduced ROSTA Windows. Among the many contributing artists were Lev Brodaty (1889-1954), Boris Yefimov (1900-), Vladimir Lebedev (1891-), and Vladimar Kozlinsky (1891-). During the Second World War the idea was revived in the TASS Windows.

One of the leading political poster artists of the Civil War period was Dmitri Mo'or (Orlov) (1883-1946), a highly original and talented artist. The grotesque caricatures he painted personified his implacable hatred of the enemy, his anger, his support of a ruthless policy toward the enemy. In contrast he portrayed the strength and heroism of the embattled revolutionists. From his brush came such classic examples of the Soviet political poster as "Have You Volunteered?" (1920), "Wrangel Is Still Alive; Finish Him Off Without Mercy" (1920) and "Help!" (1921). Another well-known cartoonist who did posters at the same time was Victor Deni (Denisov) (1893-1946). Unlike the sharp, abrupt manner that characterized the style employed by Mo'or, Deni's graphic weapon was the plastic line, the calm outline, the enlightening drawing touched with color rather than painted.

The posters of Nikolai Kochergin (1897-), who worked at different times in both Moscow and Tbilisi, were usually based on a combination of sketchy figures against a more detailed background. His work shows the tendency of the Soviet political poster toward a heroic treatment of the man of the Revolution, an embodiment of great ideals, aspirations and emotions.

Another leading poster artist of the early Soviet years was Alexander Apsit (Petrov) (1880-1944). Instead of using the conventional allegoric forms for depicting ideas and emotions, he painted actual people in action —one of the first to do so on posters.

Alexei Radakov (1879-1942) did posters to promote the spread of culture in the villages. Although a well-known cartoonist, he rarely used the cartoon in his posters. They are notable for their wit, their variety in treatment of a theme, and their attractive colors.

The same revolutionary spirit, purposefulness and will for struggle and victory that infuse the early Soviet posters can be found in our contemporary poster art, which is popular not only among the Soviet people but has won recognition outside the Soviet Union as well. ★

Dmitri Mo'or. **"Have You Volunteered?"**

Vladimir Mayakovsky. A ROSTA poster.
"Ukrainians and Russians have one militant call: The Polish war lord shan't keep our workers in thrall!"

QUERIES FROM READERS

QUESTION: "Exactly how many higher educational institutions are there in the Soviet Union?" an American student asks.

ANSWER: There are 739 colleges and universities in the Soviet Union. They graduate 330,000 students annually.

QUESTION: "I am of Latvian descent," one of our readers writes. "I should like to know what the living standards are in Latvia today. My parents left Latvia in 1938."

ANSWER: The standard of living of the Latvian people today is twice as high as it was in 1938.

QUESTION: Are there areas in the Soviet Union which are regularly flooded—as is the case in the United States?

ANSWER: Floods are especially frequent in the Soviet Far East, specifically in the basin of the Amur River, the largest river there. But in that part of the country, too, floods are successfully coped with. This is no easy task, of course. The great Galileo had good reason for writing, "I can predict the path that celestial bodies travel, but I can say nothing about the movement of a drop of water." A lot of water has flowed under many bridges since then, and its movement can now be predicted with a higher degree of accuracy.

And now, how do we fight floods in the Soviet Union? First of all, the surprise factor has been totally eliminated. The information and geological forecasting services do a very good job here. Most of our flood fighting is done by artificially regulating river flow. Floods, as you know, are of short duration; the idea is to extend them in time, and that is done by means of artificial water reservoirs. There are many of them in the Soviet Union: on the Moscow River, the Volga and the Dnieper. We also have man-made lakes on the Ob and the Yenisei, big Siberian rivers. These reservoirs take up the excess water in flood periods, or, to use a technical phrase, they cut the flood peak.

QUESTION: Sidney Novick from Los Angeles asks whether a homeowner can sell his house, who fixes the price and who acts as agent.

ANSWER: Yes, a homeowner can sell his house to anybody. The price is fixed by the local Soviet, through which all the sales arrangements are made.

QUESTION: The next question comes from Curtis Foster, Cleveland, Ohio: "I've been told there are Negroes in the USSR. Could you please say a few words about them?"

ANSWER: There are quite a few Negroes in the Soviet Union. They enjoy the same rights and have the same responsibilities as all other citizens. We have no such thing as racial discrimination in the Soviet Union. The same jobs, at the same wages, are open to Negroes or whites or people of any other color. They live in whatever part of town they choose, and nobody considers mixed marriage a crime. People of all races and nationalities are absolutely equal in the Soviet Union. Any manifestation of racial hostility is punishable by law.

QUESTION: A Somers, Connecticut, reader asks whether many people get married in the Soviet Union.

ANSWER: Quite a few, 290 couples every hour. The average annual figure is nearly five million. As many as 7,000 wedding parties are held every day in the year. It might interest you to know that most marriages take place in November, December and January. The figure slowly drops in spring and hits the lowest mark in April. Very few marriages are registered in summer. Incidentally, we checked these statistics on the members of our editorial staff and found that most of them got married in November, December or January.

QUESTION: "I should like to have some facts about the development of Uzbekistan," one of our readers asks. "I have a post card with a view of Uzbekistan's capital, Tashkent."

ANSWER: There was no industry in old Uzbekistan. Even nails had to be brought in from a distance. Today Uzbekistan has more than 100 industries and exports its manufactured goods to 58 countries. The number of students per 10,000 of the population is higher in Uzbekistan than in France, the Federal Republic of Germany, or Italy, while in number of doctors Uzbekistan is far ahead of the United States, Britain and France. For more facts and figures, see the October 1962 issue of our magazine.

QUESTION: "Who is the best paid man in the Soviet Union?" Robert Holler asks.

ANSWER: We really don't know who the highest paid individual is. In our country noted scientists and academicians are well paid, and a successful writer, especially a playwright, may earn even more than an academician.

QUESTION: Is it true that Leningrad is built on islands?

ANSWER: Yes. Leningrad spreads over 101 islands formed by 66 rivers and canals. The main river, the Neva, is 46 miles long, and its width varies from 1,100 to 1,900 feet.

QUESTION: Sidney Novick also asks whether a Soviet citizen can make money by selling real estate.

ANSWER: No, that is considered unearned income, and all unearned income is illegal.

QUESTION: Robert H. Holler asks whether the Soviet press comments on "flying saucers" and what it has to say about the possibility of life on other planets.

ANSWER: Several years ago there was a good deal of material on "flying saucers" in the Soviet press, most of it satirical. The reports of mythical flying saucers, especially when they turned out to be populated by no less mythical communist agents from Mars or other planets, gave satirists plenty of occasion to practice their wit.

As for serious articles about life on other planets, you will find plenty of them in Soviet magazines, newspapers and especially in scientific journals. There are two points of view on this question. Some Soviet scientists say that only rudimentary forms of life can exist on other planets, while others believe that they are inhabited not merely by thinking, but by highly civilized beings. Thus, for example, Professor Iosif Shklovsky asserts in his book *Universe, Life, Reason* that "a great ring of civilizations actually exists in the Galaxy." Here is one of the ingenious proofs of his theory the professor cites. Quite inexplicably, Mars' satellites, Phobos and Deimos, move strictly in the equatorial plane and very close to the planet. They have been found to rotate more and more slowly with time. For such large satellites to be slowed down by Mars' highly rarefied atmosphere, they would have to be hollow. Nature, however, knows no hollow bodies. And Professor Shklovsky arrives at the breath-taking conclusion that these satellites of Mars are artificial, that they were created by thinking inhabitants of other worlds.

QUESTION: Max Miller from Los Angeles asks whether there are casinos, raffles and horse races in the Soviet Union.

ANSWER: Yes, we have raffles. They are conducted by the state. We don't think of raffles as gambling. We also have horse racing and pari-mutuel betting. This is gambling, of course. The pari-mutuels are state operated. They probably give the state some small income, but the overwhelming majority of the people in the country disapprove of gambling, and there are letters in the press from time to time calling for a ban on pari-mutuel betting. Thus far, it's still legal—to the great joy of horse-racing fans. As for card games, we have no casinos and gambling clubs. But, of course, there are people who enjoy a game of preference or poker of an evening. ★

WHO MAKES HISTORY?

BY VICTOR AFANASYEV
MASTER OF PHILOSOPHY

"HISTORY DOES *NOTHING;* 'it' does not possess *any* fabulous wealth; 'it' does not fight *any* battles! Not 'history' but precisely '*man,*' real, living man, does all this, possesses everything and fights for everything. 'History' is not any special person who uses man for the attainment of *his* objectives. History is *nothing but* the activity of man pursuing his objectives."

These words were written by Marx and Engels. Maintaining that history is made by man, they tried to determine what part the people play and what part the outstanding individual plays in the development of society.

There are always the men who make the laws, and there are those many more who carry out the laws. There are the military leaders who command hundreds of thousands in battle and those hundreds of thousands of rank-and-file soldiers who give their lives to realize the strategic ideas of their commanders. There are the great researchers and inventors whose discoveries leave an indelible mark on science and technology, and there are the ordinary people who make their ideas a living reality. There are the owners of colossal fortunes who do not work but own whole industries, and there are the workers who with their own labor, with their own hands, create the incalculable treasures in which our remarkable planet abounds.

Now, which of these are the real makers of history—the mighty of the earth who are always in the news, always surrounded by an aura of grandeur and glory, or those obscure millions whose name is the people?

Historical materialism maintains that the real creators are the working people, that the people are not the "mob," the voiceless "rabble" subject to commands from above. This apparently was also the opinion of a great American, Thomas Jefferson, who said that the people were not born with saddles on their backs so that the few privileged ones, their spurs on, could ride them with the help of law and God's grace!

Why does Marxism believe that history is made only by the masses of the people? It does so because the productive activity of people is the motivating force in the development of society. All of social life is founded on material production. Those whose labor creates material values are therefore the real makers of history. Painstakingly, persistently, day by day, year by year and century by century, often not even aware of it, the working people develop and perfect the implements of labor and the processes of production, and it is this which, in the final analysis, brings about profound technical changes.

The masses also contribute enormously to society's culture. "The people," Maxim Gorky wrote, "are not only the force that creates all material values; they are the sole and inexhaustible source of spiritual values, the first philosopher and poet in time, beauty and brilliance who have created all great poems, all tragedies of the earth, and—the greatest creation of them all—the history of world culture."

Another powerful spiritual force is collective creative labor. It matures the people, and their progressive ideas sooner or later change the society.

The most important social changes that we know have come through revolutions. At these crucial moments of class struggle the fate of the new, more progressive social system has always hinged on the support it had from the masses. Thus, slave rebellions shattered the foundations of slave-owning empires. The peasantry was one of the major forces to do away with feudalism. It was the proletariat that brought the people to socialism. Thus, all classes that have outlived their time are sooner or later removed from the historical scene by the people, and neither power, wealth nor force can keep them in power.

There is one more noteworthy law-governed phenomenon of social development. The higher the level of material production, the more deep-reaching the social changes; the more critical and diverse the tasks facing society, the more numerous and the more active the masses of people taking part in the historical process. Thus, the people play an increasingly more important role in history.

We believe that a socialist society provides the most favorable conditions for the creative activity of the people. Vladimir Lenin wrote that socialism accelerates progress in every area of social and personal life. Moreover, it is mass progress, the entire population moving ahead.

The reason for this is that the people, having taken power into their own hands for the first time in history, are using that power for the difficult but gratifying task of building independently a happy and just society for everyone. They know that the success of this great mission depends on them alone, that it is they who must build socialism.

The constructive activity of the people manifests itself most obviously in the sphere of material production, in the effort to reach the highest possible level of labor productivity (the nationwide movement to fulfill economic plans ahead of schedule by introducing technical improvements, economizing on materials and working time, increasing efficiency, helping those workers who lag behind).

Soviet people are also active in sociopolitical matters. Millions of history makers, putting their heads together, can produce incomparably brilliant solutions. That is why when questions of social development are to be decided, the Communist Party and the Soviet Government turns to the experience and knowledge of the people and presents the most important problems for nationwide discussion. In recent years there have been such national debates on the reorganization of industrial management, the farm development program, education, and many other matters.

An especially wide-ranging discussion was held on that most important political document, the draft for the new Program of the Communist Party. Seventy-three million people took part in meetings held throughout the country and 4,600,000 of them spoke from the dais or the floor. This helped the delegates to the Twenty-second Congress of the CPSU, at which this Program was adopted, to outline the ways of developing the Soviet state into a state of the whole people.

The period of the dictatorship of the proletariat, which was needed during the years when a socialist society was being built, is over. Soviet society is administered today by the people as a whole, through their representatives in government bodies and by their direct participation in the work of the many public organizations.

While maintaining that the people are the decisive force in history, Marxism does not deny the role of outstanding individuals, leaders. These leaders serve to organize the masses, they determine what the main tasks are and mobilize the people to carry them out.

Great men emerge, not fortuitiously but by virtue of historical necessity, when objective conditions require them. Great political leaders come to the fore when revolutionary transformations of society, major political actions, popular revolts, are imminent.

It stands to reason that it is pure chance that accounts for the appearance of precisely *this* great man at a particular time in a particular country. If, however, *this* man goes, for whatever reason, the demand will come for a replacement, and such a replacement, more or less adequate, will sooner or later inevitably be found.

It was accident, for example, that made a particular Corsican, Napoleon, the military dictator that a war-exhausted French Republic needed. But if Napoleon had not appeared, his role would have been played by some one else. The ample experience of history shows that a great man has appeared whenever the times needed him.

By far not all of the many names inscribed on the pages of history are really great. There are men who have moved against the sweep of their time, who have tried to reverse the march of history. Expressing the interests of reactionary classes, they and the evil causes they led invariably came to grief.

The really great man is the one who devotes all his life, all of himself, to further the progress of society, who, understanding the objective laws of social development, uses his authority as a leader not to contravene these laws but to regulate his society by them.

History, of course, has more than sufficient examples of leaders with great power and authority who abused that power, moved counter to the objective laws of social development. But even in these instances we know that the society was not pushed off its path of historic development. We may, of course, have deviations which temporarily slow down or to some degree distort the process of social development, but nothing can change its direction.

An example is Stalin's personality cult, exposed by the Communist Party and condemned by the people. It would seem that his colossal personal power gave Stalin every possibility of setting aside the laws of social development, of dictating his own "laws" to society. But this did not happen. Stalin did not, and could not, change history. No arbitrary acts in the period of his leadership could seriously block the process of social development that started in Lenin's time and was charted in the program of the Party adopted in 1919. On the contrary, these acts of arbitrary rule were clear evidence that Stalin did not measure up to the demands of the time.

The general direction of development of the Soviet system did not change either before or during the period of the personality cult. It was moving toward a single goal, the building of a communist society, and it moved ahead toward this goal, sweeping away all hindrances and obstacles, including Stalin's personality cult, which was a distortion of Marxism-Leninism.

Marxism recognizes the role of the individual in history but views his activities in relation to the activities of the masses, the most progressive classes and political parties. Marxism has always fought against the blind worship of leaders, against the cult of their personality. The founders of Marxism-Leninism declared that only collective leadership will guarantee the success of revolutionary movements, that communism can only be built with the active participation of millions, for it is the people, and only the people, who make history. ★

V OUR VOCABULARY

Material and technical basis of communism. The Soviet people are building a society in which every person will have a sufficiency of material goods and cultural services, an abundance of everything required for a prosperous and happy life.

The material and technical basis of communism, in the form of universally developed productive forces, is the foundation of that abundance. With its planned industry and agriculture the Soviet Union will attain an unprecedentedly high level of productivity. For the most part, that material and technical basis for the new society will have been created by 1980. By then industrial output will have increased sixfold and agricultural output 3.5-fold as compared with 1960.

The most important feature of the material and technical basis of communism is the attainment of greater output with less expenditure of labor and other resources. But this abundance of material values is not an aim in itself for the people of the communist society of the future. It is only a means for the unlimited spiritual development of every individual. Therefore time and energy devoted to productive work will be reduced to a minimum. Under communism the workday will be much shorter than now.

The material and technical basis of communism requires the application of the most advanced techniques by highly trained specialists. More specifically, it means complete electrification of the country; the mechanization and automation of production processes (a "push-button" technology which will reduce man's work to controlling the processes); highly educated workers, culturally and technically; peak development of basic industrial production; new materials and new sources of energy—in short, the use of every productive potential which our rapidly increasing scientific knowledge (a productive force in itself) affords us.

Payment according to work is the principle presently used in the USSR for the distribution of material and cultural values. A worker is paid in accordance with the quantity and quality of his work.

Since we have public ownership of the means of production (land, factories, mills, mines, power plants, banks, stores, etc.) the fruits of the work the people do are given back to them in various forms, such as wages and in such very substantial additions to their real income as free medical services, free education and other social benefits. Thus, under socialism, does working for the benefit of society as a whole reap manifold remunerations in the form of social services.

These social services are granted in equal measure to every citizen, regardless of the work he or she does. Wages however, vary with the type of work done, its quality, and the skill required of the worker.

Distribution according to needs is the distribution of material and cultural values without regard to the kind, quality or quantity of the work performed by the recipient. He gets what he needs simply in accordance with his needs and not in accordance with his work. Of course, only a society which has an abundance of all the material and cultural values can apply that principle completely. Such will be the communist society in the USSR, whose foundations will have been laid by 1980.

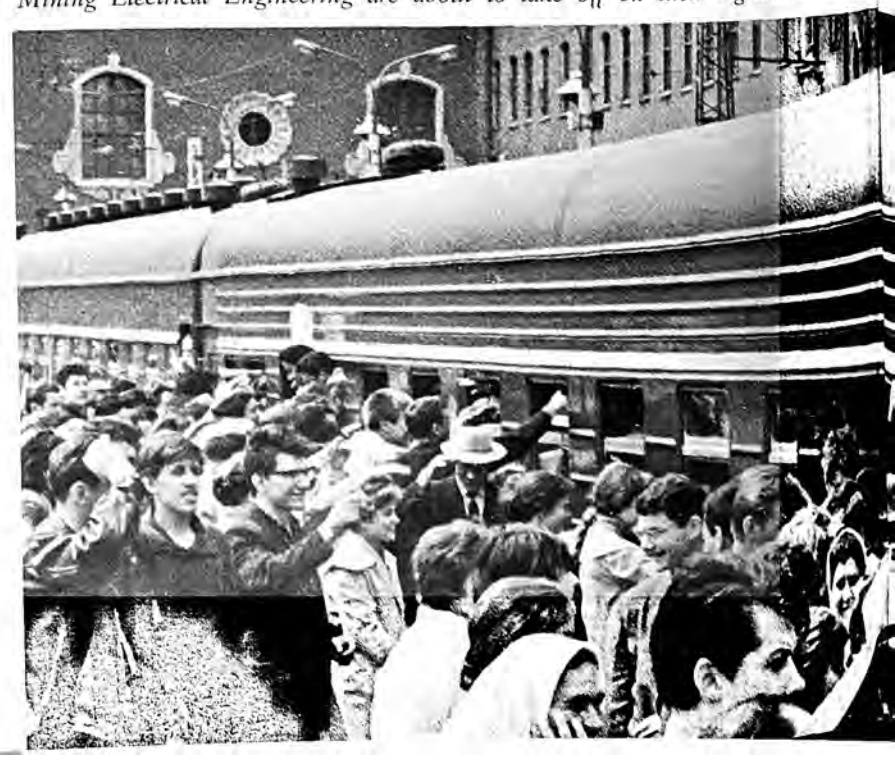
But the principle is being applied in part right now. When seeking medical attention, no one is concerned about whether or not he can afford it, because medical services are free in the USSR. Education too is free, in all schools—even the specialized secondary schools, colleges and professional schools. These and many other material and cultural values are distributed free out of the public consumption fund. As the communist economy develops, the role and significance of this fund will grow and eventually will cover all the people's requirements.

students' MECCA

Only students in good physical condition are permitted to go to the virgin lands to work.

An amateur photographer's paradise! Many of the students produce excellent documentary films which they show at special exhibitions when they get back home.

Young people from Moscow University and the Institute of Radio Electronics and Mining Electrical Engineering are about to take off on their big adventure.



"We'll write often," they promise. It's a long way from home and she'll be gone two and a half months.

Foreign students in the USSR are as responsive to the call of the wide open spaces as their Soviet friends.

BY YURI VEDENSKY

PHOTOS BY YEVGENI TIKHANOV

TSELINNY, virgin land territory, is no longer pioneer country. Millions of acres have been plowed up, the big state farms are growing apace and so are the families of settlers. But there is still plenty of work to be done. As they have in previous years, students from Moscow, Leningrad and Kiev—18,000 of them—spent their two-month summer vacation building houses, clubs, barns and workshops for farms in the territory.

Early in the spring the students sent their representatives to the state farms to negotiate collective agreements. The students work in teams, and individual earnings run from 120 to 150 rubles a month. The farms provide accommodations and meals at minimum cost. Three meals cost 50 to 75 kopecks a day.

However, it is not the money that seems to attract students to the virgin lands. Manpower is in high demand all over the country, and there is no need to go that far for high wages. But these work trips to remote places and to top-priority construction projects have come to be the fashion, the thing to do. A student who hasn't feels that he has missed something. "And he has," says a veteran summer vacation farm hand. "It wasn't an easy two months, but I wouldn't have missed the experience for the world." ✶

There'll be time for fun too, and musical instruments and sports equipment are part of the standard baggage.

PUBLIC DISTRIBUTION

BY PAVEL MSTISLAVSKY*

How its material and spiritual goods are to be distributed has been a problem for all societies. Many social scientists think distribution is the key to economics. One great economist called it the shiny right side of the medal of property and therefore of the entire social system.

Whatever the reader's estimate of the place of distribution in the economic scheme, we trust he will find this article rewarding. It is a verbatim report, somewhat abridged, of a student seminar at a Moscow college led by Pavel Sergeyevich Mstislavsky.

Dr. Mstislavsky: Today we shall consider how our society will make the transition to the communist method of distribution—distribution according to needs. The importance of distribution to society is apparent. The ancients said: Your stomach gets what is in your bowl, meaning that distribution determines your standard of living.

Our progression toward communism is changing many aspects of life in our society. We have discussed some of them at previous seminars. Today we shall examine a world-historic process, a principle that mankind has for centuries dreamed of bringing into play.

This will be our procedure. First we shall discuss the meaning and significance of distribution according to needs, then the conditions and prerequisites for the transition to communist distribution and how they will gradually be created, and, lastly, the forms of distribution and their development during the period of transition to their higher phase of communism.

Who wishes to speak on the first point?

The Meaning and Significance of Distribution According to Needs

A:**"From each according to his ability, to each according to his needs" is a principle of communism anyone can understand. It means that every able-bodied person works for the good of society, honestly and conscientiously, to the best of his ability and the extent of his strength, and that his material and cultural needs are satisfied by society free of charge. Society gives him what he needs from publicly-owned shops and stores, in the quantity he requires and of the quality he desires. That is what I understand the Program of the Communist Party of the Soviet Union to mean when it says that each individual will be provided with whatever he needs for his growing requirements and personal tastes and wants.

Dr. Mstislavsky: That is right, Communist distribution assumes that every person will have the freedom to choose the quantity, quality, type and style of goods he wants.

B: I don't think the communist principle should be interpreted in that way—that each works to the extent of his strength. That would mean a workday without limits, not the same for everybody. It would be a long workday, at any rate. With automation taking over more and more of the hard labor, people are able to work 12 hours a day. I think we should qualify that and say 'within the limits of the established short workday.'

C: I think the length of the workday could be different for different people.

Dr. Mstislavsky: The principle "from each according to his ability" naturally means there could be workdays of different lengths. But if production is to be integrated and rhythmic, the workday, a short one, of course, will have to be the same for the great majority of people, and its length will have to depend on society's requirements.

D: Won't people use the excuse of not being very efficient to do the very minimum amount of work, and the excuse of "individual needs" to take ten times more than they really need?

E: That would be easy to prevent. Strict account could be kept of how much a person works and how much he takes. We might even set limits to the amount a person could take.

F: That won't be enough to stop them. And what are we going to do with those who refuse to work at all and still grab as much as they can?

E: Censure them publicly and then punish them.

Dr. Mstislavsky: I do not go along with you on the severe measures, the limitations and punishments. Free choice means that there is no limit, no rationing, no threat of punishment. That, of course, does not mean that public opinion will put up with the glutton and the grabber. But this is not enough. The question **D** has raised is serious, and we shall return to it when we discuss the conditions necessary before we can distribute according to needs.

F: There is something I don't understand. We say that communism is a social system under which all people are completely equal socially. But we also say that everyone is completely free to consume as much as he wants to. That means some will consume more than others. Where's the equality?

Dr. Mstislavsky: Marxism has never interpreted social equality to mean reducing people's tastes and requirements to the same level. Lenin spoke scornfully of a professor who tried to equate communism with leveling. Naked egalitarianism was something that religious sects and petty bourgeois ideologists preached, never the Marxists.

G: It seems to me that equality should not be measured by the yardstick of so many pounds or units consumed. What is important to people is not the number of pounds or units they take, or even their quality, but how much and how well the goods satisfy their particular needs.

Take our family and our neighbor's family. My father makes 50 per cent more than our neighbor because he does harder work. I have a scholarship. But look at our needs. Father is a big man, tall and heavy, and the work he does requires a lot of energy. I'm built like him, as you can see. Dietitians say we need more than the normal quantities of food. We also pay more for our clothing because we take larger sizes. But more important than that is the fact that there are six in our family and only two in our neighbor's. It is easy to see that proportionately the needs of our family are not so well satisfied as those of our neighbor's. To be fully equal we should be getting things in accordance with our needs. That would be communism and be really just.

Dr. Mstislavsky: Quite right. Equality does not mean reducing tastes, needs and consumption to the same level but seeing that everyone's needs are completely satisfied. I don't quite understand what you mean by "really just," however.

G: When I said that communist distribution according to needs would be *really*, just, I did not mean that the socialist distribution we presently have, distribution according to the quality and quantity of work performed, is unjust. Under socialism distribution according to work, puts an end to the glaring differences in the living standards of people in societies where those who own factories, land and the like are able to appropriate the fruits of the

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**For brevity's sake we designate the students as A, B, C, etc.

labor of others. Still, socialist distribution has its defects. I pointed them out when I compared our family with our neighbor's family.

Dr. Mstislavsky: Your example might be considered an exception.

G: Oh, but it isn't. When you have distribution according to work, those who are mentally and physically less capable are certain to have a lower living standard. Even when wages are the same, the man with a big family can't live as well as the man with a small family or the bachelor. That's why distribution according to needs is more just. That's why we are working toward that goal.

Dr. Mstislavsky: That's true. But your belief stems from what you hold to be ideal and just. A businessman, since he has the capital, would probably tell you that distribution according to capital invested is just. Let's look at it from another angle. Are there any ideals and principles all men subscribe to that justify distribution according to needs?

H: The Party Program embodies ideals all men subscribe to—peace, work, freedom, equality, fraternity, universal happiness. It wouldn't be hard to show that distribution according to needs is entirely consistent with those ideals. If everyone could satisfy his needs, there would be no quarreling over material security, no envy. That would provide a better climate for peace and fraternity. It would give man more freedom. We've spoken of equality. As for happiness, it goes without saying that a man is happier when his needs are satisfied.

Dr. Mstislavsky: It's a good answer but only in terms of logic. Does history confirm any of what you have said?

I: While I was preparing for the seminar, I got to wondering who had first suggested the idea of distribution according to needs and how popular the idea had been. I ran through a number of books on the history of socialist thought.

Dr. Mstislavsky: What books did you look through?

I: Volgin, Kautsky and Plekhanov.

Dr. Mstislavsky: And what did you find?

I: That the Greeks used the idea of distribution according to needs in their legend of the Golden Age and in their fanciful descriptions of distant lands, the islands and kingdoms of the Scythians. Later we find the idea in Plato, and then in the Christian teachings. For instance, Acts 4:32-34 has a description of the first commune in Jerusalem where "they had all things common . . . and distribution was made unto every man according as he had need." The same idea of the commune taking care of all the needs of each person is also found in the Middle Ages. Sir Thomas More's *Utopia*, written in the sixteenth century, gave the idea new impetus. A hundred years later came Campanella's famous *City of the Sun*. In subsequent periods the idea of communist distribution crops up more and more frequently in the works of various authors. There are the French writers Vera and Morellet, and the Englishmen Wells, Godwin and Owen. The idea is even more popular today. Doesn't that show that distribution according to needs is a universal ideal?

Dr. Mstislavsky: To a degree, but there were just as many writers who argued for other principles of distribution. Nor did the ancient Greeks, Plato, the Christians or the Utopians follow through consistently on the principle of distribution according to needs; they were not Communists. Plato, for instance, believed that only a small section of the population, the rulers and their guards, should enjoy distribution according to needs, certainly not the masses of the people. Plato, More and Vera even tolerated slavery. Among the ancient preachers of "all things common" were more than a few who advocated such nonsense as wives held in common, something that is altogether incompatible with scientific communism.

The significance of the Marxist interpretation of the principles of distribution according to needs is its hardheadedness. It does not base the idea on daydreams or abstract ideals, on speculation. It is a scientific conclusion drawn from an analysis of the history of mankind's development, an immutable law of history, an objective tendency, something that is sure to come about as human society develops and moves into a higher stage. History shows us that all previous methods of distribution had fundamental shortcomings or basic flaws because the corresponding society was at a low stage of development. History discarded the slave system and then the feudal method of production and distribution. In our time it has made the flaws of the capitalist method of production and distribution sufficiently apparent. Socialist distribution according to work also has its obvious shortcomings, but it will inevitably develop into the more perfect method of distribution according to needs.

J: Then why are we so slow about realizing the ideal system of distribution?

Dr. Mstislavsky: Because what fills our bowls does not fall from the sky, meaning that we must have the requisite social and economic conditions.

Conditions and Prerequisites for the Transition to Distribution According to Needs

What are these conditions?

K: The principal requisite for distribution according to needs is a level of productive forces and a labor productivity high enough to ensure an *abundance* of consumer goods and services with a short workday. If there is no abundance, there simply isn't enough to distribute according to needs.

Dr. Mstislavsky: What do you understand by abundance?

K: Being able to produce goods of the required quality in such quantity that supply will exceed demand.

Dr. Mstislavsky: That is an important point. Many bourgeois ideologists in the past, and nowadays too, for that matter, saw nothing wrong about distribution according to needs but claimed that needs are insatiable.

L: There can be no end, certainly, to the growth of needs, because if there were society would make no progress. Nevertheless, at each given moment in history people have had very definite needs which could be measured. They may be great, but they are not limitless. That becomes evident as soon as we move from the general mass of needs to specific aspects.

Take food. Scientists have long held that while we need to keep improving the nutritional structure of our food intake, there is a point beyond which the consumption of food is harmful. Superfluous carbohydrates turn into fats that weigh you down and impair your health. Food that is too fatty ruins your digestion, and so on. In clothing and footwear there are also rational limits and varying requirements.

Here and in other countries dozens of research institutes are studying needs. Approximate estimates have been made of the average quantity and quality of material goods and cultural services required by people of different sexes and ages, living in different regions, in order to satisfy their reasonable needs, with allowance made for individual deviations from the average and individual tastes. Scientists maintain that the level of prosperity must be higher than that now enjoyed by people in the United States, Britain or Sweden, say, but certainly not so high as to be limitless. Even such an aristocratic thinker as Aristotle believed there should be a limit to needs.

J: We don't need Aristotle to prove the point. Obviously there is a limit to the things we consider necessities. But what about "individual requirements and tastes"? Where do you set limits there? There will always be people who never have enough, especially when you give them freedom of choice. How are you going to convince them that this is necessary and that is superfluous?

M: Of couse we must draw a dividing line between reasonable requirements and unreasonable ostentation and extravagance. By needs and individual requirements we mean, as Marx and Engels put it, "reasonable needs," the needs of "socially-developed people." In other words, the needs of a cultured man with a high sense of civic consciousness, not those of a spendthrift or grabber.

Dr. Mstislavsky: In every period of history man's needs have had a limit. We must remember that the wrong kind of education often creates appetites that do not correspond to real needs. Greed and avarice frequently have no limits. Traits of that kind should not be confused with reasonable needs and healthy tastes. But can we disregard these traits altogether?

K: That's why I say that this scientifically computed average must allow for a reserve to cover individual deviations.

B: There must also be a reserve in case of natural calamities.

H: The possibility of error has to be allowed for in scientific forecasts, and we need reserves to cover such eventualities.

Dr. Mstislavsky: Quite right. Then there are the international factors. We need reserves for trade with other countries and in the event of international complications. But don't you think the Soviet Union has provided for reserves above and beyond the needs science tells us must be met in the 20 years between 1961 and 1980?

M: I assume it has. I know, for example, that I find nothing in the books on nutrition I looked through recommending that per capita consumption of meat in the Soviet Union should exceed 190 pounds a year, fish 35 pounds, sugar 77 pounds or fruit 220 pounds. These standards naturally differ from the American. They take into account the social and geographic characteristics of our country. The goal we are headed for is enough production to allow for an even higher per capita consumption: meat—200-220 pounds; sugar—97 pounds; fruit—275 pounds. Our press gives these consumer standards for fabrics and footwear—63 square yards of cloth a year, and 3.3 pairs of leather shoes. By 1980 the figures will have jumped to from 83 to 95 square yards of all types of fabrics and to 3.6 pairs of leather shoes.

J: What about other types of consumer goods?

M: They can also be predicted. Every family must obviously have a TV set, a radio, a refrigerator, a vacuum cleaner and a sewing machine. Is a family likely to want more than one each of these items? I read somewhere that the forecast is four radios and radio-phonographs for every three families. Then, for every ten families there should be a public TV set in addition to their own sets. There must be refrigerators for rent in addition to one refrigerator per family. With public laundries not every family needs its own washing machine, and about three-fifths of the families will not have them. Every third family will have a piano. If a family does not have a washing machine, piano or air conditioner, it will only be because it does not want them.

Dr. Mstislavsky: The forecasts you cite are made by research institutes. They are tentative, not figures from government economic plans, and are, of course, subject to change. The plans provide for reserves over and beyond predicted needs. Rationing and restrictions on the consumer are inconsistent with abundance. That is an important point to keep in mind.

What does an abundance of cultural benefits comprise?

N: An abundance of leisure time, I should think. The Party Program indicates how that will be achieved. In the current ten-year period the workday will be reduced to six or seven hours with two days off a week. Subsequently it will be made still shorter. Lighter housework and better transportation and shopping facilities, thanks to new technological advances, will also help save time.

An abundance of cultural benefits means an *abundance of knowledge*. That abundance will come with the introduction of universal 11-year schooling and a secondary specialized or higher education beyond that, free of charge, of course, for anyone who wants to go on.

(Continued on page 56)

AROUND *the* COUNTRY

HURSHID IS BECOMING A MUSCOVITE

Hurshid Ansari, an Indian boy, came to Moscow with his father and younger brother Ashar two years ago. He was admitted to Boarding School No. 69 in the new Southwest District of Moscow. The teachers and pupils helped the boy to learn Russian, and now both Hurshid and his brother speak Russian quite fluently.

Hurshid has made very good progress in school; he finished the eighth grade this spring. But though he studied hard it did not prevent him from taking an active part in sports and in the cultural life of his school. He was coached by Yevgeni Ogurenkov, well-known Soviet boxer, and got a second rating in boxing. Together with his friends he hiked a great deal and toured the historic places of Moscow and Moscow Region.

Hurshid's parents decided that their son should complete his education in the USSR, and the boy is very happy about it. He started ninth grade this fall after vacationing in a Young Pioneer camp near Moscow. Upon completion of the eleventh grade he plans to enter an institute. Hurshid has already chosen his vocation: he wants to be a television engineer.

TRUCK RACES

Across-country race of heavy trucks is an annual sports match which has become a tradition. The best drivers of Moscow compete for individual and team titles. The winner must manage to cover—at high speed and with skill and calm nerves—such obstacles as muddy forest roads, rivers and deep swamps. Trucks of different sizes took part in this year's competitions, 71 entries in all. The most interesting was the competition of 3.5-ton load-carrying trucks. The time shown by each group of vehicles was regarded as a team result.

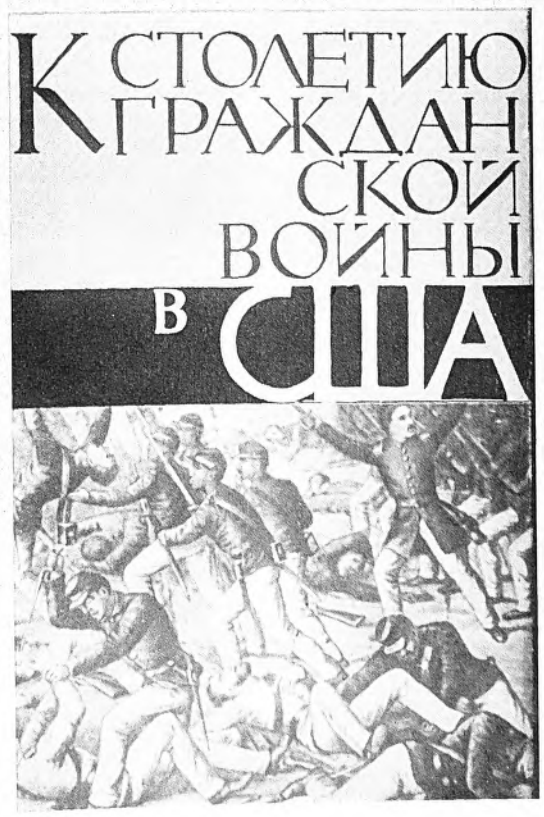
FUR AUCTION

The Thirty-fifth International Fur Auction took place at the Fur Palace in Leningrad last July, with as many as 250 representatives of the largest fur-trading firms of Europe, Asia, America and Australia present. They bought squirrel, marten, mink, kolinsky and otter pelts. The proceedings were carried on in a lively atmosphere with extensive competition and with prices exceeding those of last year's auction. The businessmen praised the evidently high quality of Soviet furs.

RUSSIAN SQUADRONS IN THE UNITED STATES

Centenary of the Civil War in the United States is the title of a book that has recently appeared in the USSR. Among the many interesting facts it contains is the account of the visit of the Russian fleet to the United States.

One hundred years ago, in September 1863, two Russian squadrons under Rear Admirals Stepan Lesovsky and Alexander Popov arrived in that country for the first time. They were sent to New York and San Francisco respectively to support the North and to prevent Britain and France from taking action on the side of the slave-owning South. Although the Civil War was at its height, Russian and American flags were displayed and enthusiastic demonstrations were organized in all the cities of the Northern states where the Russian visitors appeared. They remained in the United States nine months, until the situation changed in favor of the North and intervention on the part of the Western European powers became impossible.



SOVIET ART IN THE USA

Ever since the Agreement on Cultural Cooperation between the USA and the USSR was signed, there have probably never been so many envoys of Soviet art appearing in the USA at the same time as this fall.

On December 1 the group of Moscow Circus artists will end their tour in the United States. This was their first visit to the USA, after appearing in Europe and Asia, and it is interesting to note that last July and August an American circus enjoyed a successful tour in Moscow.

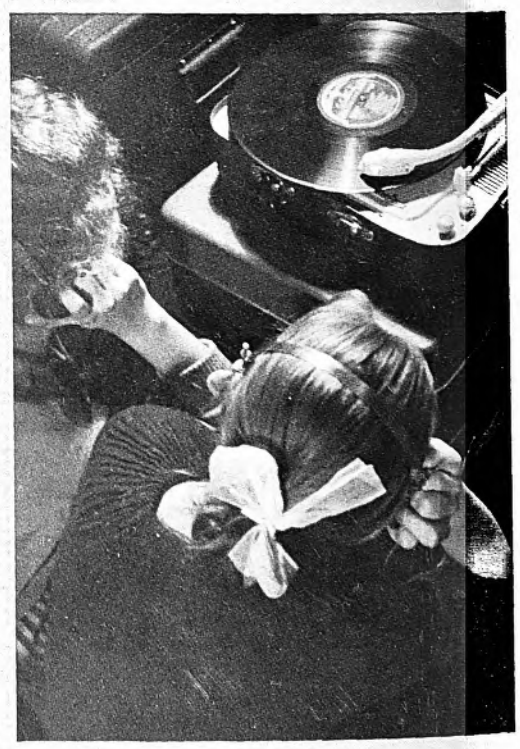
Sergei Obraztsov's Puppet Theater will give its last performance in New York a week before that.

Now in its second month in the USA is the ballet group of the Bolshoi Theater, whose tour includes 60 performances in 24 cities.

Rudolph Barshai's chamber orchestra, which appeared in the United States at the same time as the Bolshoi Ballet, is still little known in international musical circles. However, it is already very popular with music lovers at home.

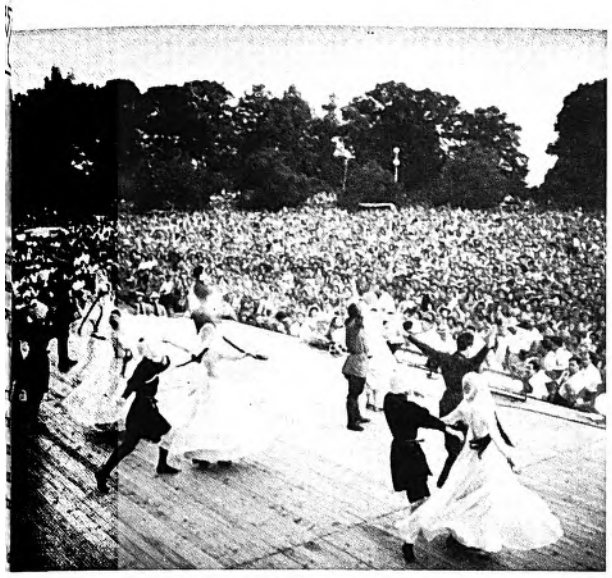
Cellist Mstislav Rostropovich, who will be in America until December 3, and David and Igor Oistrakh need no special recommendations—they are renowned throughout the world. But this is Marina Mdivani's first meeting with America's music lovers. The list of her musical victories is brief (she is only 26), but she already sports the Silver Medal of the Sixth World Festival of Youth in Moscow (1957), the Grand Prix of the International Marguerite Long and Jacques Thibaud Contest in Paris (1961), and won fourth prize at last year's International Tchaikovsky Contest in Moscow.

The tours of the Soviet artists in the USA are continuing. We should like to hope that this unique festival will reveal to the Americans new facets of Soviet art and new facets of the Soviet people's character.



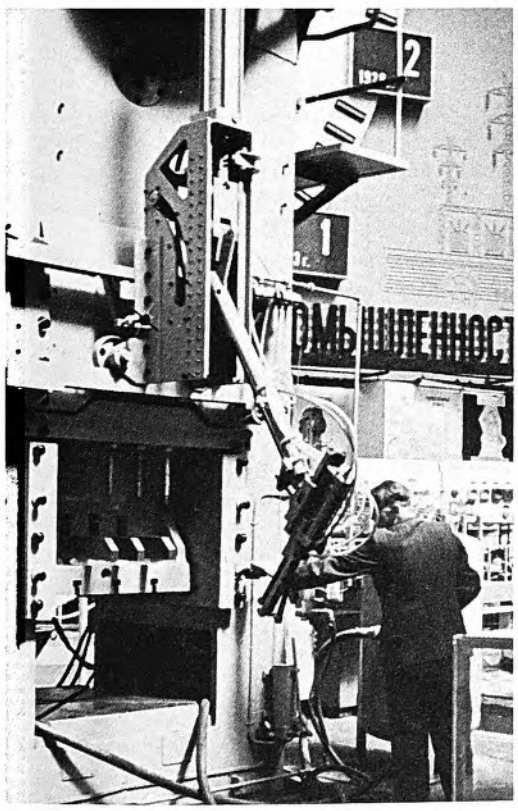
MUSIC LIBRARY

The music library in the city of Voronezh is becoming increasingly popular with the inhabitants of that city. During the three years of its existence it has attracted thousands of regular visitors. At their disposal are not only books and scores but also 25,000 recordings of the works of Soviet and foreign composers. The library is very popular with school children.



FESTIVAL IN SOCHI

A song festival was held in the southern resort city of Sochi. One of the highlights of the festival was the performance given by a 5,000-member joint chorus of all the city's amateur companies. Among the groups taking part in the festival were the State Symphonic Orchestra, with People's Artist of the USSR Natan Rakhlin conducting, the Volga Folk Chorus and the State Dance Ensemble of Abkhazia. Here you see the State Dance Ensemble of Abkhazia.



PRESS HAND

A mechanical hand attached to the front of a press bed reliably takes hold of the necessary part, bringing it under the press. Like a man's hand, it is flexible, having several joints. The merits of a press with a mechanical hand are obvious: it provides complete safety for the press operator who services several presses or even an entire automatic transfer line, thus increasing labor productivity. The mechanical hand design is a product of the Automobile Industry Research Institute. At present one is in use at the Moscow Likhachov Motor Works and at the Moscow Compact Car Works.

NEW WORLD RECORD

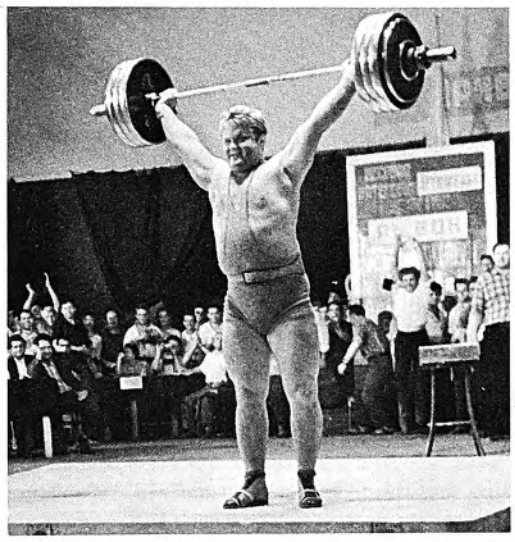
The crowd watching the weightlifting contest in Lugansk in the spring of this year saw Leonid Zhabotinsky make a record in the snatch but fail to hold it on the stretch.

The same thing happened at the International Moscow Prize meet. The Ukrainian athlete's third record bid was successful in the USSR People's Games in August.

Whereas earlier he merely looked on while two heavyweight aces of our times, Yuri Vlasov and Norbert Schemansky, vied with each other, Zhabotinsky has now joined this famous pair. In that contest the American (Schemansky) established a new world record in his 361-pound snatch.

Yakov Kutsenko, one of the leaders of the Soviet weightlifting team, believes that Zhabotinsky is capable of lifting 375-385 pounds in the snatch. Incidentally, in the People's Games the Ukrainian giant not only chalked up his first world record but also amassed a splendid total of 1,168.4 pounds, third best in the history of the sport.

Soviet heavy weightlifter Leonid Zhabotinsky is shown establishing a new world record of 363.7 pounds in the snatch.



UNDERGROUND HYDROELECTRIC POWER STATION

Both generators of the Khram-2 hydroelectric power underground station in Georgia have started to produce electricity. The station was built under the Khrami, a mountain river, in a rock excavation having a total of almost 14 miles of tunnel. The station will annually generate up to 380 million kilowatt-hours of electricity. Tbilisi, the capital of Georgia, will be just one of the beneficiaries.

INDIA COMES TO SOKOLNIKI

An Indian exhibition recently opened in Moscow's Sokolniki Park has on display more than a million articles which are the products of some 850 enterprises, both public and private.

More than 30 percent of India's enterprises have been erected with Soviet assistance. These constitute a sizable part of the new India that is now capable of turning out machine tools, aircraft and atomic reactors.

The exhibition is a kind of an accounting by the Indian people of what they have accomplished. "We want peace to make still more," they say.

SITALLURGY COMES TO THE FORE

Sitallurgy is a new branch of industry now being developed in the Soviet Union. It will manufacture a particular kind of glass in no way inferior in strength to concrete.

Professor Isaac Kitaigorodsky, one of the pioneers in the industry, informs us that the new material was obtained by scientists of the Moscow Mendeleyev Chemical-Technological Institute in cooperation with workers in the industry.

The new material was named sitall—a combination of the Russian words *steklo* (glass) and *kristall* (crystal). This is not accidental. When specially treated, the glass mass acquires a new property, *i.e.*, it is crystallized. As a result, ordinarily brittle glass becomes so durable and strong that it can be used in housebuilding, in the manufacture of roofing products, staircases, banisters and pipes.

Kitaigorodsky pointed out that no special machines are required for manufacturing sitall. It can be produced with regular glass works equipment. The expense involved in changing over to the manufacture of the new material is repaid within one to two years.

Sitall is at present coming to the fore. Experimental industrial shops are being built in two Donbas plants. By the end of next year construction sites will receive their first shipment of sitall.

MOSCOW MARKET

Central Market is one of Moscow's 45 collective farm outlets. They sold 250,000 tons of produce last year.

THE woman behind the counter waved a chicken at me. "Look at this, young man. Young, tender, fresh-killed this morning." I was tempted.

The scene was the Central Market in Tsvetnoi Boulevard, the biggest and most important of Moscow's widespread chain of markets. This is where collective farms sell what is left over after they have filled their contracts with the state. Here you can buy anything raised on the land.

Who are these vendors? What sort of people are they?

TANGERINES AND MUSHROOMS

There's Ivan Baskakov, selling fruit and vegetables for the Lenin Collective Farm near Gorky, some 25 miles from Moscow. Fifty-eight years of age, thin and with a keen, dry sense of humor, he told me with obvious pride that he'd often seen the great leader Lenin.

Bekmirza Radzhabov has traveled about as far as any ordinary person does in a lifetime to sell pomegranates, tangerines, dried apricots and poppy seed. He comes from a cotton-growing collective farm near Andizhan, eight hours by train from Tashkent, in Uzbekistan. He's 50 and a friendly man.

Plump 60-year-old Nadezhda Ivanova did her utmost not to be photographed. Giggling like a schoolgirl, she hid behind the long strings of dried mushrooms she was selling.

SUPPLY AND DEMAND

We went to Nikolai Kislyakov, deputy chief of Moscow's market system, for answers to our questions. He has a big job. Moscow has 45 markets. More than 500,000 individuals and 115 collective farms sold close to 250,000 metric tons of produce last year.

I asked how the market setup differs from that of the state. The basic difference, he said, is that the prices in the market are not fixed; they change with the supply and demand. Representatives of collective farms are usually instructed to sell at a particular price, or have to get the farm board's permission otherwise. Naturally they keep a wary eye on what their competitors charge.

Ample precaution is taken to guarantee the quality of the produce sold. All sellers must have a certificate from their local area testifying that the food is wholesome and up to standard. Then it has to pass another test at the market's laboratory before the seller is issued the certificate without which he cannot get a stand.

Seventeen of the markets have hotels attached for the convenience of out-of-town vendors. We looked over the one connected with the Central Market. It has very reasonable accommodations (70 kopecks a night) for 120 people in tidy two- and four-bed rooms. Two new markets, planned to open this year, will have hotels accommodating 190 people each.

SUPPLEMENT TO STATE TRADE

If new markets are being opened, we asked Kislyakov, does that mean the market system is slated for a more important place in the retail scheme? No, he said. The market system only supplements the state trade system, and in 1960-61 accounted for only four per cent of the country's total food sales.

In his office Alexander Visokosov, director of the Central Market, was answering a phone call from a collective farm 75 miles from Moscow asking that a truck be sent over to pick up a load of vegetables they wanted to sell. This was a common practice, he said, and was done either by a collective farm officially or by a group of individuals. The market is paid when the produce is sold. He had already sent eight trucks out that morning; the usual daily number was about 12. The markets have a fleet of 280 trucks. Frequently the collective farms use their own trucks.

MORE THAN A MARKET

Visokosov, a twice-wounded war veteran and retired army officer, showed us around the buildings. The rear section was pretty old, but a modern brick and glass structure in front housed, in addition to the large fruit and vegetable market, the hotel, a restaurant and a well-stocked department store.

In the meat laboratory we watched Maria Khoklova, head of the section, and assistant Alla Kravchuk checking meat under a microscope.

We threaded our way back through the thick crowds of Sunday shoppers in the various sections—meat, potatoes, milk, fruit, vegetables and flowers—with their hundreds of vendors. They pay a daily rental of 50-60 kopecks for the stands, and for that same amount they also receive the required white coveralls, trays, knives, scales and anything else they need.

Courtesy of the weekly Moscow News

In addition to food stalls, the market also houses a restaurant, hotel and department store.

HYDROFOILS

FROM TIME IMMEMORIAL boatbuilders have looked for ways to speed up their river and seagoing craft, the problem being to cut down water resistance.

As far back as the last century someone had the idea of using foils to keep ships riding high in the water. Designers in Gorky headed by Rostislav Alexeyev, a Lenin Prize winner, translated the idea into fact; they built a variety of Soviet hydrofoil ships.

What are these foils and what is their principle of operation? They are wing-like plates attached to the ship's hull. As they move through the water, they develop a heightened pressure on their lower surfaces and a lowered pressure on their upper sides. This produces a lift similar to that in an aircraft.

The foils are attached to the lower part of the hull by solid struts that are streamlined. As the ship's speed increases, the lifting power also increases and gently raises the hull out of the water, thereby lessening the resistance and further increasing the craft's speed. The entire hull finally rises above the water. Now the power of the propelling agent is used only to counteract the resistance of the water to the foils and struts, as well as the air resistance.

When the engine is started, the craft moves with the hull submerged because the foil's lift is insignificant at low speed. As it increases, however, the ship rises first on the fore foil and then on the aft. The entire hull leaves the water when the craft reaches full lifting speed. The sharp drop in the water resistance makes for much greater speed.

There are different arrangements of foils in use: stairwise, V-shaped and flat or slightly submerged. In still another, the aft foil remains submerged while the fore one glides over the water.

The arrangement most widely used in the Soviet Union is the one with slightly submerged foils, as in the first Soviet hydrofoil motorship Raketa (Rocket). Its slightly submerged foils are arranged beneath the hull, fore and aft, without protruding beyond the beam. Motorships of this type, as well as similar craft with a reduced draft, are in serial production and ply all the major rivers of the country.

Travel by hydrofoil motorship is often faster than rail. It takes about 20 hours, for instance, to go to Kazan from Gorky by train; a Raketa covers the distance in eight hours. The net cost of passenger transport on a Raketa is lower than on conventional ships or buses.

The number of Soviet hydrofoil ships keeps growing. In addition to the Raketa, the shipyards are serially turning out Meteor-type motorships, service runabouts and others. It should be noted that the Meteor has better technical and performance characteristics than the Raketa and is superior to all known foreign-built hydrofoil motorships in its hydrodynamic properties. It rises smoothly and quickly, and can be stopped promptly when moving by inertia with the engines cut. These valuable features, as well as her double bottom, make the Meteor safe for rivers with limited waterways. In use since 1961 is the 300-seat motorship Sputnik, which can skim over the water at 50 miles an hour.

Still another type of hydrofoil ship, seating 150 passengers, with an aircraft-type gas turbine instead of an internal combustion power plant, will soon be coming off the slips. The new propelling agent, though smaller and lighter, is expected to give the ship a top speed of 62 miles an hour. An inland-water freighter with a cargo capacity of 80-100 metric tons is now in design.

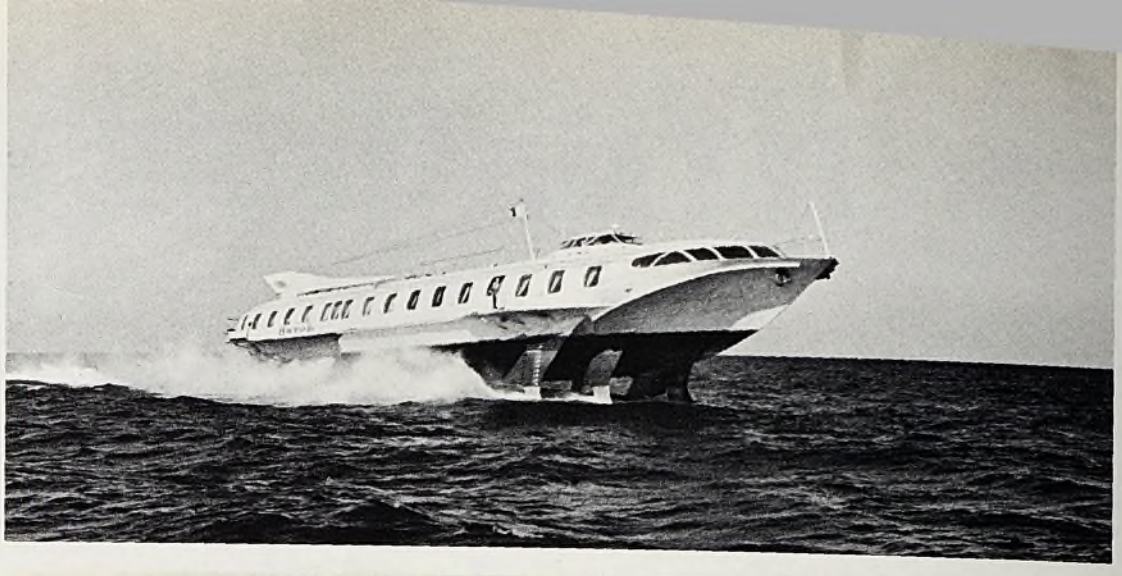
There are also three seagoing types of hydrofoils: Kometa (Comet), Vikhr (Whirlwind) and Strela (Arrow). The Kometa has a length of 115 feet and drafts of 5 feet and 11 feet on foils and at anchor respectively. An 1,800-horsepower engine gives it a speed of 43 miles an hour. The Kometa accommodates 118 to 150 passengers.

The motorship Vikhr is longer—157 feet. It travels at the same rate of speed as the Kometa but carries double the number of passengers.

Courtesy of the newspaper Vodny Transport

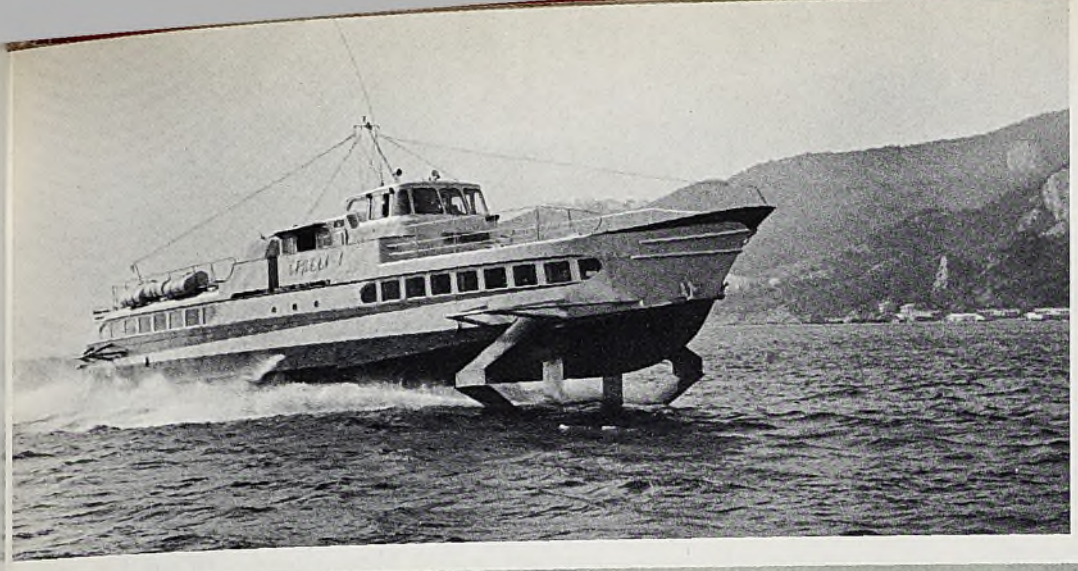
The Chaika (Sea Gull) *is the world's fastest hydrofoil river craft, capable of doing 70 miles an hour. It has a water-jet engine instead of a propeller and can accommodate 30 passengers.*

The Vikhr (Whirlwind) *is a seagoing motorship with a speed of better than 45 miles an hour. This 250-300 seater does the Odessa-Yalta run.*



The Raketa (Rocket), *the first hydrofoil, seats 66 and has a speed of 45 miles an hour. It can cover 560 miles before it requires refueling.*

A service craft, the Vesna (Spring) *travels at a speed of close to 45 miles an hour and can cover a distance of 125 miles without any refueling.*



The Strela (Arrow), *a Black Sea cruiser on the Crimea-Caucasus run, can do 50 miles an hour in a strong gale with 92 passengers on board.*

The Meteor *is a 150-passenger 50-miles-an-hour vessel. Its double bottom ensures safe sailing on shallow rivers. It is also seagoing.*

BY ILYA EHRENBURG

A GOOD BEGINNING

THE SIGNING of the treaty banning atomic explosions in the atmosphere, outer space and under water coincided with the fifth anniversary of the death of Frederic Joliot-Curie, a great scientist and a great man, who headed the world peace movement. Many thought with sorrow: What a pity he did not live to see this day!

In 1957 Joliot-Curie wrote: "If there is the need to reach agreement on eliminating atomic weapons—the destiny of entire mankind depends upon it—there is the need to stop atomic explosions right now. Competent specialists have many times seriously warned about the danger, beginning with the very first tests. . . . The danger exists also in peacetime. Should tests continue, the quantity of radioactive strontium among adults, and even more among children, would reach a quota sufficient to cause cancer of the bone and leukemia. . . . Believe me, the greatest danger threatens every one of us and our posterity if atomic weapons tests are not stopped right now."

A year before his death he sent a message to the World Disarmament Congress, held in Stockholm, which read: "Once again, and because I regard it my supreme duty, I want to emphatically declare the need for stopping atomic tests. Radioactive strontium-90 and caesium live for a long time and accumulate in plants, in animals and in the human body. Nuclear explosions create an accumulation of harmful radioactive elements which are frightfully dangerous to man even in peacetime. They cause suffering to the present generation and those to follow. At the same time he wrote in a scientific magazine: "Public opinion has been warned; it knows what danger looms over mankind and it wants nuclear explosions to be stopped." This was a kind of testament of the scientist who heard the voice of conscience; and only now, five years later, has agreement been reached not to stage poisonous tests in the air.

For many years the Soviet Union has demanded the prohibition of thermonuclear weapons and nuclear tests. It goes without saying that if the Three Powers, which were unable to reach agreement before, now broke the deadlock of protracted and futile negotiations, it is explained by a change in public opinion, a victory for all peace forces. How can one fail to remember now the role of Joliot-Curie, of many other scientists in all countries; the role of the peace movement, which emerged in the terrible years of nuclear madness and blindness, of various public movements; emerging later, the role of the efforts of scientists Einstein and Pauling, Russell and Bernal; the marches in Britain organized by Canon Collins; the women's movement in the United States; and the heroic struggle in all countries of the world, the movement organized by Joliot-Curie?

It goes without saying that the termination of deadly explosions in the atmosphere was gladly welcomed not only by scientists but also by hundreds of millions of ordinary people, fathers and mothers, Americans and Russians, Australians and Brazilians, Algerians and Burmese, British and Poles.

Every mother may now worry less about her child, and no tirades of policy makers or politicians who denounce the banning of nuclear tests in the atmosphere will make her forget that from now on her child is better protected from fatal diseases.

It is in the nature of man to think about the distant future. In this lies his distinction from the anthropoid ape. Centuries ago there was a good tradition in the Slav republic of Dubrovnik: every youth who decided to marry had to plant 70 olive trees. Olive trees grow slowly but live very long, and the man who might soon become a father would have to think about his grandchildren and great-grandchildren. What a paradox—when in recent years people have begun to explore outer space, when they dream of how their grandsons will travel to other planets, and when atomic explosions made now will have a deleterious effect on the people who will live centuries hence!

A month before his death Joliot-Curie, demanding the banning of nuclear explosions, wrote: "These tests are now an essential factor of mistrust and the cold war; this in an excessively armed world, a world in which tens of thousands of atomic and hydrogen bombs have been piled up." A ban, though partial, on nuclear tests is the first victory of the forces of peace over the forces of war. . . . What has changed, after all? Time and the growing consciousness of the peoples. When I went to America, six months after bombs had been dropped over Hiroshima and Nagasaki, I was amazed to see nearly universal blindness. Newspaper readers admired the atomic bomb. It was christened Hilda, and swim suits and ice cream of the same name were being sold. For a long time the American in the street did not understand what atomic war means. Neither was it realized by hundreds of millions in other countries. The truth is brought home slowly, but the skeptics who consider truth unwavering are not right. Gradually people began to realize that an atomic war does not resemble a war of the past—which brought not only ruin and death but also annexation and reparations—it is a catastrophe.

In 1955 Joliot-Curie said that the world had stockpiled enough nuclear weapons to destroy all life. Back in 1946 Albert Einstein told me: "If the course of events is not reversed, the whole world may be contaminated."

Scientists of all countries have done a great deal to awaken mankind to this danger. Much has been done by the peace movement, by many thousands of men and women who collected signatures under the Stockholm Appeal in towns and villages all over the world. The conference held on the initiative of Canon Collins was attended by prominent scientist Linus Pauling, British Laborites, West German pastors, American Quakers, and we all were unanimous in condemning the atomic weapons and in demanding that the nuclear weapon tests be discontinued. We also found a common language at round table sessions attended by statesmen, among them experts in the disarmament problem—Noel-Baker, Jules Moch and others. Gradually people having only a vague idea of nuclear physics began to understand that war, which was murder yesterday, is suicide today. The Communists knew that the use of nuclear weapons is not a way of proving the superiority of a new social system over the moribund one, and that even if hundreds of millions of people survive in some countries after a nuclear war, they would be pushed right back to the primitive era. As to the adversaries of communism, they have grown aware that atomic disaster will be universal and that there is no preserving capitalism by killing both capitalists and workers.

The hostile stand taken by the Government of the People's Republic of China regarding the nuclear test-ban treaty came as a surprise to hundreds of millions, and though it tried to substantiate its position by lengthy documents containing an endless number of paragraphs ("First . . ., Second . . ., Twenty-second . . ."), it expressed its indignation rather than its reasons. This is all the more surprising and regrettable since China is a socialist country, since its government keeps talking about its internationalism, and, finally, since this government represents a great people who have made a great contribution to the development of world civilization, a people traditionally very peaceful and free from religious fanaticism.

Workers in the peace movement have been less surprised by the position of the Chinese Government. We have been having arguments with the Chinese delegates for six years now, either at the presidium meetings or at the World Peace Council sessions. I recall the discussion in 1957 around one resolution which contained the phrase: "Disputes between states must be solved by negotiation." The Chinese delegate objected and proposed that "also" should be inserted: "must also be solved by negotiation." I asked what other ways our Chinese friend saw besides negotiation. We sat over that phrase for five hours. When I told Joliot-Curie what had happened in the commission, he frowned and said: "They do not understand what the atomic weapon is. One of my pupils, a talented physicist, is working in Peking. Probably he will be able to explain it to them." Differences in the peace movement were getting sharper every year. The Chinese, who are justly proud of their country, were becoming aggressive, reasoning was giving way to insulting words.

What was the matter? Both information and responsibility were lacking. The Chinese leaders say that "American imperialism is a paper tiger." Together with poet Pablo Neruda I visited China in 1951. He liked paper tigers, which were sold at hundreds of stalls, very much and bought a score of the whiskered beasts. However, thousands of large hydrogen

bombs in no way look like toys. To regard an atomic world war as a war against Chiang Kai-shekites is naïve—a child, presented with a paper tiger and smashing it with a paper arrow, might reason it that way. One of the Chinese leaders said that 300 million Chinese would survive after the war and would be happy, having wiped out imperialism and capitalism for good. However, even if 300 million Chinese survived, they would be miserable among the ruins and would die from radioactive poisoning.

The Chinese Government alleges that the Soviet Government wants to have a monopoly on the talk about the atomic war and atom bomb explosions. It seems to me that nuclear physicists are the most competent people in these problems, and if the Chinese do not believe the Soviet Government, they can read what leading scientists of our time say on that score—for instance, Joliot-Curie, of whom they did not stint in their praise. He at any rate understood more about the strength of the atom bombs than the people who are talking about the "paper tiger.". . .

The Chinese leaders are setting their hopes on an atomic war while publicly renouncing it, of course. They say: "How can we strive for atomic war when we do not yet possess atomic weapons?" Their calculations are naïve: they want to remain observers in the atomic catastrophe, "victorious" survivors. However, atomic war is not a potion capable of destroying the imperialists and benefitting China. As for the constant verbose and indecent attacks levelled against the Soviet Union —which defended and defends the right of the Chinese people to live as they wish—they are rash, to say the least.

The Chinese Government declares it is criminal to ban atomic explosions; it is necessary to ban atomic weapons. It is perfectly true that atomic war is more terrible than poisoning the atmosphere with explosions. But formerly only after wars were treaties signed in which one side dictated to the other. Agreement has always meant mutual concessions because it has to be acceptable to both sides. The test ban agreement prevents the further perfection of the detestable nuclear weapon and protects future generations from being poisoned and destroyed. This is the first step, and no one said it was the last, to universal peace. This is not the end but a good beginning. It is a good thing that the time of conversation between deaf mutes has yielded to the time of negotiation. It is a good thing that one limited agreement has been signed on one limited question; it is far better than noble warnings and ultimatums consisting of 20 or 30 clauses which, unlike rockets or bombs, really constitute a heap of paper.

The Chinese people's Peace Committee is circulating letters and leaflets directed against the peace movement. The authors of these letters and leaflets have obviously forgotten what the defense of peace means and what atomic war means. The peace movement has to develop more extensively the struggle of the peoples for further negotiations, for new agreements, for general and complete disarmament, which is the hope of the peoples. We are not fighting against paper tigers and paper arrows; we are fighting against the hateful nuclear weapon, against catastrophic war, for the future of all children—Soviet, Chinese and American. The peace movement is not a political party; it includes followers of communism, moderate socialists and defenders of bourgeois democracy, and one thing unites them all—the desire to avert war, to adjust peaceful relations between states on different continents, with different systems, with different skin coloring of their inhabitants. Among us there are neither racists nor people ready to prove the superiority of one system over another to the detriment of all. For us the Moscow treaty is neither an honorary certificate nor a respite but a source of strength in the struggle for peace, for general disarmament. There are countries where our friends are persecuted. There are countries where we are slandered. But truth is not a stay-at-home; it will reach out to all.

Courtesy of the newspaper Pravda
(slightly abridged)

THE ESSENCE OF DIFFERENCES

Many readers ask: What is the essence of the differences between the Soviet and Chinese Communists? Here some important aspects of the discussion are clarified by Boris Vladimirov.

TO BEGIN WITH I have to mention that the above question is somewhat misleading. The differences exist not just between "Soviet and Chinese Communists," but between the world communist movement, including the Communist Party of the Soviet Union, on the one hand and the leadership of the Chinese Communist Party and a handful of their followers on the other.

The essence of the contradiction lies in a different understanding of the character of our epoch and subsequently in different approaches to the goals and activities of the world communist movement.

There are now two main social systems in the world—socialism and capitalism. We believe that further developments will lead the other part of the human race to the socialist way of life as well. That is why we say that the main characteristic of our epoch consists of the transition from capitalism to socialism, and that the basic contradiction of the epoch is the contradiction between those two social systems.

As we see it, many ways are possible in the advance to socialism—peaceful transition among them. The socialist state, by reason of its nature, is against warfare. Therefore we necessarily stand for general disarmament, peaceful coexistence and economic cooperation and competition with all countries notwithstanding their political credos.

Chinese leaders do not believe in the possibility of a peaceful transition from capitalism to socialism. They regard as the main criterion of a revolutionary spirit the recognition of an armed uprising everywhere and any time. They insist that the treacherous nature of imperialists precludes any peaceful relations with them and brand any measure proposed by the Soviet Union and other socialist countries to lessen international tension as a "deceit," a "betrayal" of the interests of the socialist countries.

To them the surest way to the victory of communism is world war. But their mistaken concept of war and peace is a separate topic. Now it suffices to say that their own foreign policy smacks of adventurism which endangers world peace.

The Communist Party of the Soviet Union and fraternal Parties do not cherish any illusions as to the nature of imperialism. But we believe that the peace forces are stronger now than those of the warmongers and that they can prevent the unleashing of world war.

Chinese leaders do not see the socialist camp as a basic leading force in the social transformation of human society. They proclaim that the main contradiction of our time is not between socialism and imperialism, but between the national liberation movement and imperialism. They proclaim that the outcome of the socialist world revolution hinges on the outcome of the revolutionary struggles of the peoples of Asia, Africa and Latin America.

The national liberation movement is indeed part and parcel of tbe world revolutionary process. It shatters the colonial system, it undermines imperialism and in this way facilitates the world's transition to socialism. But the socialist camp still remains the *decisive factor* of the social developments of our time. What the Chinese leaders are doing is tantamount in fact to isolating the national liberation movement from the international working class and socialist camp. This would inevitably lead to weakening both the national liberation movement and the world revolutionary movement as a whole.

Moving on to communism means—among other things—broad democratization of social and political life. The conditions which necessitated a dictatorship of the proletariat in the Soviet Union have disappeared and the Soviet state has become a socialist state of the entire people. Chinese leaders insist that a dictatorship of the proletariat should be prolonged.

The Soviet people now live better and enjoy the benefits of socialism. The Chinese leaders see in this latter fact the "bourgeoisification" and "degeneration" of Soviet society. It appears, judging by their logic, that if people walk in bast sandals and eat watery soup from a common bowl—this is communism; and if a workingman lives well and wants to live even better tomorrow—this is tantamount to the restoration of capitalism.

We have done away with the cult of personality. Chinese leaders have taken upon themselves the role of defenders of the personality cult, the role of disseminators of Stalin's erroneous ideas.

Chinese leaders try to cover up all mentioned and many more unmentioned mistaken views and practices with numerous quotations from Marx, Engels, Lenin, claiming to be the only true Marxists. But they use the words of Marx and Lenin out of their context without any consideration for time and existing conditions. And Lenin himself stated that any abstract truth, when it is applied without analyzing a given concrete situation, becomes a general phrase. It is the surest way of discrediting the most correct idea. Thus Chinese tbeoreticians use the letter of Marxism-Leninism to distort the spirit and essence of Marxism-Leninism.

To Soviet Communists Marxism is not a collection of once-given and long petrified dogmas. Life is ever-changing, new conditions emerge and new problems appear. The founders of Marxism have formulated general laws of social and economic development, but they did not give us ready-made answers to all the questions. At the Twenty-second Party Congress Nikita S. Khrusbchev said: "We are advancing along uncharted paths. We have to elaborate a large variety of problems arising in the course of communist construction, to develop and give concrete expression to theoretical propositions."

To sum up: The Communist Party of the Soviet Union and fraternal Parties stand for a living, developing Marxism. And the general line of living Marxism of today is in brief the struggle for peace, democracy, national independence and socialism.

Chinese leaders stand for do-it-yourself mistaken teachings which they proclaim as Marxism and, led by those teachings, deviate quite far from the general line of the world communist movement. ★

ASSISTANCE UNPRECEDENTED IN HISTORY

By VLADIMIR TANDIT

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FROM THE FIRST DAYS of the existence of the People's Republic of China (PRC) the Soviet Union established with this young Asian socialist state close economic ties based on cooperation, fraternal mutual assistance and full equality.

It is not for the sake of bragging that we remind the reader of certain facts regarding Soviet-Chinese economic relations. The PRC leaders have been preferring of late to gloss over the matter of Soviet aid to China, have been increasingly forgetful of what they themselves had to say on that subject not so long ago. In his speech at a reception on the occasion of the thirteenth anniversary of the establishment of the People's Republic of China, former PRC Ambassador to the USSR Lu Hsiao pointed out that "in the matter of revolution and construction the Chinese people got assistance and support on the part of the Soviet people. We highly appreciate this support and assistance, and shall never forget it."

It is something hard to forget indeed. In every province of the People's Republic of China, at any large industrial enterprise, on the state farms of the Northeast and in the mineral-rich mountains of the Southwest, at the Anshan blast furnaces, in the shops of the Changchun Motor Works, on the bridge across the Yangtze River and in the East Coast ports, at the experimental nuclear reactor in Peking, on the cotton plantations of Sinkiang—everywhere you will find vivid proof of the disinterested "assistance of the big Soviet brother," as the Chinese themselves called it, an assistance tremendous in depth and scope.

Each of the 198 industrial projects erected in the PRC with Soviet assistance is a big industrial enterprise or installation, the last word in design and equipment.

The Anshan Steel Plant, which annually turns out six million metric tons of steel, was fully reconstructed with Soviet assistance and has no equal in Asia. Other steel enterprises of the PRC, including the huge Wuhan and Kaotow complex, were also built with Soviet technical assistance. Altogether the enterprises built in the PRC with active Soviet assistance are responsible for one-third of the cast iron and two-fifths of the steel produced by that country. The overwhelming majority of these enterprises are second to none in efficiency and output capacity. A major contribution to the industrialization of China was made by the Wuhan Heavy Machine-building Works, the Loyang Tractor Plant, the electric stations in Taiyuan and Hsian, the chemical plant in Chilang, and many others. Soviet organizations provided these projects with complete sets of equipment, supervised their assembly, and put the enterprises into operation. Thus thousands of Soviet specialists helped the Chinese people build a socialist economy.

Credits and loans for the restoration and development of the national economy were another effective form of Soviet assistance to China. In February 1950, the USSR granted the PRC the first credit (in the sum of 300 million U.S. dollars) on extremely favorable terms. These and other credits granted by the USSR made it possible for the PRC to buy from the USSR everything needed for its industrialization. In payment China sent the USSR traditional export items and raw materials.

In the period 1955-61 the USSR exported 2.1 billion rubles' worth of machinery and equipment to China. Knowing that Chinese industry and agriculture were in dire need of fuels and lubricants, the USSR increased its oil and oil product deliveries to the PRC from year to year. Their annual Soviet export to China (2.4 million metric tons) was equal to more than half of China's own production of these materials.

Incidentally, the blame for the reduction of the foreign trade turnover between the USSR and China rests entirely with the Chinese leaders, whose general economic policy has had an adverse effect on Soviet-Chinese trade.

It is common knowledge that in 1961 the USSR showed a sympathetic understanding of the temporary difficulties China was experiencing at the time when it granted the PRC Government permission to repay its 1960 debt in five-year installments interest-free. And was not the transfer to China of the Chinese-Changchun Railway, the naval base in Dalny, and the Soviet shares in the Soviet-Chinese corporations a remarkable example of the USSR's loyalty to the principles of proletarian internationalism? Only 9-10 years have passed since then. Is it not too early to forget about these friendly acts of the Soviet Union?

The transfer to the PRC of 21,000 Soviet sets of scientific and technical documents, including those for more than 1,400 large industrial enterprises, played a tremendous role in the development of the Chinese national economy. The long list of China's new industrial items published in the statistical reference book *The Glorious Decade* mostly features manufactures of Soviet design: large blooming mills and excavators, precision vertical lathes and bridge cranes, hydroelectric turbines and powerful transformers, sea-going ships, and equipment for the manufacture of mineral fertilizer.

The Soviet Union rendered China tremendous assistance in the training of scientific and technical personnel. About 8,000 Chinese engineers and qualified workers underwent production training and received specialized education in the USSR. Some 10,000 Chinese youths and girls graduated from Soviet higher educational establishments. Many Chinese scientific workers received their degrees in the USSR.

It is difficult to give a general appraisal of the economic effect Soviet assistance has had on the Chinese economy because of its extent and diversity. The Hong Kong magazine *Far Eastern Economic Review* cites the figure of 7.8 billion dollars. We won't argue about that. Even a mere enumeration of the facts pertaining to Soviet-Chinese economic relations shows that never before in world history has there been an example of one country rendering another such great assistance for the development of its economy, science and technology. ★

THE COMMUNIST WAY

STORY AND PHOTOS BY ANATOLI RUSSOV

WORK on the Voronezh Electrosignal Radio Plant began in February 1931. That was when the first giants of Soviet industry—the Rostov Farm Machine Plant, the Moscow Motor Plant, the Irtysh Copper Works and the Chelyabinsk Tractor Plant—were starting production and when the Makeyevka Iron and Steel Works was building the first Soviet blooming mill.

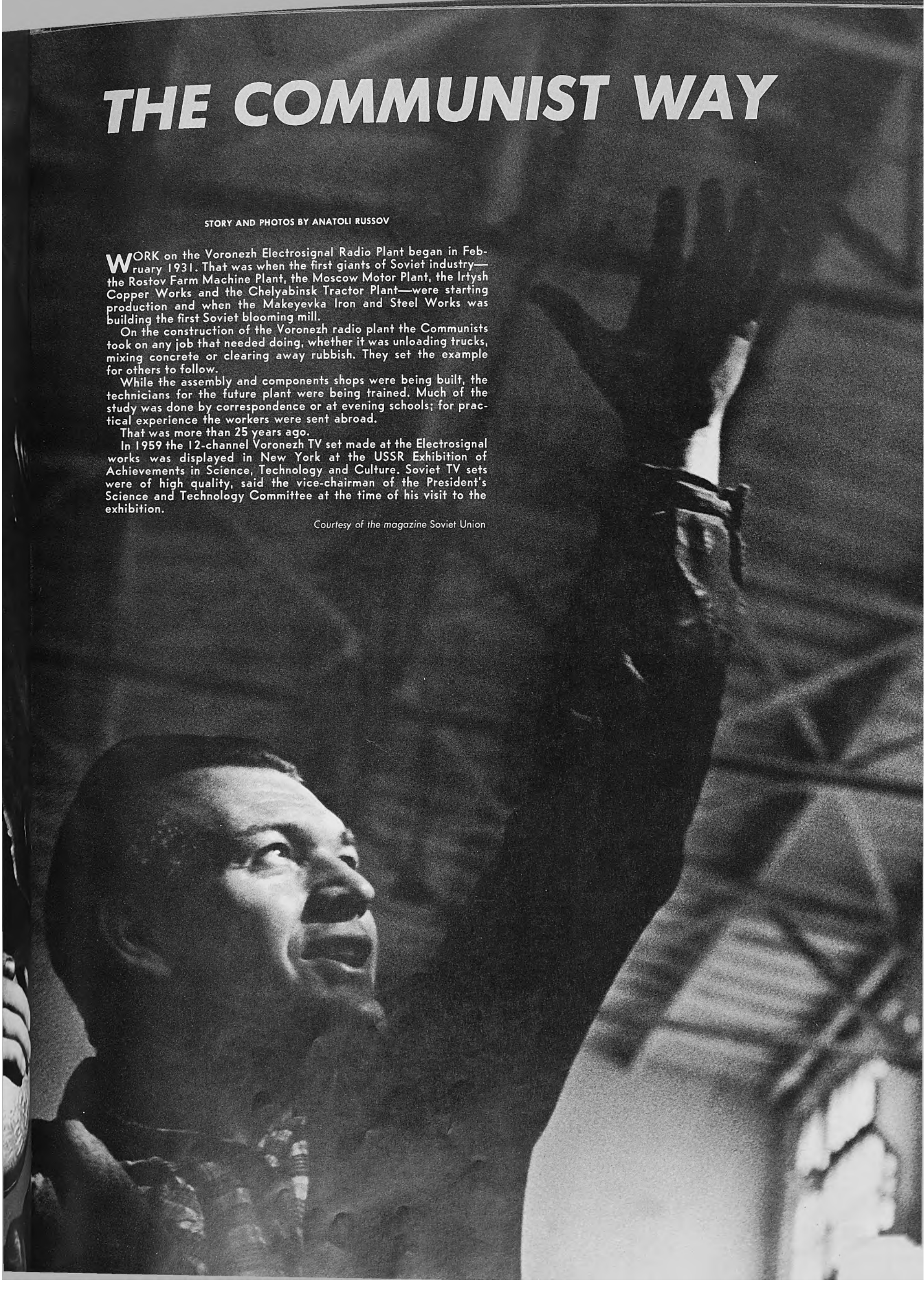
On the construction of the Voronezh radio plant the Communists took on any job that needed doing, whether it was unloading trucks, mixing concrete or clearing away rubbish. They set the example for others to follow.

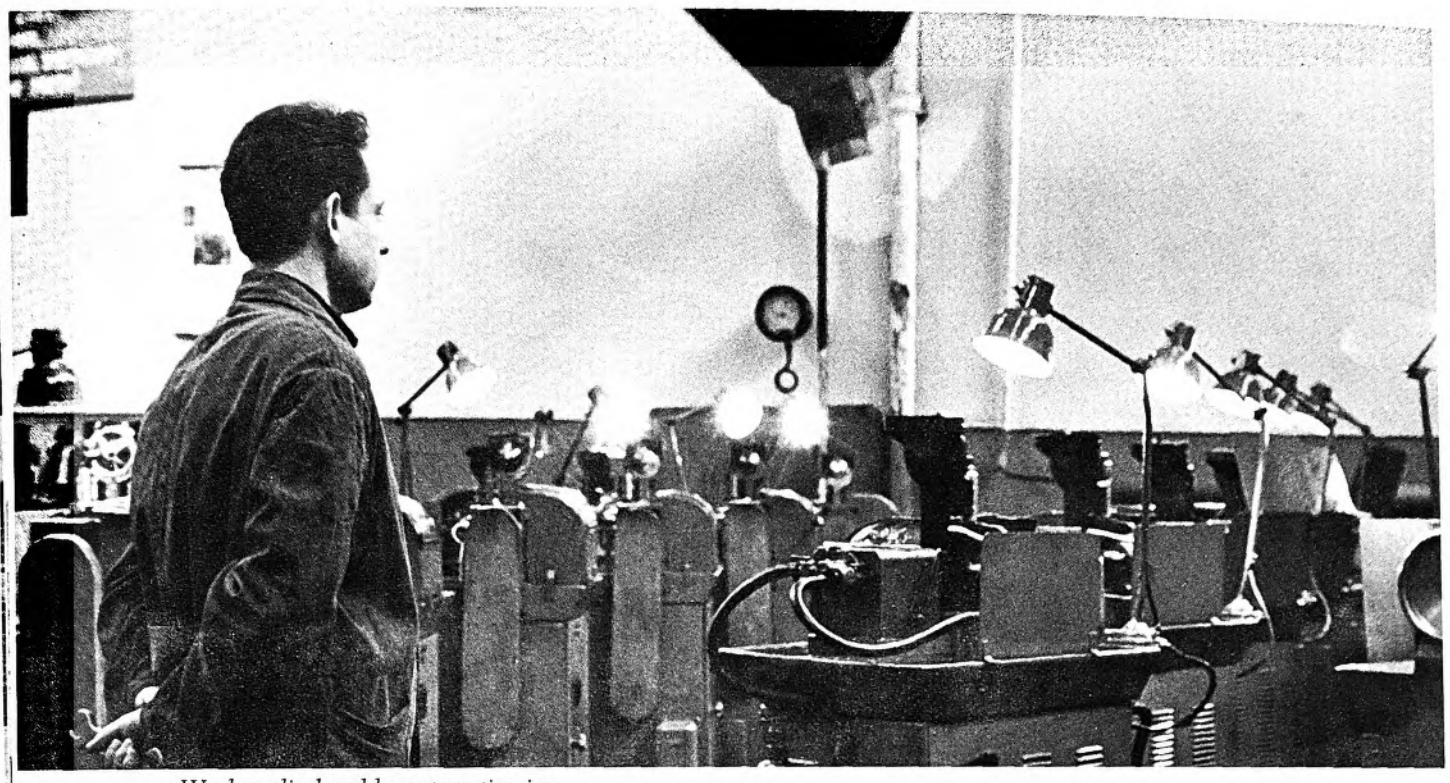
While the assembly and components shops were being built, the technicians for the future plant were being trained. Much of the study was done by correspondence or at evening schools; for practical experience the workers were sent abroad.

That was more than 25 years ago.

In 1959 the 12-channel Voronezh TV set made at the Electrosignal works was displayed in New York at the USSR Exhibition of Achievements in Science, Technology and Culture. Soviet TV sets were of high quality, said the vice-chairman of the President's Science and Technology Committee at the time of his visit to the exhibition.

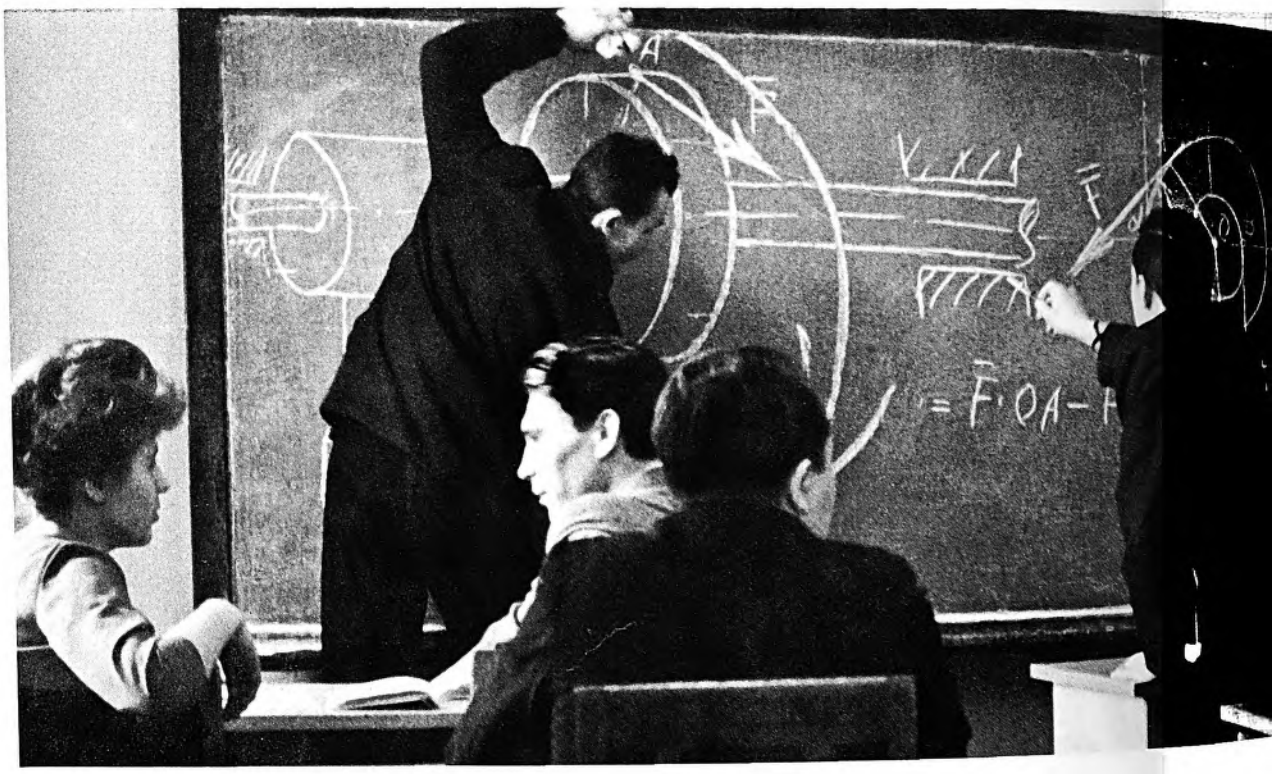
Courtesy of the magazine Soviet Union



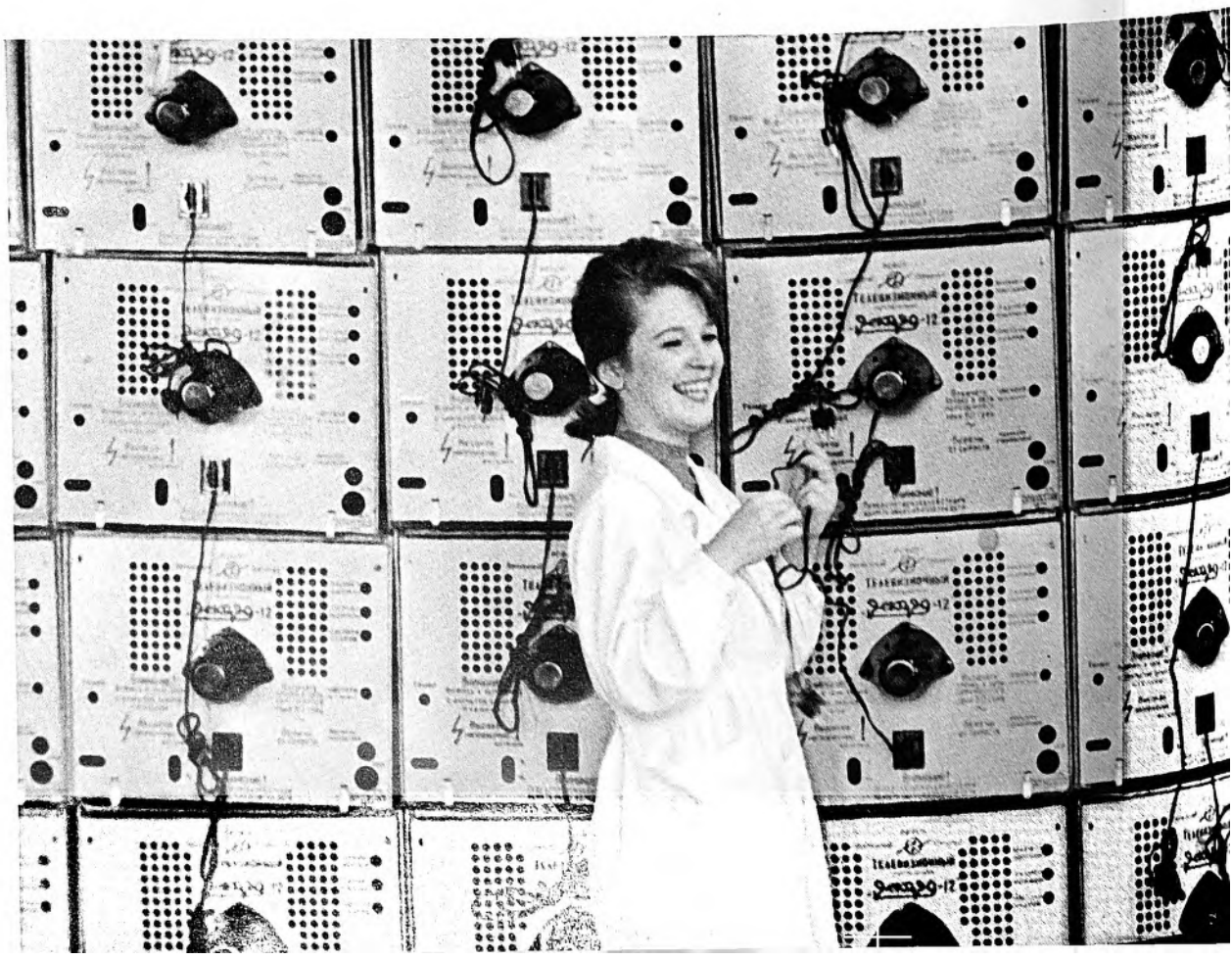


As active trade unionists, the Communists have taken on the job of automating all production processes.

Workers displaced by automation improve their qualifications at plant expense or are moved to jobs at the same pay in other departments.

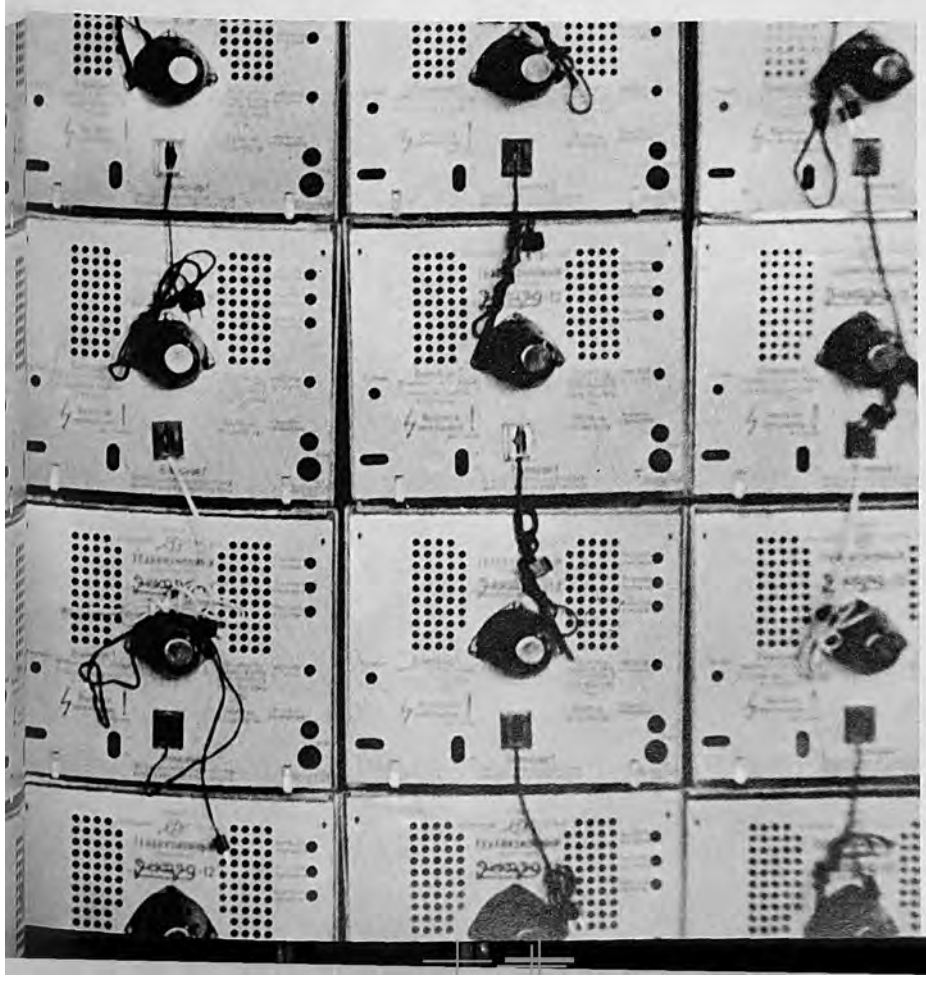


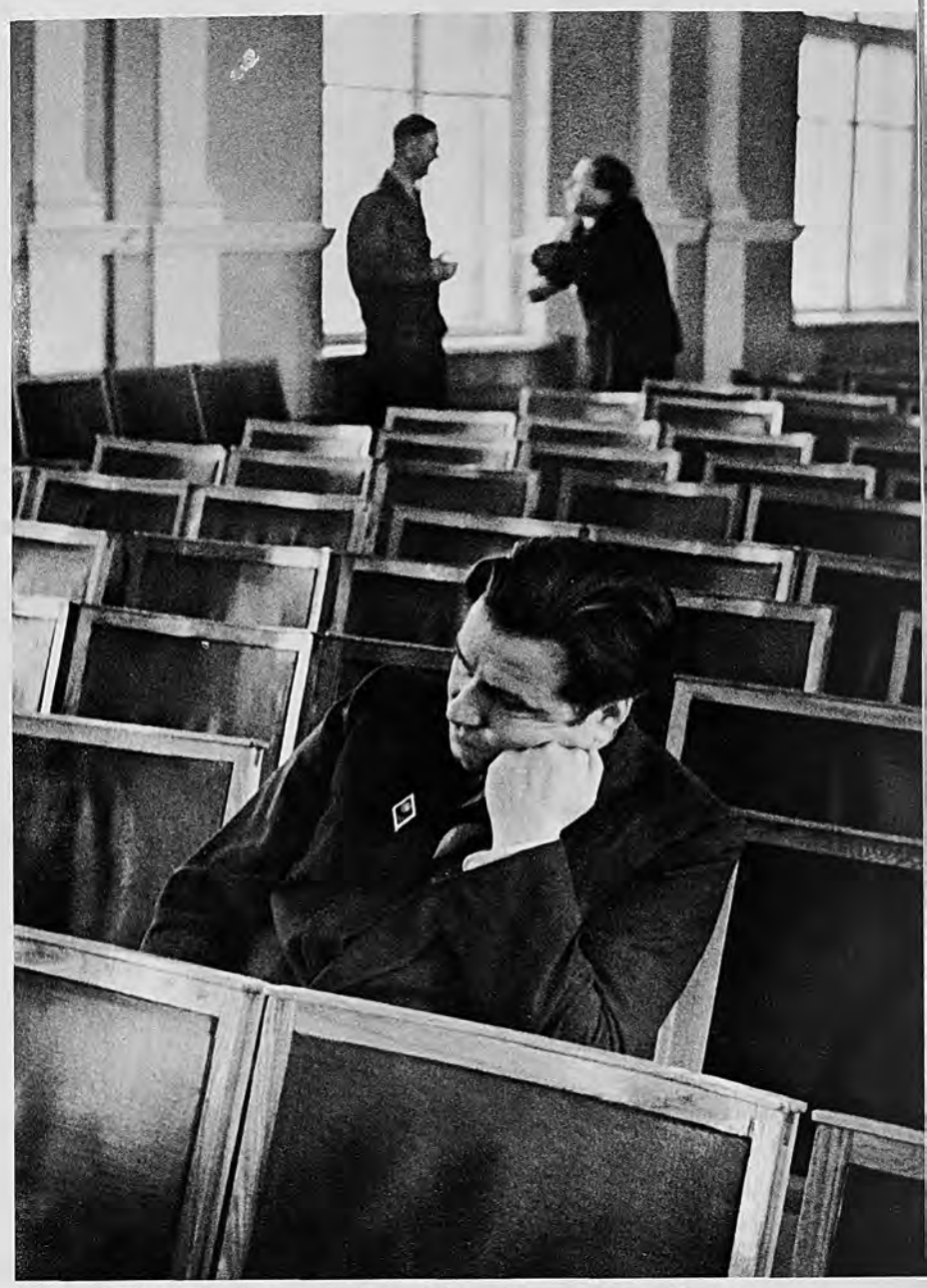
A lecture room at the Voronezh Polytechnic Institute, built at the request of plant Communists; 82 per cent of the plant staff is studying.



Nina Lesnykh is a member of a group helping the Party and State Control Committee. She checks the rear-panel assembly of television sets.

Automation means a shorter workday. The Party wants every worker, technician and engineer to have more time for study, for improving his qualifications, and also for rest and recreation.





Alexei Apalkov, the Party organizer of Shop 42, was criticized at a meeting for his poor work by both members and non members.

The plant director (right) has to answer lathe operator Alexander Salin's criticism for delaying the introduction of an innovation.

Communists make it a point to share their work experience with the others, often by inviting non-Party people to their meetings for discussion of current plant problems.

Alla Pavlova, senior superintendent and Party organizer, explains Party policy and decisions to a group of young workers.

Lathe operator Vyacheslav Podoprikhi
been admitted as a candidate membe
ideas have saved the plant a lot of m

One out of every nine workers belongs to the Communist Party. There are no special privileges, only added responsibilities, yet the best workers and engineers apply for membership in the Party.

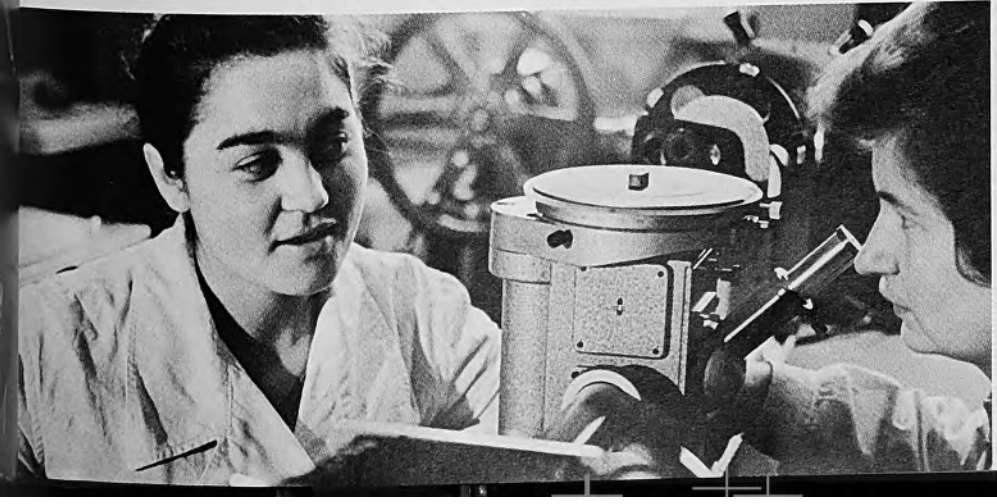
Adjuster Victor Bolotin has just bee
mitted to the Party. He is a fourth
student at the Voronezh Radio Sc

Valentina Akulova has been admitt
the Party as a candidate member. S
a press adjuster and a good union me

Reporters from the plant newspaper are getting the facts for an article on why there are occasional delays in delivery.

Engineer Yuri Shirokov has applied to the plant Party Committee for membership. His application is being discussed at a meeting.

Svetlana Pavlova is an X-ray laboratory assistant. She is an excellent worker and her application was approved by the Party.



Bricklayer Ivan Kostin is a new Party member. He is chairman of the commission that checks the quality of the plant's housing.

PUBLIC DISTRIBUTION

(Continued from page 41)

An abundance of cultural benefits also means an abundance of books, newspapers, magazines, motion pictures, television programs, stage productions, concerts, art and museum exhibitions, science laboratories for leisure-time research and the facilities for art, music, dramatics and other such activities at studios and clubs. The Party Program provides for all that.

P: How can there be an abundance of these things? Take the Bolshoi Theater Ballet, or interplanetary flight, or some new object that is not yet being produced on a mass scale. These can't be distributed according to need! What's the answer?

Dr. Mstislavsky: Nobody is going to complain if 95 per cent of the needs of the population are completely met and the remaining five per cent are met after some delay and in the interim distributed by drawing lots or according to the contribution made to society. I'm sure that people will find amicable ways of distributing that five per cent even if we are not there to advise them. Achieving an abundance of the more general needs is our problem. It is not enough simply to have a goal; we must be moving toward it. What do statistics of recent years have to say about that?

Q: I have some figures on the growth of industries producing consumer articles. The base figure of 100 per cent is for 1940.

	1952	*1958*	*1962*
Agriculture	100	156	167
including livestock farming	113	180	209
Industries producing consumer goods (Group "B")	158	277	372
including the food industry	120	199	265
light industry	145	243	300

These, as we can see, are high rates of development.

J: Aggregate figures always look better. How about the most important items of consumption, like grain and potatoes?

Q: No need to list those. Later on, when we have more animal produce, we will probably cut down on these consumer items. Here are the figures on annual per capita production of high calorie produce:

	1953	*1958*	*1962*	*1962 in per cent of 1953*
Meat (slaughter weight—in pounds)	68	81	92	135
Milk (in pounds)	423	626	637	150
Butter (in pounds)	5.7	8.4	9.3	161
Eggs (in units)	85	111	137	161
Granulated sugar (in pounds)	40	57.5	77.6	195

As you see, during the past nine years we have had a 35 to 95 per cent increase in the output of these important products.

J: But still there's a shortage.

Q: Yes, to satisfy the full demand for animal produce we must raise meat and egg output another 150 per cent and milk almost 100 per cent. This we plan to do during the next 10 years. We have discussed how that will be done at previous seminars.

As for clothing and footwear, here are figures on production and sale per head of population:

	1952	*1958*	*1962*	*1962 in per cent of 1952*
Fabrics of all types (in square yards)	26.3	33.5	36.47	138
including woolen and silk fabrics	2.6	6.2	6.8	259
Leather shoes (pairs)	1.7	1.7	2.06	121
Sale of garments and knitwear (in rubles)	18.6	39.9	47.5	255

According to the revised plan for 1965 production of footwear should approximate three pairs per person. The plan for output of fabrics and ready-made clothing is being overfulfilled.

Production of television sets and appliances is growing at a still faster rate.

	(in thousands)		
	1953	*1958*	*1962*
Television sets	84.1	979	2,168
Radio sets and radio-phonographs	1,641	3,902	4,251
Home refrigerators	49.2	360	838
Washing machines	3.5	464	1,797
Sewing machines	993	2,686	3,341
Clocks and watches	12,838	24,771	26,100
Electric vacuum cleaners	45.5	245	625

Output of all these articles (with the exception of clocks and watches, production of which is sufficiently high) will continue to grow in the next few years until the demand is fully satisfied.

Dr. Mstislavsky: What will give us this abundance?

P: Higher labor productivity based on technological progress. Real income can rise only with a rise in output. If we don't have as much as Americans do, it is only because our labor productivity is lower, especially in agriculture.

Q: The United States has more favorable natural conditions for agriculture and a greater number of food processing industries than we do. Besides, our country has been swept by three devastating wars in the past 40 years. Add to that the fact that we started at a very low level when we inherited the age-old backwardness of czarist Russia in 1917. But we have come up fast.

Dr. Mstislavsky: Thank you for your detailed answer. What else is necessary besides a high enough production potential for us to make the transition to distribution according to needs?

R: A change in man's psychology so that he acquires a highly developed sense of communist consciousness. By this I mean that he must first of all like the work he does. He must be enthusiastic about it, find fulfillment in it. Until people develop such an attitude to their work, distribution according to needs will be impossible. Unless people have such an attitude, they will not work energetically and some will actually shirk—that was mentioned before—and there will be no abundance. Work, said Marx, must become a prime necessity, something without which life is unimaginable and a person feels lost. Since under communism there will be no material stimulus to work, man must become accustomed, as Lenin put it, to working for the welfare of society with no thought of a reward, for purely moral incentives, to satisfy a psychological need.

Dr. Mstislavsky: Is a conscientious attitude to work enough, or do we need a change in man's psychology and habits?

S: Comrade **R** is considering the problem from only one angle. The important thing is that there must be a constant striving to improve production. Production will lag hopelessly behind growing needs unless there is that striving to progress.

T: It is just as important for people to become used to spending the values they create sensibly and economically, without extravagance. As soon as there is any great extravagance, abundance will vanish. There must be a public-spirited attitude about the wealth society creates. Remember what Lenin said, that just as communism implies more than present-day labor productivity, it also implies people of a new stamp; it is not for philistines like the novelist Pomialovsky's seminarists, who were quite capable of wrecking public warehouses and demanding the impossible. I think people must rid themselves of their private-property habit of grabbing as much as possible without thinking of what their actual needs are or of the resources society has.

P: The problem is obvious, but how is it going to be solved? People are inherently selfish.

T: That's not so. No one is inherently selfish. It depends on upbringing. What is needed is character training, long and persistent character training. Our people learn to put in an honest day's work because the public climate they live in encourages and honors that attitude toward a job. Children are taught to like work in their vocational training classes. Our press, radio, television and other educational media fight greed and extravagance and all the other traits we condemn as antisocial.

Dr. Mstislavsky: So your feeling is that everything depends on mass character training?

T: Punishment may sometimes be necessary, but I feel that the primary influence in character training is public pressure, expressed through the trade unions, the Party, the Young Communist League, the Young Pioneer organization and the press.

Dr. Mstislavsky: You all agree?

Voices: Yes, of course. Education is the only way to make people conscious of their duty to society.

Dr. Mstislavsky: Here you are wrong. It is the new material and social conditions primarily that serve to develop the social consciousness of the new man. We've already spoken of how much the shorter workday, for example, contributes to making working conditions easier and life spiritually richer. Even more important is the fact that in our society the nature of work is changing basically. Automation is making work infinitely easier; physical labor is decreasing, while the intellectual challenge is growing. Work is becoming a more creative activity, calling for inventiveness and experimentation.

The more man gains ascendency over nature, mastering and changing it, the more interesting and attractive his work becomes. The boundaries between types of work and types of workers are being steadily erased. The barriers between physical and mental work are breaking down. The differences between rural and urban living are being eliminated. The economic and cultural level of backward areas is being raised. All that is bound to bring changes for the better in people's characters, habits and interests.

The "social atmosphere" of work, if one may put it that way, is also important. Working for yourself and not for a boss, for the society in which you live and not for some foreign power, collectivism and friendship on the job—these things tend to replace the centrifugal forces of private profit, selfishness, individualism and isolation with the centripetal forces of unity, mutual assistance, a consciousness of common interests, and a sense of responsibility for a common cause. People's characters develop, and their relations with one another become more brotherly.

Our whole way of life repudiates the old principle of "Each for himself and one God for all," and instills the principle of "One for all and all for one." The character of the new man is being molded by the combined force of new material and social conditions and continuous educational work. This process is going on right now. We can see the shape of the new man emerging more and more clearly.

What other conditions do we need for the transition to distribution according to needs?

U: Highly efficient planning of production and distribution, a distribution system that meets individual requirements promptly and efficiently, a well-organized trade setup, advance orders, a study of demand—all these are necessary conditions.

Dr. Mstislavsky: Quite right. Other forms of distribution besides trade are also important. Let us consider the third and final section of our seminar topic:

The Forms of Distribution and Their Development During the Period of the Transition to Communism

V: Consumer goods in our country are distributed in two major ways—first, through payment for work in the form of wages, salaries or income received by collective farmers in money and produce, and second, through the *public consumption funds* in the form of state-provided free education, free medical care, pensions, scholarships for college students, grants to large families, education of children at preschool institutions, low rents and other services.

The first is the most important. About three-fourths of the moneys distributed to consumers is in the form of wages and salaries. The second is an auxiliary form but is steadily growing in importance. The plan goal is that in 20 years' time the public consumption funds will comprise about one-half of the real income of the population. Why this trend?

Individual payment for work is based on the principle of distribution according to work. Eventually it is to be replaced by free distribution, irrespective of work performed. This will not happen at once; it will be the result of a long process. As envisaged by the Party Program, for a long time to come, the next 20 years at least, payment for work will predominate.

Dr. Mstislavsky: The ratio of these two forms of distribution will be changing within the 20-year period. Won't that mean less incentive on the part of the individual to work?

Y: Material incentives will still be important, though. Many of our most essential needs will still be met through wages and salaries.

A Voice: I don't see why you put so much stress on material incentives. Under communism the only incentives to work will be moral. How can we instill a communist consciousness in people if we put so much emphasis on material incentives?

R: Material incentives teach people industry, diligence and thrift. These must become ingrained habits. So must a realization of the need to work conscientiously, to economize on materials, and to look for better ways of doing things. Material incentives help to raise labor productivity; they encourage people to improve their skills and learn new skills. Doesn't all that hasten our progress toward communism?

Dr. Mstislavsky: Yes, of course. That is an interesting example of the dialectic character of the transition to communism. We will achieve a moneyless economy by making better use of money. We will reach a time when moral incentive is primary by making better use of material incentives. Think about it, and you will see that otherwise our progress would be slower. We must pay serious attention even now to moral incentives; that goes without saying. They must be harmoniously combined with material incentives, the way our communist work teams in factories are doing it.

Wages will also change so as to bring us closer to distribution according to needs. Who would like to speak to that point?

W: I think wage changes are very important. The real income of factory and office workers rose by 55 per cent between 1952 and 1961, and the income of collective farmers in cash and in kind rose by 82 per cent. In the 1959-1965 seven-year plan period the average wage will go up by 26 per cent. The readjustments of the past few years have almost doubled the minimum wage and sharply reduced the gap between the wages paid highly skilled factory and office workers and the wages paid those on jobs that require little skill. As time goes on the gap will be reduced still further by raising wages of the less skilled workers and increasing the minimum wage.

The Party Program foresees, in the next 10 years, an increase in the real income of wage and salary earners of almost 100 per cent and a rise in the wages of the lower-paid factory and office workers of 200 per cent. Such pay increases will help to reduce the gap between the lower-paid and the higher-paid groups of workers, a very important factor for the transition to distribution according to needs.

Dr. Mstislavsky: Is all of that right? Would anyone like to make any corrections or additions?

X: I'd like to say that if we triple the incomes of the lower-paid group in the next 10 years, every family would have a sufficiency of material goods.

It seems to me **W** is wrong to make greater security for lower-paid workers hinge on an increase in wages. Here a very important role is played by the public consumption funds.

Dr. Mstislavsky: Quite right. Just what part do the public consumption funds play?

X: The public consumption funds pay for the goods and services which the society distributes without charge to those who need them, no matter what work the recipient does. In a sense this is the communist system of distribution applied to a socialist society.

Dr. Mstislavsky: Just a moment. I would like the seminar to discuss what you have just said about the public consumption funds representing distribution according to needs. Is that so?

C: No, it isn't. I don't believe we can consider the public consumption funds as a ready-made form of communist distribution. First, because the funds are distributed to those who need them most and not to everyone who needs them. In many cases they are insufficient to satisfy all needs. Secondly, a part of the funds is distributed regardless of work done (medical care and education), while another part (for pensions, scholarship stipends, housing) depends on length of service, maintaining passing grades, etc. Then, the public consumption funds are not distributed to the whole population in equal measure. As examples—not all collective farmers get pensions; a higher education is open only to those who are able to pass entrance examinations, the children from lower-paid families usually have priority for kindergarten places, and so on.

Dr. Mstislavsky: You are right. The present public consumption funds will have to go through a long evolution before they really represent communist distribution according to needs.

X: The public consumption fund may not be a ready-made form of communist distribution, but it is the closest thing we have to it. It *will* evolve into communist distribution and *will* gradually squeeze out distribution according to work. The 20-year plan stipulates a much faster growth of public consumption funds than of wage funds.

Dr. Mstislavsky: What will the public consumption funds provide?

Y: For one thing, more and better free medical care. Services are now being expanded to include free medication and free sanatorium treatment. Education, also free, will be very considerably expanded, especially on the college and specialized high school level, with the number of college students more than trebling in the 20-year period. In the same period expenditures for preschool facilities will increase 10 times over, so that every parent who wishes will be able to place his child in a free nursery, kindergarten, prolonged-day school or boarding school. There will be greater security for the disabled. By the end of the 20-year period rent will be free, and so will public utilities, municipal transportation and certain other types of everyday services. Accommodation rates at rest homes, vacation resorts and camps will be very modest, with part of the accommodations free. Finally, a start will be made in supplying free meals to factory and office workers and collective farmers on the job.

Dr. Mstislavsky: What other social effects are the rapid growth of public consumption funds likely to have?

Z: For one thing, the grants paid to large families and to families with incapacitated members help to bridge the difference in living standards between families in which all members work and families with dependents.

Public funds also improve the social position of women by reducing the time they have to spend caring for children or the sick. As a result, they have that much more time for productive work and civic activity.

A Voice: If there are so many advantages, why don't we increase our public consumption funds to the maximum our present resources allow and do more free distribution?

Z: Because that would tend to weaken the material incentive to work and to save.

Dr. Mstislavsky: There is a time for everything, as the saying goes. In this case dispensing with material incentives too soon would only delay the building of communism. On the other hand, our plans and programs can be overfulfilled, as they usually are. Life will make its own corrections. Things may go much faster than we expect them to. Can anyone tell us about the growth of public consumption funds at the present time?

X: In the current seven-year plan period the increase scheduled for the annual public consumption funds is from 21.5 billion rubles in 1958 to 36 billion in 1965. The 28.4 billion rubles spent on grants and cut-rate vacation accommodations in 1962 will increase to 40 billion rubles by 1965, a far larger sum than was stipulated in the planned figures approved in 1959. The number of doctors will also increase more rapidly than planned. At the end of 1962 we had 20 doctors for every 10,000 people. No other country has so high a proportion and, moreover, their services are free. The Soviet Union has about one-third of all the doctors in the world. We also have the largest number of college students, proportionately, and the largest number of students on scholarship. Our factory and office workers and professionals have an average annual paid vacation of more than three weeks. More than seven million children enjoy the facilities of after-school children's institutions. More than 23,000,000 persons, a tenth of the population, get pensions. There are more than 380,000 free public libraries in the country.

A: The Party Program points out that cutting consumer prices is an important element in the transition to communism. Is the idea to keep reducing prices until things cost nothing?

Dr. Mstislavsky: Prices will be reduced as rising labor productivity lowers production costs. In the case of some items and services prices will drop faster than production costs. But the process will not be as simple as you make it out. Prices on all goods and services will not be cut at the same time and in the same proportion until they reach the vanishing point. Prices usually have to make up for overhead and allow for possible expansion. A certain ratio must be maintained between prices, otherwise reductions will create gaps in supply and demand, and create an artificially produced demand for certain goods resulting in their becoming scarce. The steps taken must be carefully planned.

* * *

On this note we send our record of the seminar, which has turned out to be rather lengthy in spite of our abbreviations. We asked Dr. Mstislavsky to give our readers his own views on the topic under discussion. He said:

"You can see that the path to distribution according to needs is not strewn with roses. It is long and difficult. To reach the goal we have set ourselves requires determined effort. But it is not utopian; we are not chasing The Blue Bird. It is all very real. There is one bird however, we won't be able to get along without—the noble dove of peace. My greetings to the American reader. We hope that this seminar report will give him a somewhat better understanding of why the Soviet people want peace and disarmament so much."

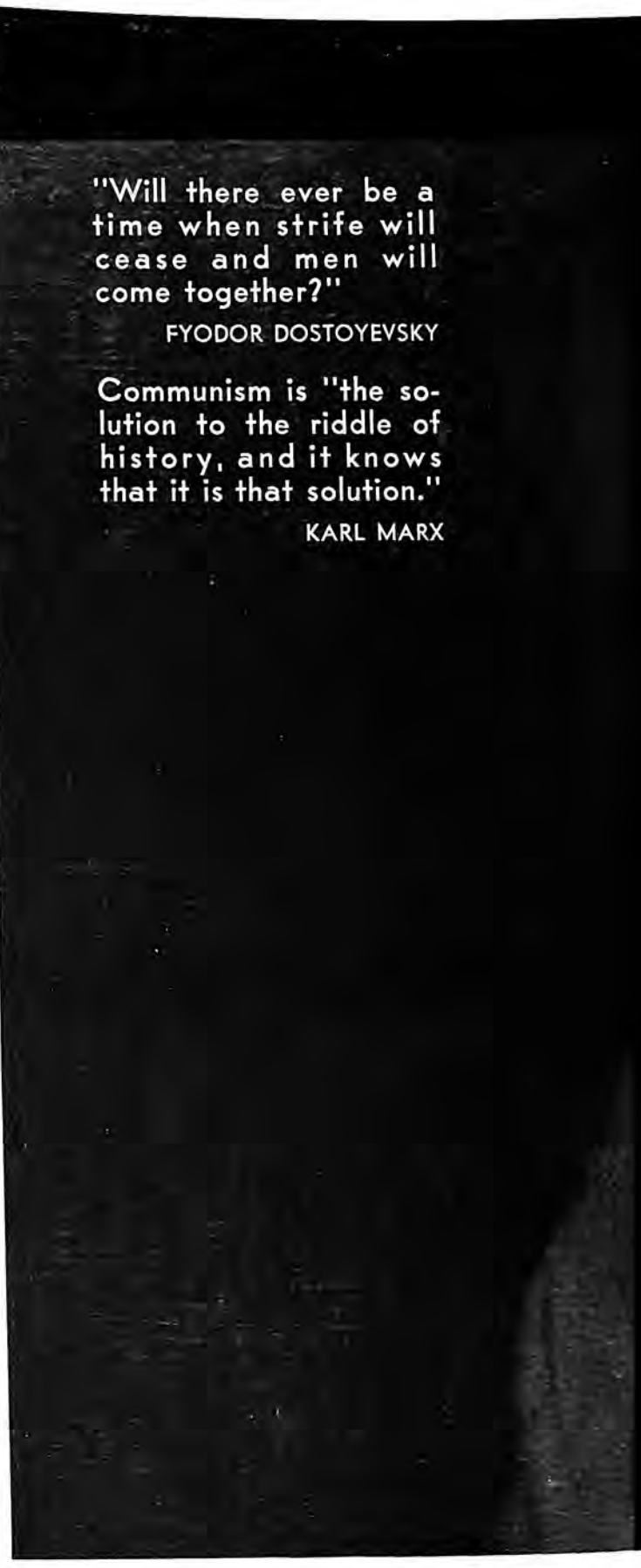
★

"Will there ever be a time when strife will cease and men will come together?"

FYODOR DOSTOYEVSKY

Communism is "the solution to the riddle of history, and it knows that it is that solution."

KARL MARX



THE TWO SIDES OF DOSTOYEVSKY

By YURI KARYAKIN

IN THE DEBATES now raging between the spokesmen of different countries, between opposing world outlooks—on the goals and the means of the struggle, on the personality cult, on what the future will be like and whether there will be a future, on the crisis of Christianity—the name of Dostoyevsky is repeatedly cropping up.

Sometimes the process is reversed and arguments about Dostoyevsky resolve into debates on general issues.

Of all the writers of the past this most Russian of Russian writers is perhaps the most universal and topical. His influence has been felt by men of such widely different backgrounds and outlooks as Einstein and Berdyayev, Thomas Mann and Ortega y Gasset, Böll and Leonov, Fellini and Aragon, Sartre and Steinbeck. Bibliographers know how difficult it is to estimate exactly how many editions of Dostoyevsky's works and how many books about him have been published in the different countries of the world. Yet this fact is of no little significance for ideologists and politicians, since it means that in one way or another Dostoyevsky has helped to shape the outlook of many of our contemporaries.

The anti-Communists lay claim to a monopoly of Dostoyevsky. His humanism, they say—and humanism generally—is incompatible with communism. They seek to mislead people whose interest in Dostoyevsky is prompted by their search for social truth and who have already begun to discard the bourgeois outlook but who still hold back from communism chiefly because they know so little about it. Shocked by the revelations of the Stalin cult, these people wrongly assume that the cult is rooted in the nature of communism. This of course is a grave, indeed tragic, mistake on their part.

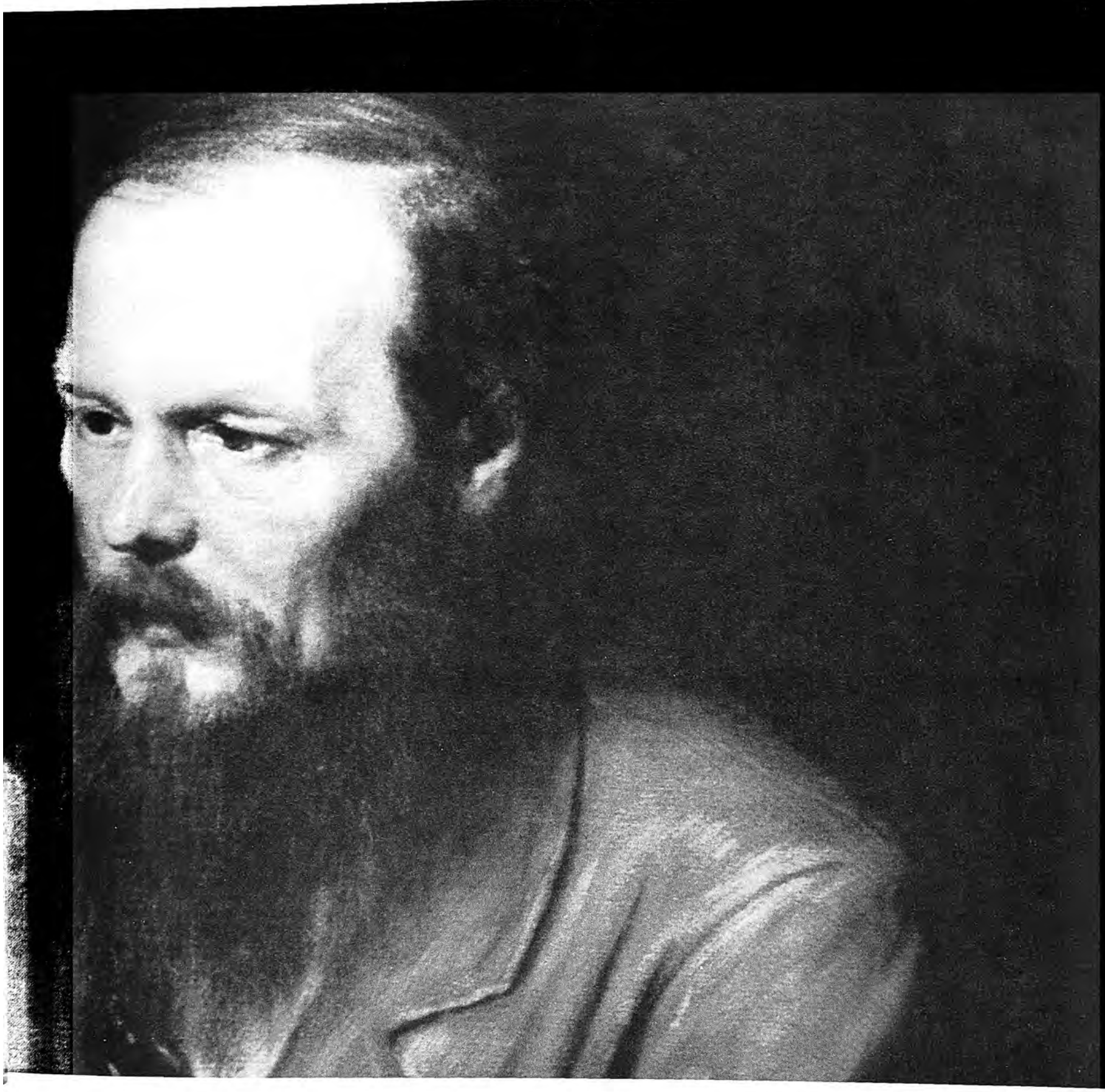
Our opponents are fond of delivering broadsides by citing what they believed to be Dostoyevsky's irrefutable arguments against the revolutionaries, and then triumphantly exclaiming: "Hasn't this been borne out?" In my view the debate should begin from a different angle.

The Bourgeoisie as the Main "Devil"

Dostoyevsky was never a champion of the bourgeoisie, and at times he supported socialist (utopian) ideas. On more than one occasion he pointed out that the youth had turned to socialism "selflessly," "with sincere love for humanity," "in the name of honor and truth and genuine well-being," that their convictions sprang from a passionate striving for good" and "a purity of heart." But why are Dostoyevsky's youthful characters so lacking in this selfless devotion, in purehearted enthusiasm for bourgeois ideals?

However much Dostoyevsky's views changed, however vicious his attacks against the socialism he so completely failed to comprehend, he never chose the bourgeois system as an alternative; he never extolled that system. On the contrary, he never ceased to strip it of its many masks. "What is liberty?" he asks. "Freedom. What kind of freedom? Freedom for all to do as they please, within the bounds of the law. When can one do as one pleases? When one has a million. Does freedom give everyone a million? No. What is a man without a million? A man without a million is not the man who does what he pleases but a man with whom others do as they please."

Dostoyevsky has an impressive list of crimes to present to the society



of his time. The most heinous of these crimes is the striving to humiliate and debase man, to make of him a "dishrag," an "insect," a "worm," a victim or a villain. He shatters the smug complacency of the philistine, probes to the depths of his mean little soul, turning it inside out and dragging out impulses too base, too shameful to be admitted even to oneself.

Shakespeare too was not without his fears for man. Dostoyevsky's doubts and fears were infinitely more nightmarish. He descended into the world of the "underworld man," a world peopled with men of "retrograde physiognomy" who "befouled their own lives" and would befoul the lives of others, a world of people with "wolfish appetites." Dostoyevsky sought through his art to study some of the extreme forms of that phenomenon which is often termed the "alienation" of man (and for which Marx supplied a scientific materialist explanation).

"The world can go to hell, for all I care!" exclaims one of Dostoyevsky's characters. Another, a raw youth, toys with the idea of "secretly preparing and then some day suddenly blowing everything sky-high, destroying everything, everybody—the guilty and the innocent." Another declares that when he gets rich it will be his greatest pleasure to feed bread and meat to the dogs before the eyes of the starving children of the poor. There are hundreds of such confessions.

Here we see indeed the uttermost depths of alienation, when all human qualities are turned into their opposites, when man, a social being by nature, finds himself in complete spiritual isolation, when he has "nowhere to go," when one man dreams of humiliating and destroying another, indeed all of mankind. Dostoyevsky's writings, according to a leading psychiatrist, have revealed to psychology, and especially psychopathology, knowledge far more valuable than anything that could be expected from an artist. The chief thing, however, is that all the murderers, all the mentally deranged characters with whom Dostoyevsky's writings teem, are depicted (often contrary to his own personal views) as definite social types whose maladies cannot be separated from their outlook.

What is the meaning of their pathological confessions? What is all this "odious screeching" (Gorky) about? The fruit of a diseased imagination perhaps? Or the ravings of a madman, unworthy of the novelist's art? Many indeed thought so for a long time. Who could have believed a century ago that, far from being isolated, the "anthropophagi" would attempt to turn the whole world into a madhouse and a torture chamber?

Is *Mein Kampf* not a variant of the notes written by a man from the "underworld"? Was Oswiecim not the realization of his ideals? And are we not today witnessing the hatching of new schemes to "blow everything sky-high?" The resemblance (but not the identity) between Dostoyevsky's anthropophagi and those of today is explained by a sociopsychological continuity, a historical kinship. The deadly microbe which the artist observed in his laboratory escaped from the test tube, spreading far and wide the virulent diseases of envy and malice, baseness and cruelty. But Dostoyevsky not only warned men of that mortal danger, he linked it directly with his concept of the bourgeois.

Has that not been confirmed?

Dostoyevsky's unalterable conviction that nothing can be more inhuman

THE TWO SIDES OF DOSTOYEVSKY

than a society in which the "chief prince is a Rothschild" and money "minted freedom" provides the key to his extraordinarily complicated attitude toward socialism, revolution and atheism.

Dostoyevsky Accuses the Socialists of Also Being "Bourgeois"

Where His Confusion Lay Ask any of those who delight in Dostoyevsky's anti-socialist pronouncements why he criticized socialism, and nine times out of ten the answer will be: "for its negation of freedom, for its standardization of the individual" and so on. But the crux of the matter lies in Dostoyevsky's understanding (or misunderstanding) of the whole problem, as is evident from the paradoxical meaning he attached to the word "bourgeois."

Dostoyevsky quarreled with socialism not as a champion of the bourgeois outlook but as its bitter enemy. This is a fact which Western literature deliberately conceals. Moreover it has been overlooked by those who make a hobby of collecting antirevolutionary quotations from Dostoyevsky's writings, who can recite them by heart, who revel in them, but who do not understand their meaning.

Dostoyevsky charges the socialist with the same offenses as the bourgeois. The socialist for him is not the antipode but a variety of the bourgeois. He confuses the one with the other. Here is how he describes capitalism: "One-tenth (of mankind) is given the highest development while the remaining nine-tenths merely serve as the means to this end." And his picture of "socialism": "One-tenth is to enjoy absolute freedom and unbounded power over the other nine-tenths."

Let us compare two other speculations. First: ". . . Great intellects are not wanted . . . they will be banished or put to death. Cicero will have his tongue cut out, Copernicus will have his eyes put out, Shakespeare will be stoned. . . ." Second: "I used to take delight in imagining just such a creature, commonplace and mediocre, facing the world and saying to it with a smile: 'You are Galileos and Copernicuses, Charlemagnes and Napoleons; you are Pushkins and Shakespeares; you are field marshals and generals, and I am a mediocrity and a nonentity, and yet I am higher than all of you. . . .'" The similarity of the sentiments is self-evident. But the first is expressed by a "Socialist" *(The Possessed)* and the second by a character who dreams of becoming a Rothschild *(A Raw Youth)*.

Literally every accusation leveled at the Socialists is matched by a similar accusation against the bourgeois. The explanation for this confusion of terms, so to speak, which has been commented upon in Marxist literature, lies not only in the angle from which Dostoyevsky examined them but in what he examined.

Suspecting the tremendous force of inertia, the force of the property instinct inherent in philistinism, Dostoyevsky believed that this was an evil that could not be cured here on earth: "He who has the greatest contempt for everything will be a lawgiver among them, and he who is the most brazen will be most in the right. So it has always been and so it will always be." Dostoyevsky writes that for the bourgeois Baal the chief thing is "a million in the shape of fate, as a law of nature." And being unable actively to counteract that "law," the artist succumbs to it, his hatred for the bourgeois turning into horror. Weighed down by these emotions, Dostoyevsky begins to see the stamp of the devil Avarice upon everything. He equates socialism with capitalism also because in his eyes they are equally godless, and for him the question of God is fundamental. That is why he fears for man under socialism as he conceives it.

But Dostoyevsky knew only the petty bourgeois forms of socialism (and he nearly always chose only the worst of them). His views on revolution were derived chiefly from the activities of the Anarchists. He knew that workingmen were infected in one way or another with bourgeois ailments, but he did not realize that these ailments were curable, though only through struggle. ". . . Workingmen are all proprietors at heart . . . such is human nature," he stated. In his day the working people were yet to win their fight for socialism (especially in backward Russia). In Dostoyevsky's eyes that which did not succeed was perforce doomed; that which was not, would never be. The bourgeois outlook was the original sin. He saw this not as an historically transient category but as something eternal.

From this standpoint his struggle against the "Socialists" as heirs to the capitalist law of "man eat man" and the morality of "licentiousness," against those who believed that "cutting off heads was the easiest way" to achieve universal happiness can be both explained and justified. What can be explained but not justified, however, is his depiction of such Socialists as the prototype of Socialists generally.

The Possessed *and the* Grand Inquisitor This confusion of concepts was most strikingly manifested in *The Possessed*, a novel written close on the heels of the notorious Nechayev affair. Nechayev, who appeared on the Russian scene in the late sixties, claimed that to be a good Socialist one must renounce "the gentle and enfeebling sentiment of kinship, love, gratitude and even honor. To stimulate energy the essence of things should be explained in a perverted form." He who "feels compassion for anything in this world" is not a revolutionary. "The revolutionary knows one science only, the science of death and destruction. He inhabits this world exclusively for this purpose." As much destruction as possible, the death of the majority of the revolutionaries—such is the prospect. "Poison, the dagger, the noose—the revolution sanctifies them all." The cult of one's own personality, the system of "all spying on all" among the Socialists organized in groups of five proscriptive lists—these, according to Nechayev, are the conditions for the triumph of socialism. Nechayev murders a student, charging his victim with "treachery" . . . (the student had voiced opposition to Nechayev's arbitrary methods).

No wonder Herzen warned that Nechayev would "do plenty of mischief" in Russia. The reactionaries reaped the fruit of the seeds sown by Nechayev. The czarist secret police made his name a synonym for the revolutionary, the Socialist. The fact that most revolutionaries both in Russia and in the West condemned Nechayev was of little concern to Dostoyevsky. He had already conceived the idea for his novel. "I feel compelled to speak my mind, even if my art should perish in my doing so," he wrote. His prejudiced approach, "fortified" by the documents fabricated by the secret police, produced *The Possessed*.

The main character in the novel, the "Socialist" Verkhovensky, proclaims his credo: "Nothing is more powerful than a uniform. I deliberately devise ranks and titles. . . . The second driving force is sentimentality. . . . And lastly, the main motive force—the cement that binds all together—is the shame of having an opinion of one's own. Every member of society spies on the others, and it is his duty to inform against them. . . . All are slaves and equal in their slavery. In extreme cases, slander and murder. . . . Genius of any kind we shall nip in the bud. We shall reduce everything to a common denominator; complete equality, complete obedience, complete loss of individuality."

To depict in such a fanatic light the ideals of the Paris Commune, the socialism of Chernyshevsky and Herzen (not to speak of Marxist communism) is, of course, to repeat the vilest slander. If Nechayev was a caricature of socialism, Verkhovensky was a caricature of Nechayev. And Dostoyevsky himself confirms this. Respecting (and even slightly fearing) the real revolutionaries and Socialists in spite of himself and knowing that not one of them would ever vouch for Nechayev, and still less for a Verkhovensky, he makes the latter confess: "To tell the truth I am a swindler and not a Socialist." But this knocks the bottom out of Dostoyevsky's own "critique" of socialism: It turns out that in reality he was exposing not simply a blundering, misguided Socialist but a cold-blooded calculating rogue, a monster drawn from the very dregs of society!

No less monstrous is the confusion Dostoyevsky introduces into his *Poem of the Grand Inquisitor*. He portrays here an inquisitor who acts in the name of Christ but who holds that Christ was a romantic and not a realist inasmuch as he had judged too highly of human beings: "We have corrected Thy work and founded it on miracle, mystery and authority. And men rejoiced that they were again led like sheep." In the end it transpires that the Inquisitor, though he prays to God, does not believe in Him—"that's the whole secret!"—he identifies himself with God.

Through his religious symbolism, Dostoyevsky objectively poses very real and earthly problems: the emancipation of the people, the relationship between the people and their leaders. But having authentically depicted the ideals of Catholicism, of the Jesuits, he again ascribes these ideas to communism (again, basing himself exclusively on facts of the Nechayev variety).

It is easy to see why of all Dostoyevsky's writing the anti-Communists extol *The Possessed* and the *Poem of the Grand Inquisitor*. Citing almost exclusively from these works and exaggerating to the nth degree the author's blunderings, they declare that Nechayev and the Grand Inquisitor are the personification of communism generally, as was supposedly confirmed by the personality cult.

That there is a certain similarity between the cult and Nechayevism can hardly be denied. Leaving aside the mystical elements and bearing in mind that the language of images cannot be translated literally into the language of reality, it is true that on reading the poem one is reminded of certain aspects of Stalin's activity manifested during the period of the cult of his personality. Curiously enough, Stalin himself once expressed his (and not only his) secret veneration for the godlike leader: ". . . I had pictured Lenin as a giant, stately and imposing," he said. "What then was my disappointment on seeing a most ordinary-looking man. . . . It is accepted as the usual thing . . . that just before the 'great man' enters, the warning whisper goes out: 'Hush! . . . Silence! . . . He's coming!' This ritual did not seem to me superfluous, because it creates an impression, inspires respect. What then was my disappointment to learn that Lenin had arrived at the conference before the delegates, had settled himself somewhere in a corner and was unassumingly carrying on a conversation, a most ordinary conversation with the most ordinary delegates at the conference. I must confess that at the time this seemed to me to be something of a violation of certain essential rules." When Stalin said this in 1924, he was expressing admiration for Lenin's modesty. Later, however, he established these "essential rules" with regard to himself. He believed that Lenin judged people too highly. He wanted to "correct Lenin's work. . . ."

Yes, in a certain sense Nechayevism and the story of the Grand Inquisitor have something in common with the personality cult (although the similarity is only one of the countless facets of this highly complex phenomenon), but true communism has not and never could have anything in common with it.

The Marxist Tradition of Struggle Against Regimented Communism Long before Dostoyevsky, Marx repudiated that crude "communism" which negates personality and is merely the consummate expression of the envy of the bourgeois and his desire to reduce everything to his own level, which is "only a form of the odiousness of private property" (Marx and Engels, *Philosophical-Economic Manuscripts*, 1844).

"What a fine example of regimented communism!" is Marx's comment on Nechayev's "foundations of the future social system," in which the people are to "produce for society as much as possible and consume as little as possible," and where all personal relationships are strictly regulated. Marx and Engels described Nechayevism as an apology for political murder, bourgeois immorality carried to the extreme. (Marx and Engels, *Alliance of Social Democracy and the International Workingmen's Association*, 1873).

Both Marx and Lenin sharply criticized personality cults, dictatorial

tendencies of any kind, such as those of Lassalle, for example, or Trotsky, who regarded military methods as the only methods of leadership.

The advocates of regimented communism appear merely absurd when propounding their ideas, but let them seize so much as a scrap of power, not to speak of the whole power, and they become a menace: their absurdity is fraught with tragedy for the people.

True communism rejects the Jesuit principle "the end justifies the means." No, revolution does not "sanctify everything"! Marxists recognize class violence, but only against those who resort to violence. This is a truly humane approach, inasmuch as it stands for the liberation of the overwhelming majority from the yoke of a tiny minority. Without a struggle for this liberation there can be no individual freedom, no self-perfecting of the personality, only its degeneration. The sacrifices which are inevitable in this struggle are not fertilizer for the soil of the future; they are themselves the seeds of that future. This is not "lambs for the slaughter" but the passionate upsurge of the multitudes whose eyes have been opened to their servile condition and who have become conscious of their strength and their ideals; it is the greater freedom of choice for man, who has risen to his full stature. Heroism and self-sacrifice in such a struggle are not self-abnegation but self-assertion of the individual. The humanism of the communist ends determines the humanism of the means, while Jesuitism, which acts "in the name of revolution," is a distortion of both means and ends. The finest ideals cannot but turn into their opposites if they are upheld by Jesuit methods; such methods strike at what is most precious in the relations between human beings—mutual trust. Advocacy of Jesuit methods "in the name of communism" reveals on closer scrutiny a distorted understanding of the communist ideals.

Marx, long before Dostoyevsky, exposed the reactionary nature of the attempts to build a society founded on miracle, mystery and worship of authority. "Bureaucracy," he wrote, "regards itself as the be-all and end-all of the state. . . . The hierarchy relies on the lower ranks for all that concerns the particular; the lower ranks, on the other hand, have implicit faith in the hierarchy in all that concerns the general, and in this way they lead each other astray. . . . The all-pervading universal spirit of bureaucracy is mystery, secrecy." For bureaucracy the cult of a single individual—and the depersonalization of all others—is a substitute for religion: ". . . worship of authority is its way of thinking" (Marx and Engels, *Critique of Hegel's Philosophy of Right*). Marx, and afterward Lenin, emphasized that such a thing as bureaucracy is likely to appear in the initial stages of the new system, but, being alien to the system, it can only retard, not prevent, its affirmation.

The struggle against regimented communism and bureaucracy—two closely interlinked tendencies—is a vital (though little studied) Marxist tradition.

Marx offers a materialist explanation for the appearance of these dangerous trends: in its initial phase communist society does not develop on its own base. On the contrary, it emerges as a result of a long and painful process from capitalism and hence still bears all the birthmarks of capitalism—economic, moral and intellectual. But this is a link with the old which is being severed, though it cannot be severed easily and all at once. The old traditions cling to the new all the more tenaciously (all other conditions being equal) the lower the level of socioeconomic and cultural development of the given country, the more petty-bourgeois the influences prevailing therein.

But regimented communism (especially in our time) is by no means inevitable, even temporarily. The difficulties of the transitional period need not necessarily take the form of a personality cult, for example. The cult can be explained (but not justified) by the concrete historical conditions, by the sum of many external and internal factors, objective and subjective, requiring special analysis. Failure to take all these factors into account is apt to lead to a voluntarist explanation of history, whereas seen in their proper perspective they can help one correctly to understand the role of the individual. (It was Lenin's analysis of the sum of concrete conditions that prompted him to recommend "considering some way of replacing Stalin" as General Secretary, because for one occupying this post rudeness, inconsiderateness and ambition "are not trifles, or if they are, then they are trifles which could be of decisive importance." (Lenin, *Letter to the Congress*, 1922.)

Marxism-Leninism long ago pointed to the dangers of regimented communism and bureaucracy; it showed, moreover, how these trends could be checked, namely, by releasing the initiative of the people, through public control over all administrative bodies, through publicity and socialist democracy generally—and not as a substitute for, but in conjunction with, the development of democratic centralism which presupposes both strict discipline and authoritative leadership.

"There is only one remedy for all these intrigues," wrote Marx and Engels, alluding to Nechayevism, "but it is a very radical remedy—namely, full publicity." To pass over them in silence would constitute naïvete, cowardice and treachery toward those who have exposed the "revolutionary" Jesuits. (Marx and Engels, *Alliance of Social Democracy and the International Workingmen's Association.*)

"More confidence in the independent judgment of the whole body of Party workers! . . . the whole Party must constantly, steadily and systematically train suitable persons for the central bodies; must see clearly, as the palm of its hand, all the activities of every candidate for these high posts; must come to know even their personal characteristics, their strong and weak points, their victories and 'defeats'. . . . Light, more light!" (V. I. Lenin, *Letter to Iskra*, 1903). This was written when the Bolsheviks were still functioning illegally. How much more imperative it is to apply this principle today with regard to legal parties and parties in government! And how utterly remote from this truly Marxist approach was the cult of the individual! Khrushchev was right when he said at the Twenty-second Congress of the CPSU: "People who usurp power cease to be accountable to the Party, to be controlled by the Party. Therein lies the main danger of the personality cult."

Light, more light!—is the demand of true communism. In the light everything can be seen. Darkness, more darkness!—is the ideal of regimented communism and bureaucracy. Under the cover of darkness anything can be done.

The personality cult is associated with the trend toward a crude, regimented communism and bureaucracy. But unlike the anti-Communists and revisionists, we believe that this cult is a violation of all the Marxist-Leninist precepts and traditions, that it is not the embodiment but a flagrant distortion of communism, that the rich, full-blooded, multiform life of Soviet society, for example, at any period of its existence (and even for a single year or a single day), cannot be reduced to the cult. And, we repeat, it is because the personality cult is inimical to the new society that this society found in itself the strength to eradicate the cult and its consequences.

Pondering over these things, one cannot but marvel at the energy and vitality of communism if even under the most adverse external and extraordinarily difficult internal conditions, if notwithstanding (and even in spite of) the personality cult, if even suffering the most grevious losses, it was able not only to survive, not only to emerge victorious from a terrible war and save the world from fascism, but, what is most important, to acquire tremendous positive experience in building new relationships and develop into a mighty force! What a potential for development it reveals! And perhaps the most significant manifestation of this potential is the enlistment of hundreds of thousands of people in the nation-wide system of public control now being built in the Soviet Union.

True Communism: The Development of Man As an End in Itself

Dostoyevsky was absolutely correct when he denounced regimented communism. But he was completely wrong when he said that for communism man is a "cog," a "tiny screw" in a vast machine, that it ignores human nature, that essentially it boils down to nothing more than "feeding people."

Here is his dialogue with communism: "I shall know all about the discoveries of the exact sciences, and through them I shall acquire a host of comforts; now I sit on homespun, later we shall all sit on velvet. Well, what of it? The question will remain: What shall we do then? With all this comfort and velvet, what, after all, will one live for? What will be the purpose of life? Humanity will aspire to lofty ideals. I agree that at the given moment to feed humanity and give everyone the right to feed is also a lofty ideal . . . but it is a secondary and subordinate ideal, because after he has been fed man will surely ask: What am I living for?"

Communism does not deny that this problem exists, it provides the solution for it. Of course, communism proposes to satisfy man's need for food, clothing and shelter, just as nature satisfies his need for air. True, the composition of that "air," so to speak, will constantly grow richer, but that is not the chief thing. Communism creates the conditions for each human to develop his or her individual abilities and inclinations, for the continuous mutual enrichment of people, for the cultivation of their talents as well as the means for their spiritual and physical enjoyment. Communism alone can restore man's faith in the human race; it alone stands for the negation of that philistinism so abhorred by Dostoyevsky.

"The realm of freedom actually begins only where labor which is determined by necessity and mundane considerations ceases; thus, in the very nature of things, it lies beyond the sphere of actual material production." There too "begins that development of human energy which is an end in itself. . . ." This is the note on which Marx's *Capital* ends. This noble ideal, the cherished goal of humanists of all ages, Marxism does not cast aside; on the contrary, Marxism is the heir to that ideal, it has purified and enriched it, and, what is more, it is changing the social nature of humanism, imparting a dynamic quality to it, linking the dream with the reality, with the class struggle of the proletariat and of all working people.

These ideals do not derive from good intentions alone. The development of society and its productive forces is unthinkable unless each member of that society contributes his share as an individual. The social character of communist production itself, the collectivity of all forms of labor make it imperative that the creative spark in each individual shall not be extinguished but on the contrary shall burn like a bright flame, that the principle proclaimed in the *Communist Manifesto*—that free development of each is the condition for the free development of all—should be realized. And again, communism alone provides the answer to the age-old problem that tormented Dostoyevsky: "That cabby there may be a Shakespeare; that man in the smithy, a Raphael perhaps; and that one plowing the field, an actor. Can it be that only a small top layer of people shall prove themselves while the rest must perish? . . ."

Religion. "A Sceptic to the Grave"

Dostoyevsky repudiates any real struggle against real evil. What then is the solution? He maintains that "evil is more deeply rooted in humanity than the socialist healers think, that in no social order will you be able to avoid evil, that the human soul itself and the laws of the human spirit are so little known, so unfamiliar to science, so unfathomable and so mysterious that there are not, nor can there be, any healers or even any final judges but only he who says: 'Vengeance is mine, I will retaliate.'" True, the "laws of the human spirit" have not yet been profoundly studied; this is a deficiency that should be remedied. But Dostoyevsky, himself assuming the role of healer, believes man's only hope lies in religion. "Man is not born for happiness," he writes. "There is no injustice here; suffering is the law of our planet." And since man suffers, "hence he has need of Christ and hence there will be a Christ." The argument is hardly convincing. . . . Dostoyevsky seems to be aware of this, for he says: "As for myself, I would rather remain with Christ than with the truth."

Dostoyevsky is convinced that reason devoid of love for humanity is cold and heartless, indeed dangerous, for it kills life. That is true. But what is the conclusion? Clearly, there can be but one: reason must be illumined by the light of humanism. No, replies Dostoyevsky, reason by its very nature is antihuman, it comes from the devil. Man should not taste the fruit of the tree of knowledge. All he needs is faith. . . . Here the writer's hatred of the narrow bourgeois rationality, of learning that is

THE TWO SIDES OF DOSTOYEVSKY

subordinated to hard cash, turns into hatred of reason, of learning in general.

Why, the writer asks himself further, do Raskolnikov or Ivan Karamazov suffer such torment? Why do they realize that to kill another human being is to kill oneself? But, one could ask in turn why is it that neither Verkhovensky nor any other cold-blooded murderer, discussing the fate of hundreds of millions of people with as little emotion as the proprietor of a slaughterhouse, suffers the slightest pangs of conscience? This is an important question, but what is the answer?

Devotion to a false idea, Dostoyevsky replies, can cause the conscience to become atrophied, can justify any crime whatsoever. That is also true. But what is this false idea? Atheism, it turns out. (It is all a matter of belief in God. If you have faith, even the slightest, you have a conscience. Where there is no faith, then "everything is permissible," "one can kill and destroy," and degradation thrives.) But, the writer reflected, what of maternal love? This, one of the noblest of human emotions, requires no supernatural sanction of any kind. Dostoyevsky knew that high moral standards existed also among atheists. And he could not but see that troglodytic morality prevailed among those who recognized God. And he exclaimed: "What is the word of Christ worth without an example?"

Moreover Dostoyevsky's reasoning brought him to the idea that religion itself is antihuman and that this antihumanism is demonstrated most vividly in the attempts to justify evil. The writer puts the question very poignantly. "Listen!" says Ivan Karamazov to Alyosha. "I took the case of children only to make my point clearer. Of the others' tears of humanity, with which the earth is soaked from its crust to its core, I will say nothing. . . . If all must suffer to pay for eternal harmony, what have children to do with it, tell me please?" Ivan rejects Paradise, "eternal harmony": "It's not worth the tears of one tortured child. . . . I do not want the mother to embrace the oppressor who threw her son to the dogs! She has no right to forgive him!" And when asked what such a murderer deserves, Alyosha (the acolyte) whispers: "To be shot!" And this whisper rings louder than all the exhortations to save the world by nonviolent resistance to evil.

Atheism breaks through the religious shroud of Dostoyevsky's works like an inextinguishable flame in which the shoddy garments of religion are burned to ashes. All his life the writer sought fruitlessly to extinguish that flame. "I am a child of this age," he confessed in one of his letters, "a child of unfaith and skepticism and probably, indeed I know it, shall remain so the end of my life. How dreadfully has it tormented me (and torments me even now)—this longing for faith, which is all the stronger for the proof I have against it."

It is not by chance that, fearing himself powerless to renounce atheism, he remarked: "I fear, I tremble." No wonder churchmen complain that Dostoyevsky "diluted Christianity."

Lenin wrote that with the words "socialism is my religion" some people go from religion to socialism while others, on the other hand, go from socialism to religion (Lenin, *The Attitude of the Workers' Party to Religion*, 1909). In Dostoyevsky the two tendencies conflict and intertwine, but the struggle between them failed to find resolution in him.

Today the "proof" against religion is extensive. The inability of Christianity to grasp the world and change it leads logically to the idea that Doomsday is inevitable. But surely the pronouncement of the sentence of death on the world spells suicide for religion. In our time it is clearer than ever before that the choice today is between accepting church dogma and awaiting the inevitable end of the world or renouncing the Apocalypse and fighting for a better life on earth. Millions of believers are turning to the latter.

Dostoyevsky himself, in spite of everything, could not reconcile himself to the idea of the Apocalypse. Examining the thesis that it is of no avail to wish the world good, for it is written that it will perish, he remarked: "There is something unreasonable and profane in that idea. Moreover it is an extremely convenient idea for domestic purposes: once all are doomed, then what need is there to strive, to love one's neighbor, to do good? Let each live for his own gratification."

And truth is on the side not of the Dostoyevsky who maintained that the "crystal palace" was impossible, that communism is a Tower of Babel, but the Dostoyevsky who sometimes reflected that "perhaps one need not be afraid of factories, perhaps the factory will nestle amid gardens. . . . I do not know how it will all be, but it will come to pass. There will be a garden." At times his gloomiest reflections are suddenly illumined by the thought that "people can be beautiful and happy without losing the ability to live on earth. I do not want to believe that evil should be the normal condition of man."

"Pro and Contra"

Battle of Ideas "Pro and Contra," the heart of *The Brothers Karamazov*, is the symbol of all Dostoyevsky's work, of all his searching. His novels are seen as a great contest of ideas, with the soul (including his own) as the background.

He consciously dedicated himself to the search for the "word of the future, still to be uttered," believing that art was the medium through which man could gain an insight into the future. This cold social concept predetermined his literary method. Dotsoyevsky set himself the task, at once both simple and complex, of discovering through his art how human beings would behave if all external compulsions were absent. He was convinced that what was exceptional today might be commonplace tomorrow, and he concentrated on the exceptional, hoping thus to pierce the veil of the future. He wanted to know what would happen if man's spiritual potential were given free rein. He delved into the innermost recesses of the soul, into the profound dialectics of ideas.

In his writings, taken as a whole, realism did not disappear but acquired a deeper quality; what disappeared were the boundaries to man's self-knowledge. "I am only a realist in the highest sense, *i.e.*, I reveal the uttermost depths of the human soul. . . . I have a totally different concept of truth and realism from that of our realists and critics. With their realism one couldn't show so much as the hundredth part of the actual facts, whereas we have predicted the facts themselves, they have happened."

Of course one can by no means subscribe to all of his ideas. Dostoyevsky himself wished to be a "prophet" in the literal, *i.e.*, the religious, sense of the word, and many of his admirers have indeed proclaimed him such. That, however, is empty talk. But those predictions of his that have been borne out can be explained not mystically but rationally. True, Dostoyevsky sought consciously to anticipate the future through the medium of his art, but the fact remains that his time witnessed the beginning of that battle of ideas which preceded the open clash of the opposed social forces, a clash which has reached its peak in our time. Nowadays, when the things he perceived in embryo have matured, we have arrived at a deeper and more critical understanding of the man himself.

He never ceases to argue. His characters are either his opponents or his supporters, and he himself intervenes in their debate, imperceptibly inserting his own ideas into their reasoning. That is how he achieves what in literary criticism has been described as the polyphonic effect of his writing. His extremely lyrical novels were at the same time "magnificently staged dialogues" (Lunacharsky), dramas, or, rather, tragedies, constructed according to all the rules of the stage; and at the same time they were confessions, sermons and exhortations.

He takes ideas and plants them like seeds in the minds and hearts of people and watches to see what harvest they will bring forth. He throws out a thought and compels his characters (though not always with success) to express their attitude toward it, pro and con. This is a device which can impart movement and life to ideas, but it can also caricature them. It was a device that could lead to amazing discoveries, and Dostoyevsky made them. But at the same time he was guilty of "frightful exaggerations" (Gorky). His realistic art is corroded by subjectivism.

Both his flashes of insight and his delusions have special significance today, when science, art and everyday life impel man to ponder the question: If ordinary "lifeless" matter contains vast stores of nuclear energy, what must be the forces latent in man? Dostoyevsky built his own device to study those forces and experiment with them. His writings, despite their outward conformity with the literary vogues of the nineteenth century, make one think of some powerful accelerator where human passions collide at terrific tension, revealing their nature in an endless succession of facets. Dostoyevsky himself is like a man who discovers nuclear energy and is convinced that there can be no other use for it but destruction and who, for this reason, is burdened with an overwhelming sense of guilt.

The Man of Honor Versus the Denunciator In one of Dostoyevsky's rough drafts we find this note: "Literature (in our time) must hold aloft the banner of honor." What would happen, he asks, if men like Tolstoy should turn out to be dishonorable? "What temptation, what cynicism and how many there would be who would be tempted to say 'If people like him can, then . . . etc.' That teaches a lesson."

Of course Dostoyevsky believed what he wrote, but he could never, with a clear conscience, have proclaimed the official banner of reaction—which he helped to uphold—a "banner of honor."

He feared being thought a Judas, yet he must have been aware that his hounding of the revolutionaries, whose devotion to the interests of the people he could not doubt, was an act of betrayal, of spiritual betrayal—in other words, a dishonorable deed. Not long ago Jean Paul Sartre declared that Flaubert was directly responsible for the massacre of the Communards in 1871, because, being Flaubert, he did not write a single line in protest against these repressions. This applies in even greater measure to Dostoyevsky. His preoccupation with religion was, apart from everything else, a salve for his guilty conscience: he consoled himself with the thought that he stood for the absolute deliverance of the people from the forces of evil.

And what were the paltry ideals of the Socialists compared to that? Yet he could not find solace. It was not for nothing that he once remarked, "I am not a great consoler, though I have sometimes tried to be."

How many people are there today whom the modern Western world has burdened with a guilty conscience? But the cure for this age-old malady can no longer be postponed. In the struggle for life on earth, honor and integrity are decisive. Formerly, when scientific experiments were confined to the four walls of the laboratory, an accident, an unsuccessful experiment could at worst cause thes death of the scientist and the destruction of the laboratory. Today the whole world can be likened to such a laboratory. Here "accidents" or evil designs can be prevented not so much by purely technical means as by the creation of social guarantees, the efforts of all the forces of peace. And again we are forced to the conclusion: In order to control the new productive forces, to prevent them from becoming forces of destruction, society needs a mass of intelligent, farsighted, sincere and warm-hearted human beings. In other words, every opportunity must be provided for the fullest development of every member of society. Their "greatest gain" will lie not in the malicious willfulness of the "underworld man" but in establishing "genuinely human relationships" (Marx). Then is communism all the more necessary, not merely for radically improving life but also for human survival.

Men must soberly assess the dangers threatening them and be firmly confident of their own strength. This era of grave peril for the human race is also an era of exploits, both on a mass scale and individually, a time of the unprecedented flowering of the best in man. Today too Dostoyevsky helps to awaken man's conscience, but he also evokes hysteria and treachery; there is something in him that blunts the social edge of his works,

something that degrades rather than elevates man, and this something is a graver danger today than ever before. This is the other side of Dostoyevsky.

The Two Sides of Dostoyevsky In all the photographs and portraits of Dostoyevsky, and especially in the arresting sculpture of him by Sergei Konenkov, the great writer appears as the prisoner of his own contradictions, as a man whom it is impossible to imagine laughing. All the more unexpected then is this confession: ". . . notwithstanding all I have lost, I love life fervently; I love life for its own sake and, seriously, I still intend to begin my life over again. . . . That is the chief trait of my character and perhaps of my work as well." (What a crude distortion of Dostoyevsky is the credo of existentialists like Camus or Berdayev, who regard him as their spiritual father!). Through the lips of Ivan Karamazov we find Dostoyevsky exclaiming: "The sticky leaves in spring, the blue sky—that is what I love. It's not a matter of intellect or logic; it's loving with every fiber of one's being, loving the strength of one's youth. . . ." Yet how tortured was the mind of this man with his passionate, Whitman-like lust for life!

It would be hard to find an artist more contradictory in character than Dostoyevsky. A victim of the autocracy, he became its apologist, the apologist of the executioner. He himself in his reasoning often switched from boundless freedom to boundless despotism. At the time of the most savage tyranny he exclaimed: "Humble thyself, proud man!" An avowed enemy of the bourgeoisie, he sought salvation in religion, which objectively upholds the rule of the bourgeoisie.

The suffering of humanity was his suffering. His was a "universal compassion." He would have happiness for all men on earth or nothing at all. He felt a kinship with all men, a sense of responsibilty for them, and he wanted to transmit that feeling to everyone. But this idea, profoundly humane though it was, remained barren, unfructified by the idea of struggle. How sadly lacking it was in courage!—that courage with which the work of other writers inspires us, Whitman and Gorky, for example, Rolland and Mayakovsky, Sholokhov and Hemingway.

Dostoyevsky alerted man to many of the dangers lying in wait for him, but he could not show him how to deal with a single one of those dangers. He posed many problems but solved none. In a word, he sounded the alarm, only to frighten and confuse. His talent has been described, and justly so, as brutal, his genius as evil. Faith in man and utter degradation of man, rebellion and abasement; the desire to help people somehow, at once, without a moment's delay, and instead, the postponement of any succor until the second coming of Christ; borrowing the truths of socialism (*i.e.*, above all its criticism of the capitalist system) and, at the same time, the repetition of bourgeois and czarist lies about socialism being "universal plunder"; noble appeals for a brotherhood of nations and a revolting chauvinism, counterposing Russia, the East, to the West, plus religious intolerance; Christianity, now as the antithesis of socialism, now as its realization (a sort of Christian socialism); the dream of the kingdom of heaven on earth and apocalyptical visions; a clergyman and an atheist; a man "of saintly and criminal visage" (Thomas Mann); "a personality torn between two abysses"—such is the true Dostoyevsky. This is not a mechanical coexistence of the truth and the lie but a co-mingling, a confusion, a coalescence of the two.

Dostoyevsky's reactionary side consists not only in preoccupation with the "dual personality," the "underworld man," "the scoundrel." It is not the subject of study that matters here but how it is understood and assessed. This aspect of Dostoyevsky is the cult of suffering; it is the twisted idea that all men are "from the underworld," that under the surface all men are "rotten." A predilection for all that is base and contemptible in man, it is the guilty conscience of one who sought consolation by assuring himself that all men have guilty consciences; it is rubbing salt into the wounds instead of healing them; it is a pathological urge to portray the unhealthy aspects of life. Dostoyevsky himself was affected by it in much the same way as the psychic ailments he treats. And, as Lunacharsky said, "one has to be endowed with colossal moral strength, I would say, one must possess our proletarian character of today to be able to quaff such a noxious potion as Dostoyevsky and be the stronger for it, although for people of another type Dostoyevsky was indeed poison."

Lenin warned against the "execrable imitation of the execrable Dostoyevsky," and no one understood better than Lenin that Dostoyevsky could not be dismissed as a reactionary. From the reminiscences of that old Bolshevik Bonch-Bruyevich we learn how "vehemently Lenin condemned the reactionary tendencies in Dostoyevsky's work. . . . At the same time, Lenin, on more than one occasion, remarked that Dostoyevsky was a truly great writer, who examined the sickness of contemporary society and whose books, though abounding in contradictions and distortions, were vivid portrayals of reality." Lenin agreed with Gorky when the latter protested against the staging of *The Possessed*. But it was at Lenin's suggestion that a monument was erected to Dostoyevsky the writer.

It is noteworthy, too, that Marxists like Rosa Luxemburg and the contemporary Italian Gramsci closely studied Dostoyevsky's writings and made some extremely profound and penetrating observations about his work.

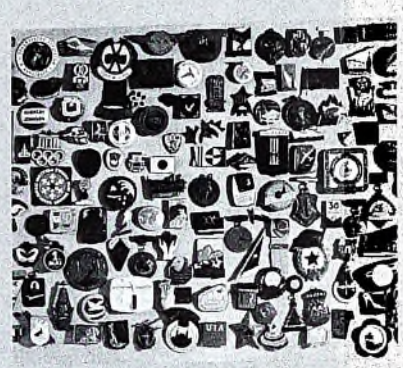
Idealist thinkers or artists of the Dostoyevsky type examine life through some powerful microscope, as it were, which, while it reveals much of value in the phenomena of life, at the same time distorts them. But Marxism enables us to ascertain the angle of refraction, to use the objectively valuable findings of these thinkers and artists against their delusions and against any speculation on these delusions. This, of course, is not easy; it is far more difficult than simply burning their writings and smashing their instruments.

Scholars in many countries have created a tradition of controversy for Dostoyevsky the humanist and against Dostoyevsky the reactionary. The "angle of refraction" is being established with increasing accuracy.

And so, when, in the heat of controversy on the topics of the day, our idealogical adversaries invoke Dostoyevsky, we have the answers to their arguments. More, we have the questions which they will find hard to answer.

Courtesy of the magazine Problems of Peace and Socialism

IN THE NEXT ISSUE



The December cover shows a collection of souvenir pins reflecting events, even whole epochs, in Soviet life. In 1914 the "Air Fleet Is the Power of Russia" pin was very popular. In 1962 Benny Goodman's USSR tour was commemorated in a pin treasured by music lovers in our country. Other equally interesting facts are discussed in the article **The World of Badges.**

The whole world knows Valentina Tereshkova, first woman to travel in space. She was given an enthusiastic welcome by the Czechs recently, and will soon visit Bulgaria and other countries. **Lady Cosmonaut on Vacation** tells how Valentina enjoys spending her precious free time.

Pavel Malofeyev is a thickset man with an ordinary Russian face and honest eyes. He never plays the diplomat, never conceals his thoughts and opinions; his movements are calm and confident. What is this factory director like? What sort of life has he had? What does he do and think about? What is *new* about this *new* man of socialist society? Why is he called **Double Director**? These questions are answered in the well-illustrated and interesting story by Y. Usherenko.

Among the other articles in the December issue are:
The Soviet Judiciary System—how the public fights crime in the USSR;
Memorable Events of 1963—highlights of the passing year in a photo story; **Taming Stellar Matter**—introducing the new PR-5 installation.

NOVOSTI PRESS AGENCY

USSR

SOVIET LIFE TODAY

Full Employment An expert on the USSR State Planning Committee tells how manpower requirements are planned and how a people's state insures employment.

Marxism Today An answer to the assertion that Marxism is outdated, describing its increasing acceptance today and explaining the force and vitality of this ideology.

Sociological Research Articles describing what is being done at industrial enterprises about improving workers' skills, management ticipation, developing the new man.

COMING SOON

THE SOVIET team won the traditional USSR-USA track-and-field meet this summer by a margin—42 points—they had hardly expected. And this when American head coach Payton Jordan, who is not a man to talk big, declared on the eve of the contest that he had brought to Moscow the youngest, the liveliest and strongest team in the history of U.S. athletics! What then happened at Moscow's Lenin Stadium?

It might be instructive to compare the results of last year's and this year's matches.

MEN	Palo Alto 1962	Moscow 1963	Points USSR	Points USA
100 meter	Robert Hayes, 10.2 Robert Sayers, 10.2 Amin Tuyakov Edvin Ozolin	Robert Hayes, 10.2 Edvin Ozolin, 10.4 George Gilbert Slava Prokhorovsky	−5	−3
400 meter	Ulis Williams, 46.4 Ray Sadler, 46.8 Vadim Arkhipchuk Victor Bychkov	Ulis Williams, 46.2 Vadim Arkhipchuk, 46.3 Lester Milburn Grigori Sverbetov	−5	−3
800 meter	John Siebert, 1:46.4 Jim Dupree, 1:46.8 Valeri Bulyshev Abram Krivosheyev	Jim Dupree, 1:47.8 Valeri Bulyshev, 1:48.0 Morgan Groth Abram Krivosheyev	−5	−3
1,500 meter	Jim Beatty, 3:39.9 Ivan Beletsky, 3:41.0 Keith Forman Vasili Savinkov	Dyrol Burleson, 3:41.0 Tom O'Hara, 3:41.3 Vasili Savinkov Ivan Beletsky	−3	−5
100-meter hurdles	Jerry Tarr, 13.4 Hayes Jones, 13.7 Anatoli Mikhailov Valentin Chistyakov	Anatoli Mikhailov, 13.8 Blaine Lindgren, 13.9 Hayes Jones, Alexander Kontaryev	−5	+1
3,000-meter steeplechase	Nikolai Sokolov, 8:42.3 John Young, 8:44.7 Pat Traynor Nikolai Yevdokimov	Edward Osipov, 8:35.0 Nikolai Sokolov, 8:41.6 Pat Traynor Victor Zvolak	+1	+5
4x100-meter relay	USA, 39.6	USSR, 40.2 USA disqualified	−2	+5
High jump	Valeri Brumel, 7-5½ Gene Johnson, 7-0⅝ Victor Bolshov John Thomas	Valeri Brumel, 7-5¾ Gene Johnson, 7-0½ Victor Bolshov Paul Stuber	+3	+3
Broad jump	Ralph Boston, 26-9 Igor Ter-Ovanesyan, 26-6½ Peter Warfield Dmitri Bondarenko	Ralph Boston, 26-10½ Igor Ter-Ovanesyan, 26-5½ Darrell Horn Leonid Barkovsky	−3	−3
Hammer throw	Harold Connolly, 231-10 Alexei Baltovsky, 221-2 Yuri Bakarinov Albert Hall	Harold Connolly, 219-2 Gennadi Kondrashev, 215-9¾ Yuri Bakarinov Albert Hall	−1	−1
Javelin	Yanis Lusis, 269-6 Victor Tsibulenko, 256-2 Dan Studney Nick Kovalakides	Yanis Lusis, 272-7½ Frank Covelli, 257-1 Larry Stuart Victor Tsibulenko	+5	+1
Decathlon	Vasili Kuznetsov, 7,830 Paul Herman, 7,653 Steve Pauly Yuri Kutenko (withdrew)	Vasili Kuznetsov, 7,666 Anatoli Ovseyenko, 7,631 Steve Pauly Dick Emberger	±0	+5
			1962: 107-128 1963: 114-119	
WOMEN				
100 meter	Wilma Rudolph, 11.5 Mariya Itkina, 11.8 Edith McGuire Galina Popova	Galina Popova, 11.7 Edith McGuire, 11.8 Mariya Itkina, 11.8 Wyomia Tyus	−3	+3
200 meter	Vivian Brown, 23.7 Mariya Itkina, 23.8 Valentina Maslovskaya Carol Smith	Mariya Itkina, 24.1 Galina Popova, 24.2 Vivian Brown Diana Wilson	−1	+5
4x100-meter relay	USA, 44.6	USSR, 45.0	−2	+2
High jump	Taisiya Chenchik, 5-7 Galina Yevsyukova, 5-5 Vivian Brown Estelle Baskerville	Taisiya Chenchik, 5-8⅛ Eleanor Montgomery, 5-6¾ Galina Kostenko Pat Daniels	+5	+3
Broad jump	Tatyana Schelkanova, 20-11¾ Willye White, 20-3½ Vera Krepkina Edith McGuire	Tatyana Schelkanova, 20-10 Tatyana Talysheva, 20-0¾ Willye White, 20 Edith McGuire	+3	+5
			1962: 66-41 1963: 75-28	
			Total score—1962: 173-169 1963: 189-147	

Note: We have omitted some events—the 200 meter, the 4x400-meter relay, the pole vault, discus throw and shot put—in which the superiority of the Americans is traditional and unquestioned. By the same token we haven't bothered to list the results in the 5,000 and 10,000 meters, the 20-kilometer walk, the triple jump in the men's events and the 800 meter, the 80-meter hurdles and the throws in the women's events, in which Soviet athletes are much stronger.

Coaches Payton Jordan and Gavriil Korobkov.

It is obvious that the Soviet girls took almost the maximum number of points, yielding only two second places (the 100 meter and the high jump). It is true that the Soviet women's squad have invariably won the "meets of giants," but never by such a score. Compared with the previous contest, the Soviet girls even scored in the traditionally American sprints. Thirty-year-old Galina Popova and Mariya Itkina defeated the much younger Edith McGuire and Wyomia Tyus. In this case experience triumphed over youth. But it was clear that the American girls have a bright future, and at the Olympic Games in Tokyo it may be easier for them than for the Soviet girls to challenge the fast Australian runners.

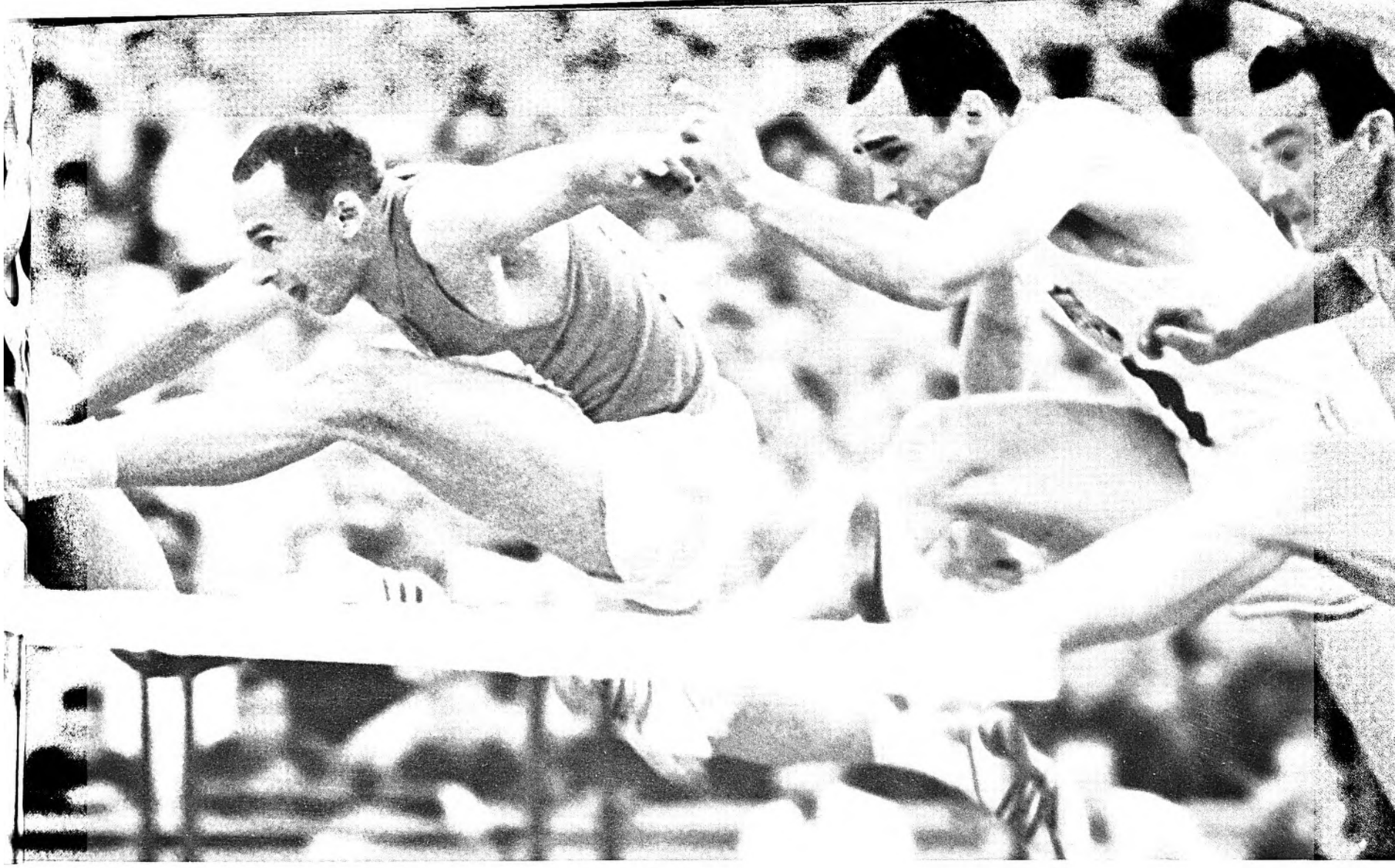
Generally speaking, the U. S. women's team is very youthful, the ages ranging from 16 to 20, one reason for the poor showing. Only inexperience can account for Rosie Bonds' not running in the 80-meter hurdles (two false starts) and Jo Ann Terry's stumbling and falling at the first hurdle. Evidently, when making up the women's team, the American coaches were looking toward the future.

The Soviet men ran up an impressive score, losing only five points (last year it was 21). The meet abounded in sensations. In the 100-meter hurdles European champion Anatoli Mikhailov beat not only Blaine Lindgren but also the famous Hayes Jones. And if in the 100-meter dash Edvin Ozolin didn't manage to overtake Robert Hayes, who was in brilliant form, he made up for it by placing second. It was the first time in the five-year history of the meets that a Soviet contestant took second place in this event.

Vadim Arkhipchuk, the Soviet "long-sprint" specialist, had been running marathon distances to develop stamina. It did him good: he finished second after Ulis Williams in the 400 meters, placing ahead of Lester Milburn. Finally, Valeri Bulyshev, whom Americans know, also placed second in the 800 meter. In the other running events the teams scored as many points as they had figured on.

A surprise to many people was that the Soviet athletes scored as many points as the Americans (67) in the different running events and the walk. It is true that because the American team in the 4x100-meter relay broke the rules the result (36 minutes 6 seconds) was disallowed.

In the jumps the athletes were rather evenly matched, winning 22 points



FIFTH USSR-USA MEET

BY ALEXEI SREBNITSKY

PHOTOS BY YURI SOMOV AND MSTISLAV BATASHEV

for their respective teams. The remarkable American vaulters who have mastered the fiberglas pole continue to serve as models for their Soviet rivals, while the Soviet triple jumpers are much superior to the Americans. And in the broad jump Ralph Boston revenged his defeats of last winter by world-record holder Igor Ter-Ovanesyan. As for Valeri Brumel, right now he has no contenders on his level. He confessed that after the 7 foot-½ inch jump he developed an ache in his leg, but in spite of that he succeeded (for the sixth time!) in beating his own world record by clearing the bar at 7 feet 5¾ inches. The Americans have a very good high jumper in Gene Johnson (7 feet ½ inch). Regrettably, he still hangs on to the old-fashioned belly-roll style of jumping.

Only in the throwing events did the Americans take a real lead—10 points. World-record holder Harold Connolly seems to have hypnotized the Soviet hammer men with his performance—they did much less than their best. In the javelin throw Olympic champ Victor Tsibulenko must have been jinxed; he placed only fourth. As for the discus and the shot put, the Americans were way ahead of the Soviet athletes.

The gap in the sum total of points was halved by the Soviet decathletes, experienced Vasili Kuznetsov and Anatoli Ovseyenko, a serviceman from Moscow who promises to become a top all-arounder. He turns in an excellent performance in the high jump (better than 6 feet 9 inches), does 15 feet in the pole vault, and throws the javelin close to 230 feet.

All this is what went into making the USSR team victorious in the "meet of giants."

These traditional competitions between Soviet and American athletes have a special quality, one which all the observers at the last meet (there were some 400 accredited journalists from 23 countries of America, Europe, Asia and Africa alone) noted—the atmosphere of friendliness and cordiality.

In token of this friendship the USSR Athletic Federation awarded a special medal to outstanding American pole vaulter Brian Sternberg, who was unable to come to Moscow because of a serious injury. Also in token of this friendship the Soviet and American athletes, with clasped hands, made a round of the cinder track at the Lenin Stadium to a standing ovation from the 75,000 spectators.

BACK COVER

1. Averell Harriman and Nikita Khrushchev took time off from official business in Moscow this summer to attend the now traditional USSR-USA track-and-field meet.

2. Vasili Kuznetsov (center) scored the first points in the decathlon by winning the 100-meter dash. Kuznetsov racked up a total of 7,666 points in this event.

3. A special feeling known only to athletes—the third attempt, and the bar is raised to a height no one in the world has ever reached. But he made it!

4. Valeri Brumel's new world record in the high jump (228 centimeters—7'5¾") received a standing ovation from the 75,000 spectators who filled the stadium.

5. Lester Milburn and Henry Carr, who ran in the last two legs of the 4 x 400-meter relay, confidently led their unquestionably superior team to victory.

6. Edvin Ozolin couldn't overtake Robert Hayes, but he beat George Gilbert, splitting the victorious American pair for the first time in the matches' history.

7. The American runners were sure favorites in the 400-meter hurdles. Willie Atterbury of the Los Angeles Track Club finished in a record 50.4 seconds.

8. Luck was against Willye White, the strongest American broad jumper. Tatyana Talysheva's final try (20-0¾) pushed this able athlete back to third place.

9. Yanis Lusis, a javelin-thrower from Latvia, has not had a single defeat in the past two years. He was up front again this year in the "meet of the giants."

10. World-record holder Tatyana Schelkanova scored first in the women's broad jump in Palo Alto last year. She did it again in Moscow this year with her 20-10.

11. 400 journalists from 23 countries reporting from Moscow enabled fans who could not attend the meet to follow it in their newspapers and see it on television.

12. It was a triumphant day for Soviet-American friendship. With clasped hands, the athletes made the farewell round of the cinder track at the Lenin Stadium.

13. The 100 meter winners (Galina Popova 11.7 and Robert Hayes 10.2) receive their medals on the winners' stand. The Soviet women took almost all possible points.

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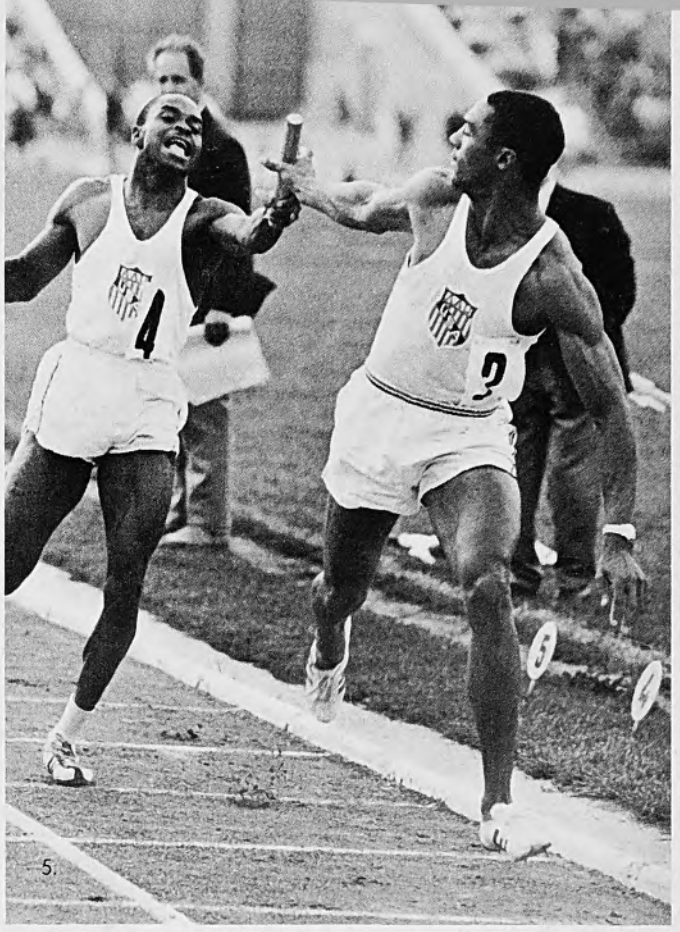
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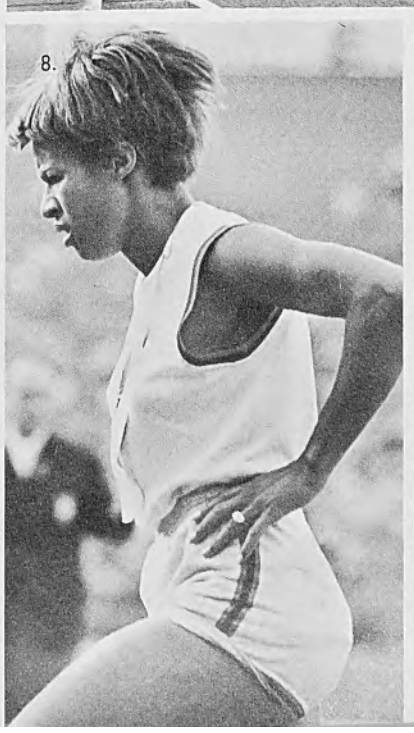
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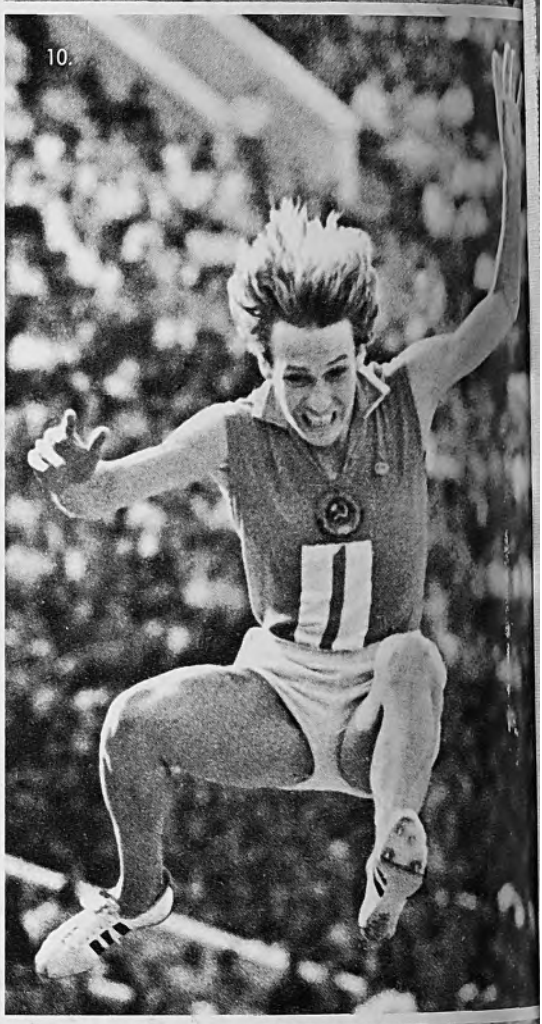
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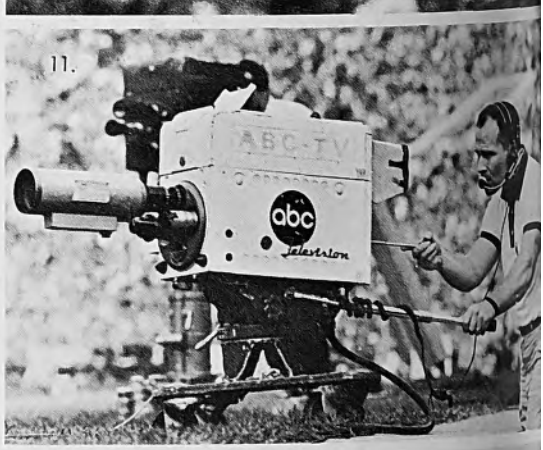
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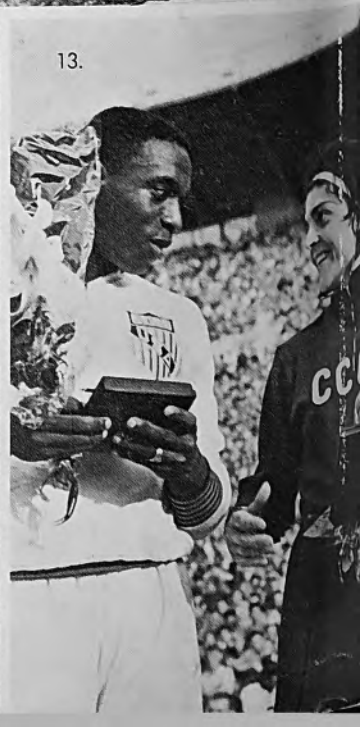
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USSR

SOVIET LIFE TODAY

DECEMBER 1963
25 Cents

Planning and Management page 8
Taming Stellar Matter page 16
Soviet Judicial System page 36
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Covers: A large collection of souvenir pins which reflect important events in the Soviet people's lives.
See story on Page 52

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ON THE NEW YEAR'S THRESHOLD

AS CHILDREN we were all fascinated by fairy tales about brave princes slaying wicked monsters and wise magicians turning wolves into lambs with the wave of a wand. A curious paradox, that the rationalist pressures of modern science and civilization have not been strong enough to break this seemingly fragile illusion that Good and the Truth will prevail.

And indeed, which of us would not like to have immediately what we know well enough will take pain and much labor to acquire? But let us imagine for the moment that we are actually living in a fairyland governed by a wise magician. Would you, an ordinary citizen, want to be this magician? Would you know what to do to cure this troubled world of its many ailments?

We suggest that you would because you know the kind of world you would like to live in, even without the clairvoyance of magicians or diplomats.

Future historians are likely to note that the sixties of our century marked the end of the myth about the clairvoyance of the powers that be. Secret diplomacy is dying before our very eyes. The problems agitating our modern world may be difficult, but they have been stripped of their shroud of mystery. Diplomacy is becoming a public institute. All of us know what kind of a world we would like to see.

Nothing can limit a magician in the working of miracles, so let him place a border control post between the years 1963 and 1964 and admit into the coming year only that which the majority of mankind agrees would make for a peaceful world. There are many, perhaps, who would like to leave behind some old economic and social injustices (racial inequality, political oppression, for instance), but on these matters there are too many different points of view. However, the idea of a peaceful world is something all of us, no matter where on the globe we live, would agree is desirable.

And so our magician will let no threat to peace cross the threshold of the coming New Year. Peace is threatened by concepts based on false fears, fanatical illusions or egotistical considerations.

He will bar the way to mistrust and suspicion in relations between countries since he knows that mistrust and suspicion are synonymous with hostility, and in our Atomic Age hostility is a dangerous anachronism.

He will not permit in the future the outworn theory that changing the social system of a country by force may serve the political and economic interests of another, an interfering one. People know by bitter experience that such a policy presupposes anything but peace. Since the powerful magician comes from the ordinary people of our planet, we will leave behind the callous and nearsighted view that the manufacture of arms is a natural companion of modern industry. How can anyone rest easy with a prosperity based on bombs?

There are any number of other such ideas that we would happily leave behind in 1963.

But why is it just now, at this time, that we permit our imagination to paint a picture of a world at peace? The answer was given on August 5, 1963, when the Moscow limited test-ban treaty was signed.

It was only yesterday that the air rang with angry and uncompromising shouts for war against the thunder of nuclear tests. Today, when the thunder has died down, bellicose militarism appears even more as the sinister throwback it is.

And so we come back from the fairyland run by the kind magician to the real world run by the laws of history.

Unfortunately, we cannot yet return to the past all that is still darkening the horizons of peace as easily as the good magician can at the border control post. But let us not be pessimistic. History will favor the great majority of men who want to build a peaceful world, and not the handful who want to destroy it.

Of course it would be nice if we could persuade Santa Claus to stand guard at our control post and make sure that we have a peaceful, happy, productive New Year.

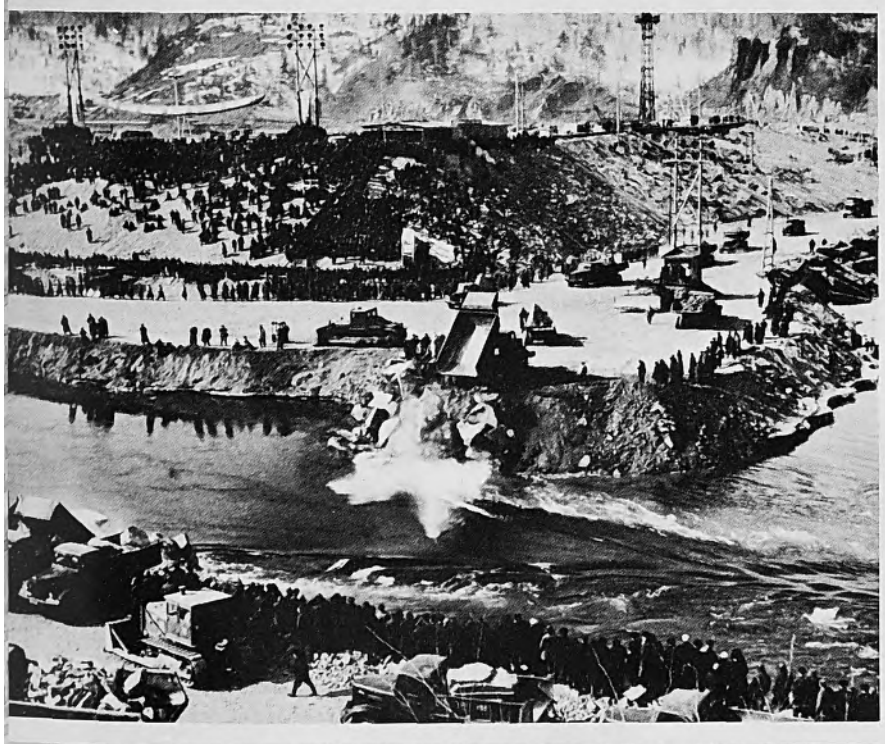
But all that Santa Claus can do, unfortunately, is bring candy and toys to our youngsters. It looks as though we will have to stand guard ourselves and assume responsibility for the future. ★

MEMORABLE EVENTS OF 1963

For the Soviet people 1963 was the usual eventful year. They built housing projects, harvested wheat, orbited space pilots, and fought to preserve the peace. It was a good year, crowded with work and achievement. Looking back, a number of events stand out, some because they show us how far we have come from our past, others because they give us a preview of the future.

These, we think, deserve a place in the chronicle for the year.

It was the fifth year of the seven-year plan, and the country was looking forward to the encouraging prospect of surpassing all the planned targets. This trend had been confirmed by the previous year. Industrial output in 1962 was 9.5 per cent higher than in 1961. In the first four years of the seven-year period 3,700 big industrial projects were put into operation, among them the one in the photo, the country's largest iron and steel mill, in Western Siberia. Nine million apartments were built in the cities (including 2.5 millon last year). State investments in industry and agriculture climbed to a record 34.5 billion rubles in 1963, more than a third of the national budget.



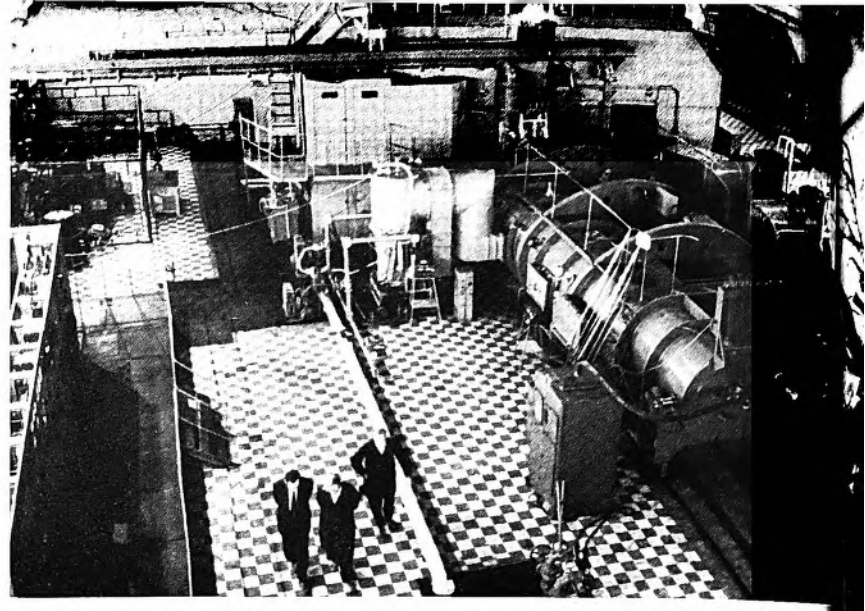
The country's productive potential was augmented by the completion of 628 of the biggest and most important construction projects. The magnitude of these highly efficient projects that incorporate the last word in automated techniques may be judged by the Krasnoyarsk Hydroelectric Power Station on the Yenisei in Siberia. The river was dammed this year.

The Krasnoyarsk Station will be the largest of its kind in the world. It will have 10 units of unusual capacity, 500,000 kilowatts each. But even this record will be surpassed. Planning is under way for a cascade of hydroelectric power stations on the Lena River in Siberia. One unit of the cascade, the Nizhne-Lenskaya Station, will have a 20 million-kilowatt capacity, four and a half times greater than that of the Bratsk colossus.

This was a year of many engineering firsts. The IL-62, a 182-seat jet passenger plane, was tested in January; it will be the main long-distance means of conveyance. A 60,000-ton tanker, the largest in the country, was launched this year in Leningrad. An unusual air-cushion vehicle, the Uragan-2 , was also tested this year. It has pneumatic rollers and an 86-square-foot ground contact area, is built upon a Vikhr air cushion and travels at a speed of 125 miles an hour. New diesel engines, automobiles, computers and hydrofoil ships—all products of creative engineering—are on display at the USSR Exhibition of Economic Achievements in Moscow. In 1963 there were 70,000 new exhibits (of a total 100,000) on view in its 79 pavilions.

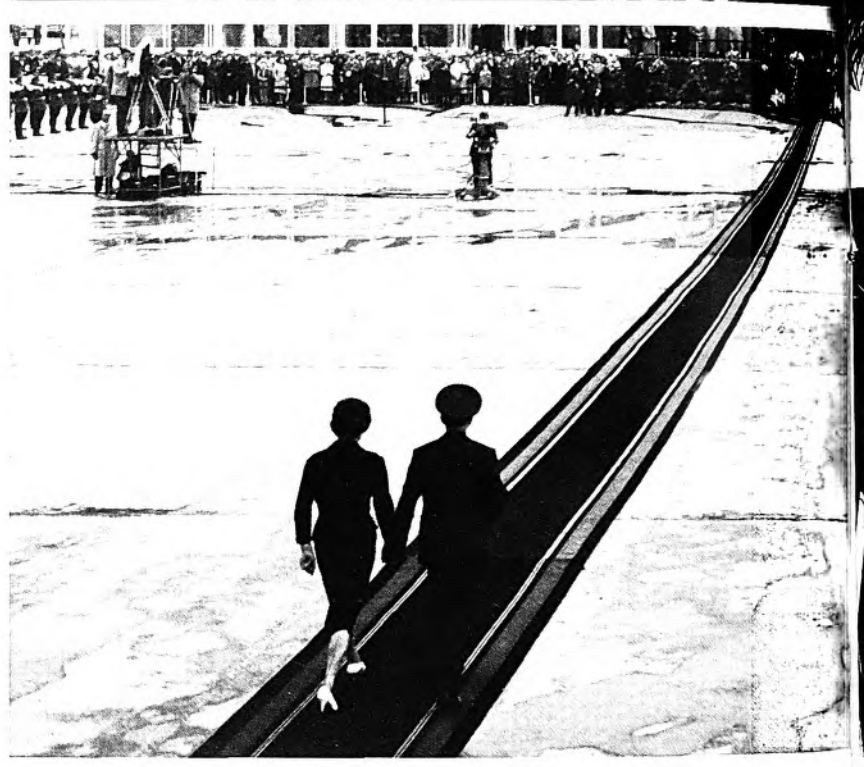
Soviet science, which points the direction of the country's technical progress, made significant research findings in many fields of study this year. Its leading center, the recently reorganized USSR Academy of Sciences, is now directing all research in the natural and social sciences. Lenin Prizes were awarded to Mikhail Molodensky (general theory of the gravitational field and shape of the earth), Bruno Pontecorvo (weak interactions of elementary particles and neutrino physics) and Ilya Vekua (theory of generalized analytical functions). Work with polymers and new cereal hybrids and in poliomyelitis was also honored with Lenin Prizes.

With the help of the accelerator shown in the photo Soviet scientists discovered the heavy isotope of the 102nd element, which has not yet been found in nature. A plasma cord with a temperature of 40 million degrees was obtained for the first time. Another first was a movie camera that shoots 500 million stills a second; it can record processes that take place at the speed of light.

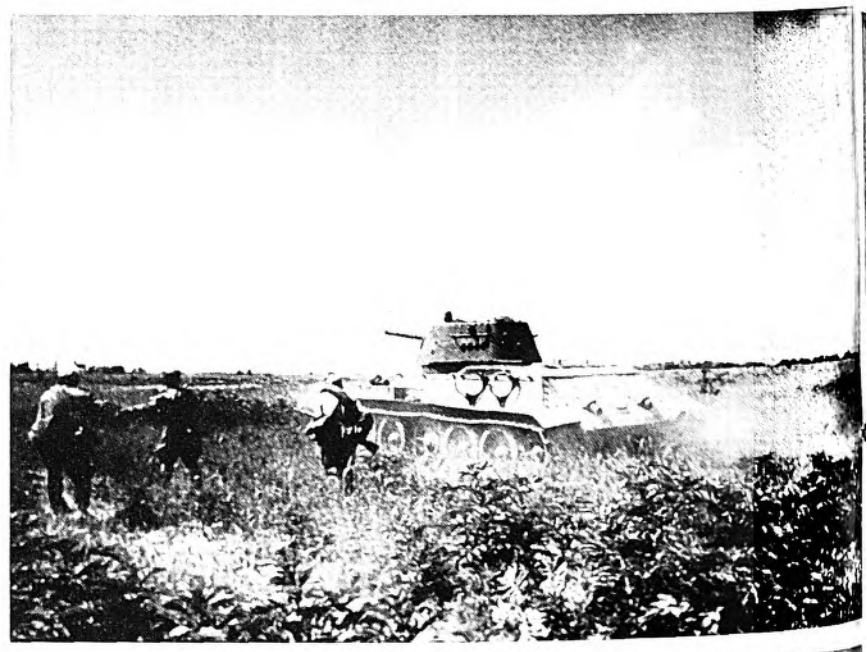


Cosmonauts Valentina Tereshkova and Valeri Bykovsky made a group several-day flight in spaceship Vostok VI and Vostok V respectively. This achievement followed upon others in cosmic exploration—heavy rocket accuracy tests in the Pacific area; the flight of Lunik IV toward the moon; the successful radiolocation of Mars, Venus and Mercury; and the launching of Cosmos XIX , the nineteenth man-made heavy satellite of the earth with a new program of investigation of the stellar ocean.

Cosmonaut Day, instituted in honor of the first space flight and the first man in space, Communist Yuri Gagarin, was marked by the Soviet people.



The Soviet people are busy with their peacetime labors, but the tragic events and glorious deeds of the Great Patriotic War are still alive in their memories. By commemorating the decisive battles of that war they do honor to those who fell and teach their children what tragedy war brings. Commemorated in 1963 were the twentieth anniversary of the Battle on the Volga, a turning point in the Second World War, and the Battle of the Kursk Bulge, a 50-day battle of tanks unparalleled in history.



This year also brought us other war remembrances. The Latvian sculptor Gediminas Iokubonis was honored with the Lenin Prize for his "Mother", a personification of the sorrow of all the mothers, wives and sisters of those who gave their lives in the Second World War to defend their country and the world from the scourge of fascism. In the former Mauthausen death camp (GDR) a monument was unveiled to General Karbyshev, a prisoner at this camp killed by the Hitler executioners. Leningrad citizens initiated a collection for a monument to the civilians and soldiers who died in the blockade, and funds are coming in from individuals and organizations throughout the country.

This year brought glory to Soviet sports. At the seventy-fifth open winter championship meet in New York for the U.S. title, Soviet athletes Valeri Brumel and Igor Ter-Ovanesyan took firsts. At Stockholm the Soviet hockey team won the world and European championship titles for 1963. The world chess crown passed from one Soviet Grandmaster, Mikhail Botvinnik, to another, Tigran Petrosyan. Soviet boxers, wrestlers, fencers and weightlifters won victories at world championship competitions. A major event of the athletic year was the match of giants, the fifth meet of the USA and USSR track-and-field teams, the Soviet team winning with a 189:147 score. (Ralph Boston (left) and Igor Ter-Ovanesyan are shown being interviewed during the meet.) A new world high-jump record of 7 feet 5¾ inches was set at this meet by Valeri Brumel. The greatest mass athletic event of the year was the Third Spartakiada of the Peoples of the USSR, in which 66 million amateur athletes participated. There were 23 million participants in the First Spartakiada and about 40 million in the Second.

Equipment was installed in the Kremlin and White House for direct telegraph communication between the Chairman of the Council of Ministers of the USSR and the President of the USA. It was a practical expression of the simple fact that global peace and tranquillity depend upon the relations between our two countries. That plain fact was demonstrated anew when the whole world sat waiting in the shadow of a thermonuclear war cast by the Caribbean crisis. We believe that in the most complex situations it is preferable to use this means of communication rather than weapons. The photo shows the telegraph apparatus sent from the United States for installation in the Kremlin.

Peace won a major victory when the three-power treaty banning tests of nuclear weapons in the atmosphere, outer space and under water was signed in Moscow in August. Most countries in the world have already signed the Moscow Treaty, which they look on as a first step toward the peaceful settlement of current international differences.

This was a year of brisk diplomatic contacts, stimulated by the Soviet Union's active foreign policy of peaceful coexistence of states with different social systems. Leading statesmen from Finland, Laos, Somalia, Cuba, Sweden, Mexico, Hungary and Bulgaria visited the USSR. Soviet newspapers reported Chairman Khrushchev's answers to correspondents of "España Popular" (Mexico), "Daily Express" (Britain), "Ultima Hora" (Brazil), and "Il Giorno" (Italy) on various questions bearing on the domestic and foreign scenes. The photo shows Orville Freeman, U.S. Secretary of Agriculture, presenting Khrushchev with a peace pipe.

The World Congress of Women, a forum of 2,000 delegates, guests and observers from 119 countries, met in the Kremlin Palace of Congresses. The themes discussed were the struggle for peace, disarmament and friendship among nations; women in the fight for national independence; health; the education and rearing of children and the youth. The congress was virtually unanimous in its approach to contemporary problems. The only discordant tone was sounded by the Chinese and Albanian delegates, who voted against the recommendations adopted by the congress.

The new academic year began this fall for the 61 million people in the Soviet Union who attend secondary schools, colleges, special secondary schools and vocational and refresher schools. One out of every four people in our country is a student. Forty-two million attend the general schools and four million combine their studies with full-time jobs. Six million boys and girls, including the secondary school graduates shown in the photo, began taking college and special secondary school work, and 1.2 million teen-agers began their studies in the vocational schools.

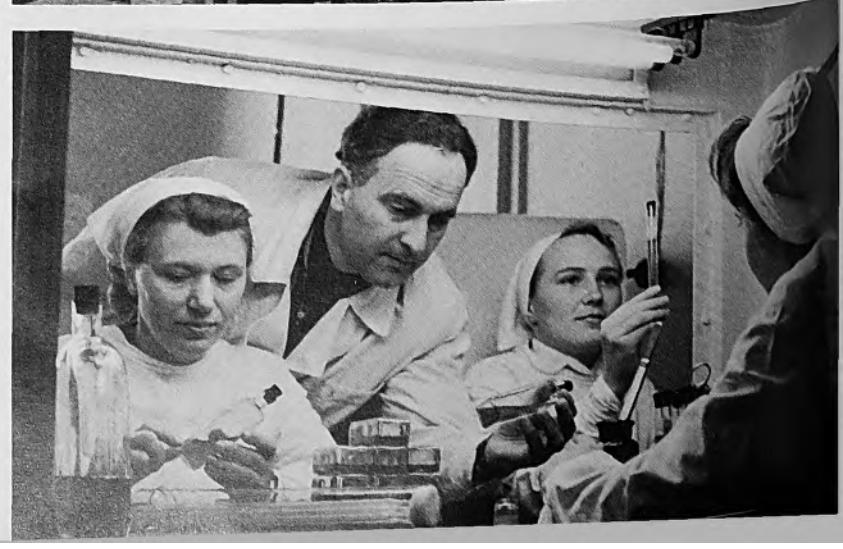
Searching discussions on literature and the arts took place. Creative intellectuals met with leaders of the Communist Party in March. The photo shows Grigori Chukhrai addressing the meeting. A pivotal event in the country's cultural life was the Plenary Meeting of the Central Committee of the Communist Party of the Soviet Union last June, which discussed problems of ideology and its role in the epoch of communism.

The Fourth USSR Conference of Young Writers (each of the 170 writers attending was under 30) analyzed the contributions made to Soviet literature by the young writers. All the peoples of the USSR were represented at the conference, including those that had no written language of their own before the October Revolution.

In August the modern novel was debated in Leningrad and later in Moscow at the meeting of the Executive Council of the European Writers Federation. Eminent writers from many European countries took part in the discussion. The participants subsequently met with Chairman Khrushchev.

Members of Communist Work Teams gathered at a countrywide meeting. Twenty-three million working people have already pledged to live by the code of ethics which marks the Communist Work Team member. Three hundred and fifty-seven thousand production teams, 38,000 shops and 2,000 enterprises have already qualified for the Communist Work title. Following the example set by textile worker Valentina Gaganova, 50,000 leaders of teams, sections and shops have assumed leadership of backward work teams, raising them to the level of the most advanced. This is a Communist Work Team at the Chernigov Synthetic Fiber Plant.

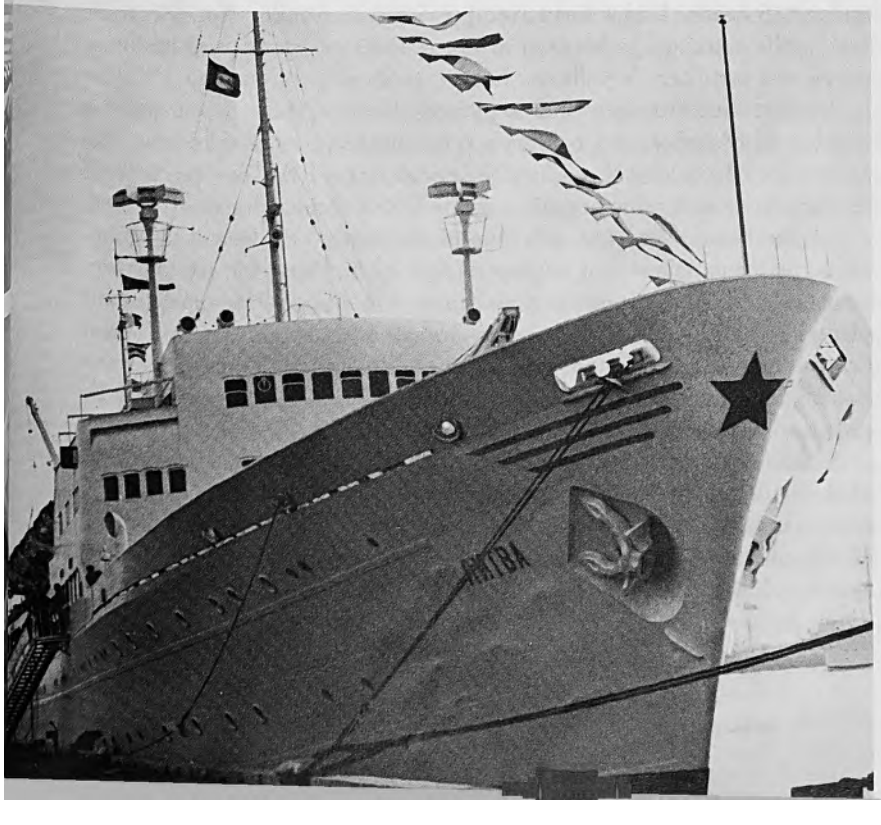
The USSR Congress of the Red Cross and the Red Crescent Society was held. This organization is concerned with all phases of health protection. Fifty million volunteers participate in its activities, which include inspecting the health standards of stores and apartment houses, helping to set up milk kitchens and village hospitals, and planting greenery. The organization is a member of the International Red Cross. It renders assistance to victims of natural calamities in other countries by providing food, clothing and medicines, and forms medical groups for work in the less developed countries. The photo shows workers at the Institute for the Study of Poliomyelitis testing vaccine to be shipped to Japan.



On May 5, Press Day, the Board of the Journalists Union awarded the Vatslav Vorovsky Medal (instituted in memory of the Soviet publicist and diplomat) to Yuri Frantsev, well-known Soviet journalist and public figure, for his articles on international topics in the Soviet weekly "Za Rubezhom." This is the third year this award has been won by Soviet commentators on world affairs.

The Single Power Grid, which will link the power supply systems of the European part of the Soviet Union with those of the European socialist countries of the Council for Mutual Economic Assistance, is now serving the Ukraine, Poland, the German Democratic Republic, Czechoslovakia and Hungary. Like the Druzhba International Oil Pipeline, the Single Power Grid will help to promote the economic cooperation of the European socialist countries, a cooperation which is constantly being expanded to new economic areas. At its recent meeting in Moscow the Council for Mutual Economic Assistance discussed problems connected with the coordination of national plans and power and fuel balances of the CMEA countries.

Frederick Erroll (left), President of Great Britain's Board of Trade, visited the Soviet Union and negotiated a renewal of the five-year trade treaty concluded in May 1959. This treaty has been of mutual benefit to both countries. In four years the volume of trade has increased by 50 per cent, to 300 million rubles a year. The new treaty is expected to boost Soviet-British trade. In 1962 the Soviet Union traded with more than 80 countries, the volume totaling 12 billion rubles, an increase of 14 per cent over the previous year.



Among the usual voyages made by Soviet ships sailing the usual sea lanes this year, there was one rather unusual run—made by the Litva . It left the port of Odessa in September with a group of Soviet journalists aboard. Steering a course toward Algeria, it took on new passengers—journalists—at Black Sea and Mediterranean ports. They were all bound for Algeria to attend the world conference of journalists from 50 countries. The voyage of the Litva became a prologue to this meeting. Crucial political and professional problems were discussed en route. Soviet journalists brought to this international conference a message of greeting from Chairman Khrushchev.

After the meeting in Algeria, the world conference was continued aboard the Litva on its return cruise to Soviet shores after stopovers in several countries of the Arab East.

A MACHINE-MADE NATIONAL PLAN

BY LEV KOLODNY

THE MORNING I visited the Main Computing Center they were feeding information into Ural-2 's memory bank. The punch cards with the data to be computed swiftly vanished into the bowels of the machine. There were some 15,000 of these cards. Sitting at the control desk was mathematician Kirill Kuzmin. While the machine was busy "memorizing," he told me, "The problem Ural-2 is working on we call Balance Sheet 435, meaning that we are trying to make up an interindustry balance sheet for 435 lines of output. To compute an interindustry balance sheet is to fix the ratios of the various branches of the country's economy. Today one variant of the problem, a balance sheet for three years, is being calculated."

The head of the Main Computing Center, Nikolai Kovalyov, gave me a more visual description of Balance Sheet 435. It looks like a big chessboard, the reason they call it the chess balance sheet. The board has 435 vertical and 435 horizontal squares, and all the squares have to be filled with figures.

That is the job of Ural-2 —to fill these squares so that with a glance at the vertical figures we know how much and what kind of products are needed for producing, say, steel or grain for the country as a whole, while a horizontal glance will tell us how much of each product is required to produce each of the 434 other articles.

Anyone can figure out that it takes 500,000 tires to equip 100,000 more cars. But how about the additional amounts of steel, iron and rubber needed, and have we made allowance for the wear and tear on the tires as a result of the extra traffic?

A very complicated business—drawing up such a balance sheet. The number of computations involved is enormous, 360 million of them for Balance Sheet 435. But this is not all. The various sections of the balance sheet are interconnected in a most complicated way. Scientific rates of raw material expenditure and requisite stocks must be worked out for each line of output calculated—a colossal amount of preliminary work. A "thinking" machine cannot do this work. This kind of thinking has to be done by human economists and mathematicians.

From the machine room the staircase leads to the third floor, where the theoreticians, the brains of the Computing Center, work.

The economists figure out the most practicable rates and norms. Economist Emilie Oganesyan showed us what data had to be studied before the rate of expenditure of materials for electric engines could be set. A study had to be made of the operation of all the country's electrical engineering plants, the finds of the research institutes had to be examined, progress in chemistry and the use of polymers had to be taken into account.

While I was getting acquainted with the work of the Computing Center, Ural-2 was busy making up Balance Sheet 435. Even a machine operating at cosmic speed takes hours and even days to solve such an economic problem.

Balance Sheet 435 (in view of the fact that it covered a period of three years) had a staggering number of unknown quantities—1,500. The problem was solved in 30 hours! Without the Computing Center all the mathematicians of Moscow gathered in this big building could have worked for a century and not solved it.

The answer told us how much of what had to be produced to take care of consumer needs and to allow for export and accumulation. The balance sheet lists the country's important industries and products under 435 heads. Under head No. 1 is iron ore, under No. 435 trade and public catering. In between are coal and steel, grain and potatoes, paper and fertilizer. Metallurgy has 21 subheads, agriculture 19. This is the first time anywhere that a planned balance sheet for so large a number of branches of a country's economy has been worked up. The economies effected by this scientific calculation of the development of so complex an economic organism as the USSR can hardly be estimated.

But the balance sheet is only one of the many problems our economists, mathematicians and engineers deal with. Plans for the development of individual industries, schemes for distributing newly built plants, complicated shipping routes are all worked out by this Main Computing Center of the USSR State Planning Committee. Even Balance Sheet 435 does not cover all the aspects of the economy. In prospect is Balance Sheet 1000, involving 1000 industries.

A huge machine twice the size of Ural-2 is being fitted out in one of the halls of the Main Computing Center and alongside it telegraph equipment to receive information from all the republics and the largest of the country's economic areas. This is the beginning of the unified system of computing centers. It is described in the accompanying article by one of its creators, USSR Minister Mikhail Rakovsky. ★

UNIFIED SYSTEM OF COMPUTING CENTERS

BY MIKHAIL RAKOVSKY

Mikhail Rakovsky is 55 years old. He is an engineer, a Master of Science and author of several studies on automation. A USSR Minister, he heads the State Committee on Instrument Making, Automation and Control Systems of the USSR State Planning Committee.

THE SOVIET ECONOMY has made large headway within recent years. It is growing at an exceedingly rapid rate. In the past four years as many as 3,700 new industrial projects of various types were commissioned. The machine-building industry alone produces 125,000 different items. The country has been divided into large economic areas that in territory, population and industry are as big as some countries. Streams of data pour into the capital from mills, factories, mines and banks, a great flood of paper, while a multitude of other streams flow back from the center with all sorts of orders, recommendations and information.

The Moscow City Economic Council, which is responsible for only the capital's industry, must do 60 million computing and logical operations a year to digest all the incoming information.

The country's productive forces are concentrated in the hands of one master, the people. This makes a single nation-wide plan possible. It also makes possible the use of electronic computing techniques for solving economic tasks, not only on a plant or industry scale but on a country-wide scale. It makes possible, too, progress from separate computing centers to a unified system of computing centers for the whole country.

We have some experience along these lines already. The unified power grid is a case in point. Electricity generated by stations large and small is fed into one grid interconnecting the power industries of the north, south, east and west. The unified state system of computing centers will channel every type of information to the Main Computing Center of the country for processing.

Work to create such a system is well under way. The foundation is there. In industry alone we have something like 800 operating machine calculating stations and 2,400 computing bureaus. Besides those in the USSR State Planning Committee, in the republics, in all major economic areas and in economic councils, many of the big plants have their own computing centers and machine calculating stations. What needs to be done is to merge these rivulets into one mighty river.

The familiar tape recorder is a variety of magnetic memory. These tapes can store other things besides music. They can record specifications for such intricate industrial items as electric locomotives, motor vehicles and rolling mills. The Main Computing Center will have a library of taped information on the capacities and products of plants, raw materials, inventories and all other important indices. Machine calculating stations of mills and factories will be wired to the computing centers of the economic councils, from there to the republic's centers and from them to the Main Computing Center for the country where a high-speed electronic computer with a colossal memory store will be operating, capable of "encompassing the unencompassable," of digesting and storing this highly diversified information on the industrial development of the whole Soviet Union.

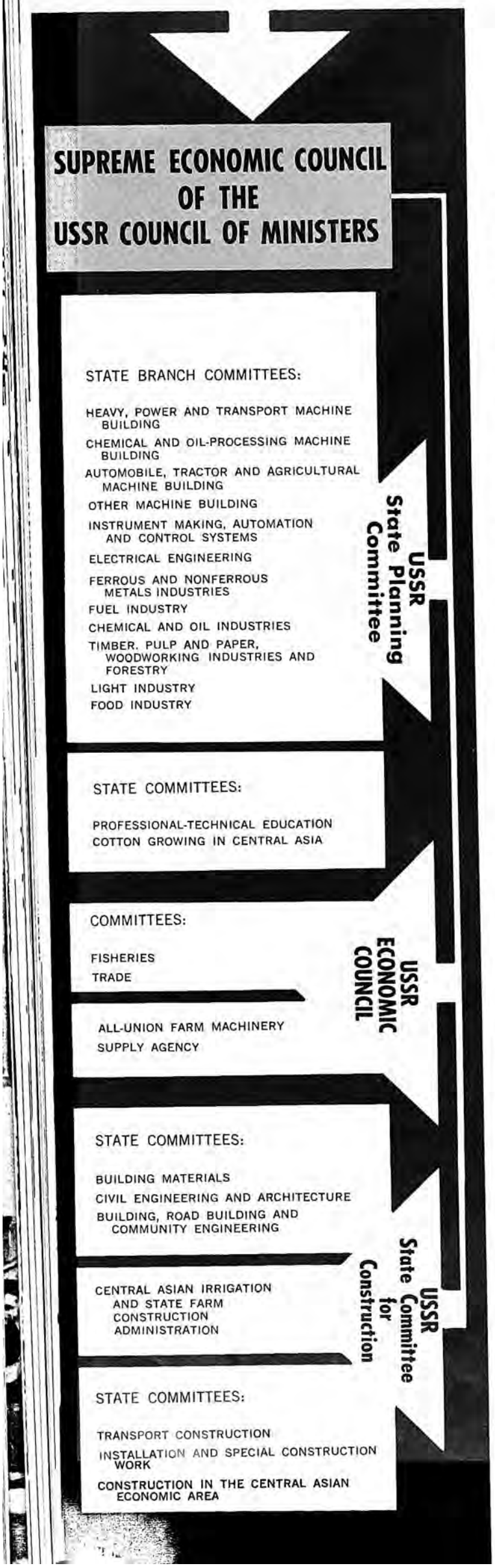
The Main Computing Center will be able to solve problems of prime national importance: it will make calculations for the current and long-term plans, set the proper ratios and relationships of production between industries and branches of the same industry, work out elements of pricing, check on local plans. Many of these problems are already being solved by electronic computers functioning at the computing center of the USSR State Planning Committee. But its efficiency would be much increased if a whole network of computing centers covered the country.

Planning will be only one of the activities of the unified state system of computing centers. It will also help us more immediately and directly to manage the economy by finding optimum versions for fulfilling our plans. The electronic machine, by running through all possible versions, will choose the best one, something which a whole army of computing workers is often unable to do. Some time ago one of our economic institutes had its machines check whether transport operations in conveying coal had been planned correctly. The machines produced the optimum plan and saved the country 50 million rubles. Even now we would find it hard to calculate all the benefits that have accrued from the application of electronic computer techniques to the national economy.

Here is one example. A machine-building plant found it lacked a certain type of rolled metal. Generally, in such cases the plant goes to its economic council, which goes to the USSR Supreme Economic Council. That body issues orders to supplying agencies which contact either their warehouses or economic councils that have metallurgical plants. Even with telegraph it takes hours and sometimes days to find the needed metal. The Main Computing Center, having received such information, would immediately verify through the economic councils' computing centers the availability of the required rolled product at different warehouses. We would then need minutes rather than days to locate the metal and give instructions where it is to go.

Soviet scientists are also trying to develop and improve optimization control devices. These are devices which work out by themselves the best forms of production process control.

Electronic equipment will do much to raise the efficiency of the national economy. ★



PLANNING A

BY GENRIKH EMDIN
EDITOR, *EKONOMICHESKAYA GAZETA*

HOW is the country's economy planned and administered?

The national agency responsible is the Supreme Economic Council of the USSR Council of Ministers (SEC). Vested with the necessary rights and powers, it coordinates the work of the USSR State Planning Committee (Gosplan), the USSR Economic Council, the USSR State Committee for Construction (Gosstroi), and the various state branches and industrial committees.

The responsibilities of the SEC in more specific detail are these: Through the proper agencies it administers all branches of industry and construction and coordinates the activities of the planning and management organs. The SEC is responsible for the fulfillment of plan targets by industrial plants and construction projects; the rational and effective use of capital investments, material, labor and available funds; the growth in labor productivity; the reduction of production costs; and improvement in the quality of goods produced. It originates and carries out measures to stimulate industrial growth and expansion. SEC decisions, within the limits of its authority, are obligatory for all enterprises, regardless of their subordination to other agencies.

Now for the functions of the management and planning organs whose work SEC coordinates.

GOSPLAN, the national planning agency, is responsible for the proportional development of the economy as a whole and the accelerated development of its most promising branches. It also sees to the proper and most economical distribution of the productive forces and the widest application of scientific and technological findings.

Gosplan's national plan is based on the plans of individual industrial plants, construction projects, collective and state farms, production management boards, union republic and state industrial committees, USSR agencies and ministries. The plans take into account the potentials for the greatest possible growth in quantity and quality.

The plan is drawn up for a five-year period and broken down by years, industries, union republics and large economic areas. An annual plan and a semiannual plan allows for necessary corrections, new requirements, late developments in science and technology, discoveries of raw material sources.

Attached to Gosplan are state branch committees whose chairmen are Gosplan members with the rank of minister. That tie-up has several virtues—it is a guarantee that the various industries follow a single technical policy, that scientific and technological improvements are applied generally and that there is a continuing specialization by industrial plants.

The 12 state branch committees attached to Gosplan are responsible for heavy, power and transport machine building; chemical and oil processing machine building; automobile, tractor and agricultural machine building; other machine building; instrument making, automation and control systems; electrical engineering; ferrous and nonferrous metals industries; fuel industry; chemical and oil industries; timber, pulp and paper, woodworking industries and forestry; light industry; the food industry.

Gosplan also directs two state committees, professional-technical education and cotton growing in Central Asia.

This organizational structure focuses attention on the organic link between planning and management. Their effective combination determines, in very considerable measure, the country's rates of economic development.

The state branch committees supervise the design bureaus and research facilities and are therefore responsible for the technological level of the industries under their jurisdiction. They have the final say in plans for new processes. Within the limits of the long-range and current plans for national economic development they decide what items will be produced, discard obsolete items for new and better types, determine which plants will specialize and how and where pilot, research and design facilities will be set up. The recommendations they work out with the local authorities and planning agencies are incorporated in the national economic plans.

The USSR Economic Council (EC) centers its attention and efforts on the application of the national economic plan, on the efficient use of resources, the elimination of excessive expenses and losses. The EC works through the Councils of Ministers of the union republics, republic and interrepublic economic councils, USSR ministries and agencies.

Two committees—for fisheries and trade—are attached to the EC. It also administers the Soyuzselkhoztekhnika—the national agency that supplies machines, spare parts, mineral fertilizers and other necessities to collective and state farms. The same agency is responsible for the repair and maintenance of farm machinery.

GOSSTROI works out technical policy for capital construction, approves suggested projects and plans and supervises the work. It administers most of the design and research agencies in the construction industry. There are three state committees subordinated to Gosstroi: building materials; civil engineering and architecture; and building, road building and community engineering. The Central Asian Irrigation and State Farm Construction Administration is also under Gosstroi as are the State Committee for Transport Construction, the State Committee for Installation and Special Construction Work and the State Committee for Construction in the Central Asian Economic Area.

It will be noted that Gosplan, the Economic Council and Gosstroi are union republic bodies, that is to say, they administer such agencies in a number of the union republics as planning committees, building committees and republic economic councils.

There are economic councils on the republic

AND MANAGEMENT

level only in the Russian Federation, the Ukraine and Kazakhstan, each of which is divided into several economic areas. These three economic councils are subordinated to the Councils of Ministers of their respective republics and to the USSR Supreme Economic Council. The Russian Federation's Economic Council administers 24 economic areas, the Ukrainian and Kazakh seven each. Byelorussia, Armenia, Azerbaijan, Georgia, Latvia, Lithuania, Estonia and Moldavia each comprise an economic area with an economic council subordinate to the respective republic's Council of Ministers. The Central Asian republics are contained in the Central Asian Economic Area. All told, there are 47 economic areas in the country, each with its economic council.

The economic councils direct the work of their subordinate agencies and organizations; evaluate, correct and approve their plans; control their production and financial return; render necessary assistance, etc. The authority of the economic councils is limited only by the powers granted by law to the planning and management agencies on the republic and national level. This integrated and centralized planning assures the necessary degree of uniformity of all the local plans and at the same time permits the individual plants and the local planning and management organs the broadest initiative and economic independence. The principle reflected here is democratic centralism.

The economic councils have departments for planning, production, finance, wages and working conditions, capital investment, supply and sales, plant and equipment, accounts, quality inspection, etc. The kind of industrial departments they have varies with the specific characteristics of a given area. For example, there may be departments for ferrous and nonferrous metals, machine building (broken down into its various specialties, if necessary), instrument making, electrical engineering, chemistry, light industry, textiles and foodstuffs. Some of these may be combined into one department or they may be subdivided into several departments, depending on the scale of production.

Now let us have a look at the planning and management of capital construction on the republic level. Except for the Central Asian republics all the union republics have construction ministeries. A construction ministry acts as the general contractor and controls nearly all the agencies responsible for industrial, residential, community and farm construction in its area. The aforementioned Committee for Construction in the Central Asian Economic Area, subordinate to Gosstroi, does the same service for the four Central Asian republics.

A special body, the Central Asian Irrigation and State Farm Construction Administration, also attached to Gosstroi, is responsible for irrigation and agricultural construction in the virgin land areas.

The economic councils and other agencies do not do the building themselves; they only place the orders.

The construction ministries of the republics (and the Central Asian Committee) have a number of area organizations within their jurisdiction. For example, in the RSFSR the construction ministry has jurisdiction over 19 main territorial departments. Usually located in the centers of economic areas, these departments have the same rights (within their sphere) as the economic councils. The production-dispatcher sections of the main territorial departments control the construction trusts directly.

That, in brief, is the structure of Soviet planning and management. We find it advantageous to combine these two functions, or, more accurately, the two aspects of the same function, under a single head. Our present system of management, which combines the area and industrial approach, meets our current needs and seems the best system for improving planning and keeping the rate of national economic growth on the rise.

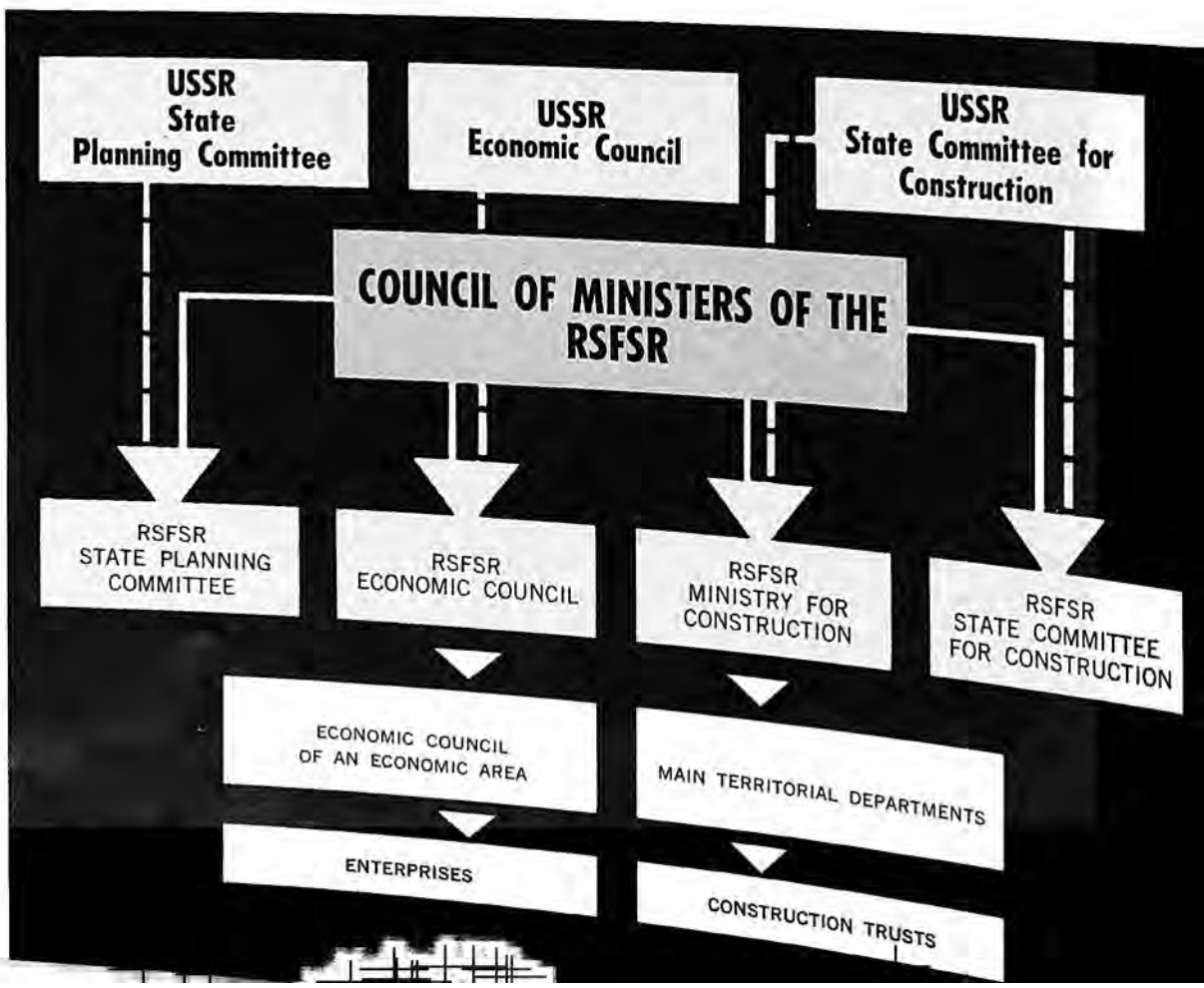
Does that mean that the type of economic management we have described is fixed, never to be modified or supplemented? Of course not. It is quite probable that as economic progress presents new targets and new requirements, the system will be modified and improved. The art of management means finding the forms most adequate to a given historical period.

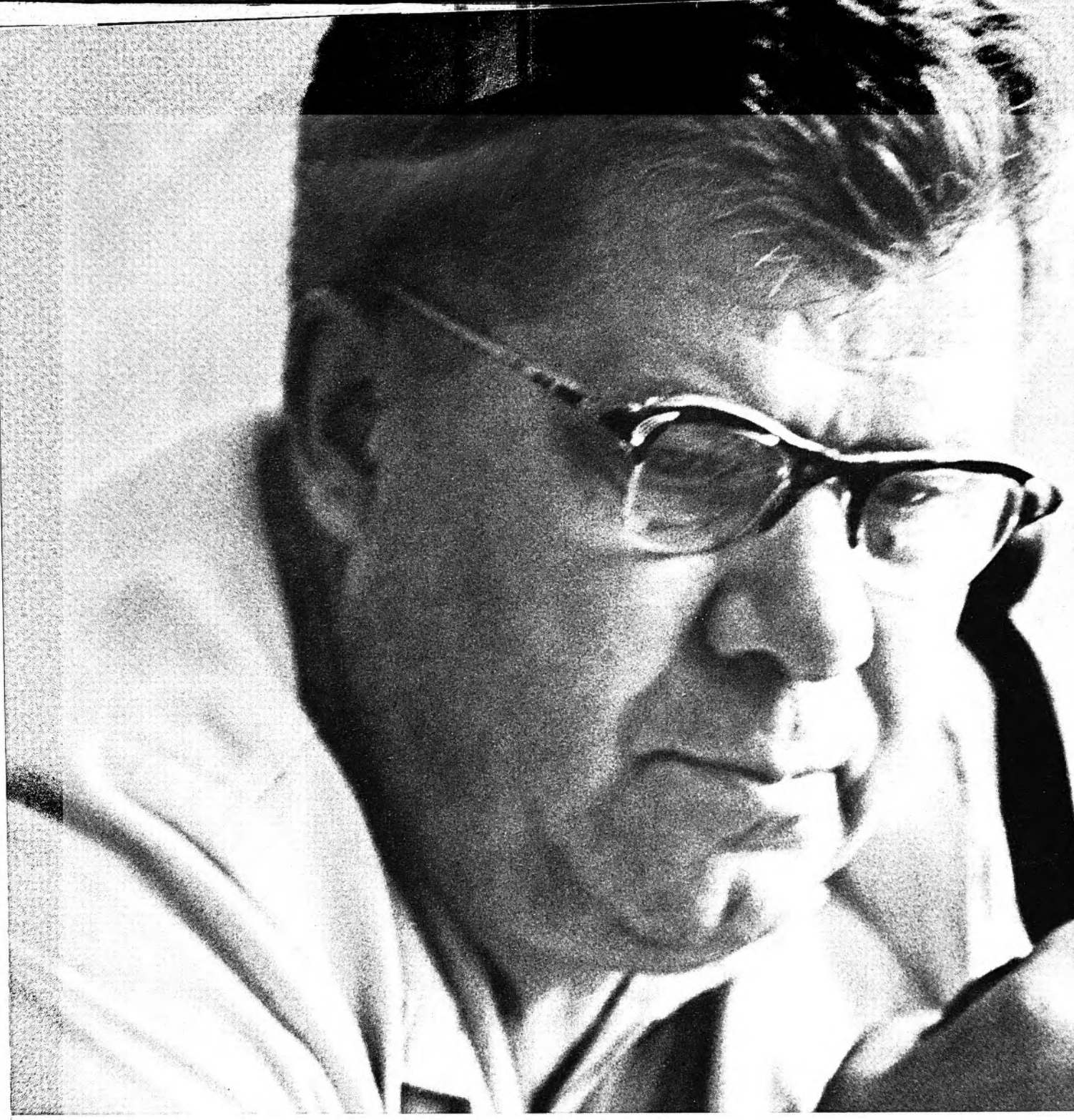
Constructive modification is inevitable for a number of reasons: first, the tremendously accelerated pace of production and construction; second, sweeping scientific and technological progress; third, the spectacular rise in the social, cultural and technical standards of the workers; fourth, the expanding democratic foundation of economic management, the growing numbers of workers active in management.

The link between economic concept and economic fact was not forged today or yesterday; it is a developing process. The novel elements are today's changed social conditions, the scale of operation, the goals and the merging of those two aspects of the economic process, planning and management.

The Soviet Union had no models to follow and therefore had its problems in organizing economic planning and management. But it also had very favorable and historically new factors —the national ownership of land, transport, banks, machines, raw materials; the possibility of drawing up an all-embracing plan as a national goal that would be obligatory for every citizen; the absence of clashing economic groups and interests; the unity of economic policy and practice from top to bottom.

The Program of the Communist Party of the Soviet Union formulates the basic economic law of the country—maximum production at minimum cost in the general interest. Every link in the chain of planning and management is devised to make the most efficient use of machines, men and materials, to eliminate unnecessary costs, to increase the national wealth. ★





BY YAKOV USHERENKO

PHOTOS BY GEORGI PETRUSOV

AT A QUARTER TO EIGHT every morning Pavel Malofeyev and his 17-year-old son leave for their respective jobs at the Urals Heavy Machinery Plant. Malofeyev is the director of this engineering plant, the largest in Europe, whose trademark is familiar on every continent. His son works in the isotope laboratory.

Seven minutes later the director is at his desk. His workday begins with a look through the Moscow and local newspapers.

From eight o'clock to ten he confers with the chief engineer, the chief mechanic, chief metallurgist, chief economist and the business manager, the heads of the major departments. There are always pressing questions to be decided; some are settled quickly, others only after considerable and sometimes heated differences. The director is a plain-spoken man, never the diplomat.

Malofeyev is a broad-shouldered, rather thickset 53-year-old man with characteristically Russian features. He moves with the confidence of one who has the respect of the men he supervises. What strikes you at once is the way he listens patiently and carefully even when obviously disagreeing with the speaker. With an occasional remark he keeps the talk from going off on a tangent.

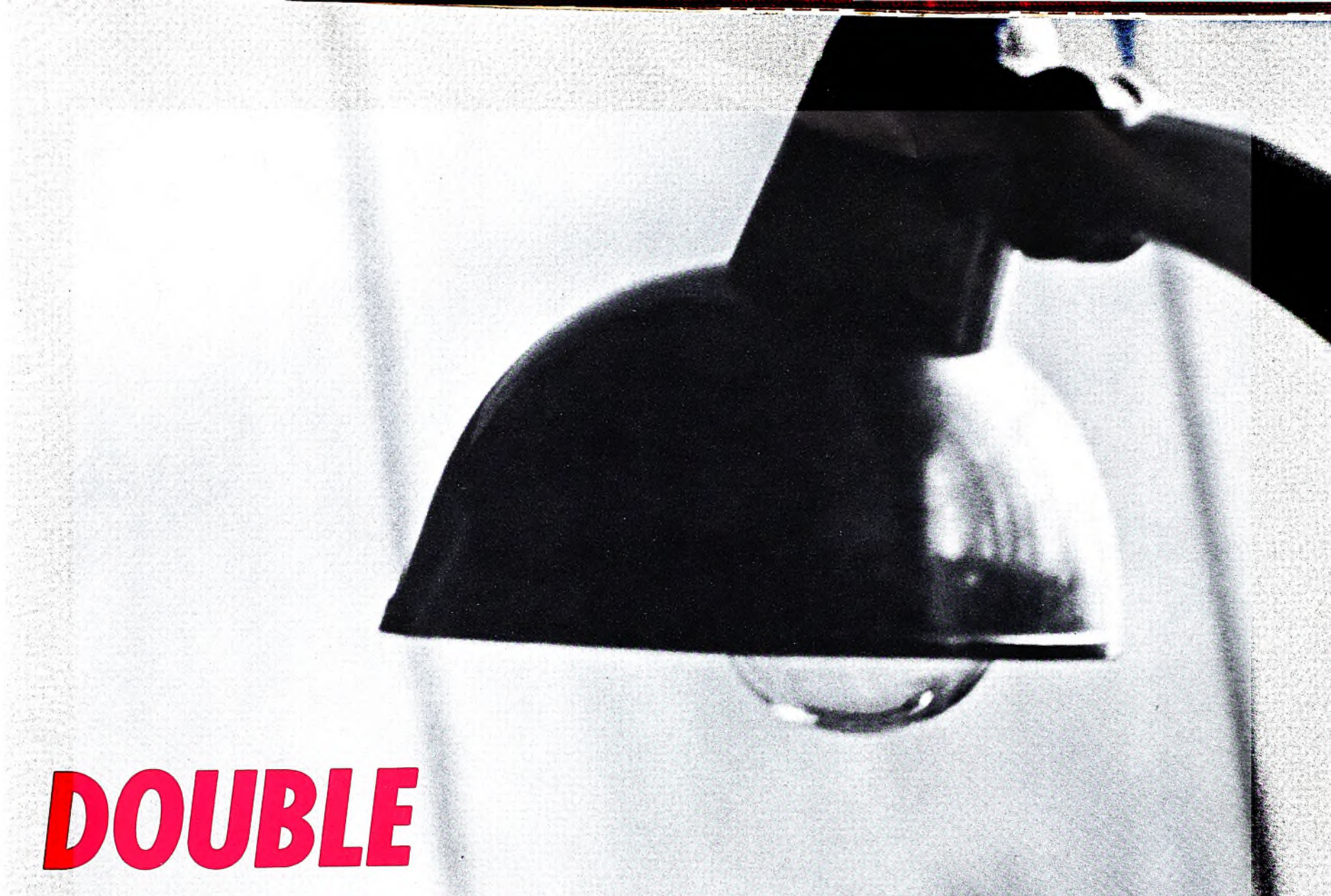
By ten all the conferences are over, and it is time for him to start on his daily round of the plant. "Getting to the people who do the real work," he says, only half-jokingly; he himself still feels more at home in the shop than behind a desk. His tour is not haphazard; he follows a carefully planned itinerary and adheres to it strictly. He has to, the huge plant has more than 100 shops. He concentrates on those that threaten to become bottlenecks.

At work in the administration building, a gray five-story structure that takes up a whole block, are hundreds of engineers, technicians, designers, planners and economists. These several hundred workers constitute two independent entities in a relationship that one designer on the staff described in jest as "two sovereign but very cooperative states within one country."

One of these "states" is the operational headquarters of the engineering plant; the other, the heavy machinery research institute. Until now they have both been housed in this building which was put up in the early thirties, but a big modern structure is being erected alongside it, also a block long. It has the earmarks of the architecture of the sixties—ferroconcrete and glass. The new building will house the laboratories, experimental workshops and designing offices of the institute.

Pavel Malofeyev was a young YCL'er when he came to work in Sverdlovsk. The outskirts of the city where the plant was being built was still taiga country then. That was in the early thirties, when thousands of young people answered the call of the Communist Party of the Soviet Union to go East to help build the first big steel mills and engineering plants. Pavel Malofeyev was one of them. Born in the small Russian town of Yelnya, in Smolensk Region, he had just graduated from its seven-year school.

With his perseverance and energy and the help of the men he worked with he developed as a leader and organizer. In three years he was holding down the job of foreman, and people many years his senior were addressing him respectfully by his given name and patronymic, Pavel Rodionovich.



DOUBLE DIRECTOR

In 1937 Malofeyev went back to school, working days and attending a junior engineering college at night. He received his diploma at the same time he was appointed chief of the machine shop. That was another landmark in his biography. By that time he was already a Communist with a 10-year record in the Party. Incidentally, Pavel Malofeyev (who was working as a fitter at that time) joined the Party when the Urals machinery plant was still under construction and there were only 50 members in the local Party organization. Today there are 5,000.

As the years went by, Malofeyev's reputation for working with men spread beyond his own shop. His skill and experience carried authority at factory-wide workers' conferences and communist meetings. But he felt the lack of formal training; experience was not enough. He held engineering positions, but whenever someone referred to him as an engineer, he would explain, "I'm not an engineer, just a practical worker . . ."

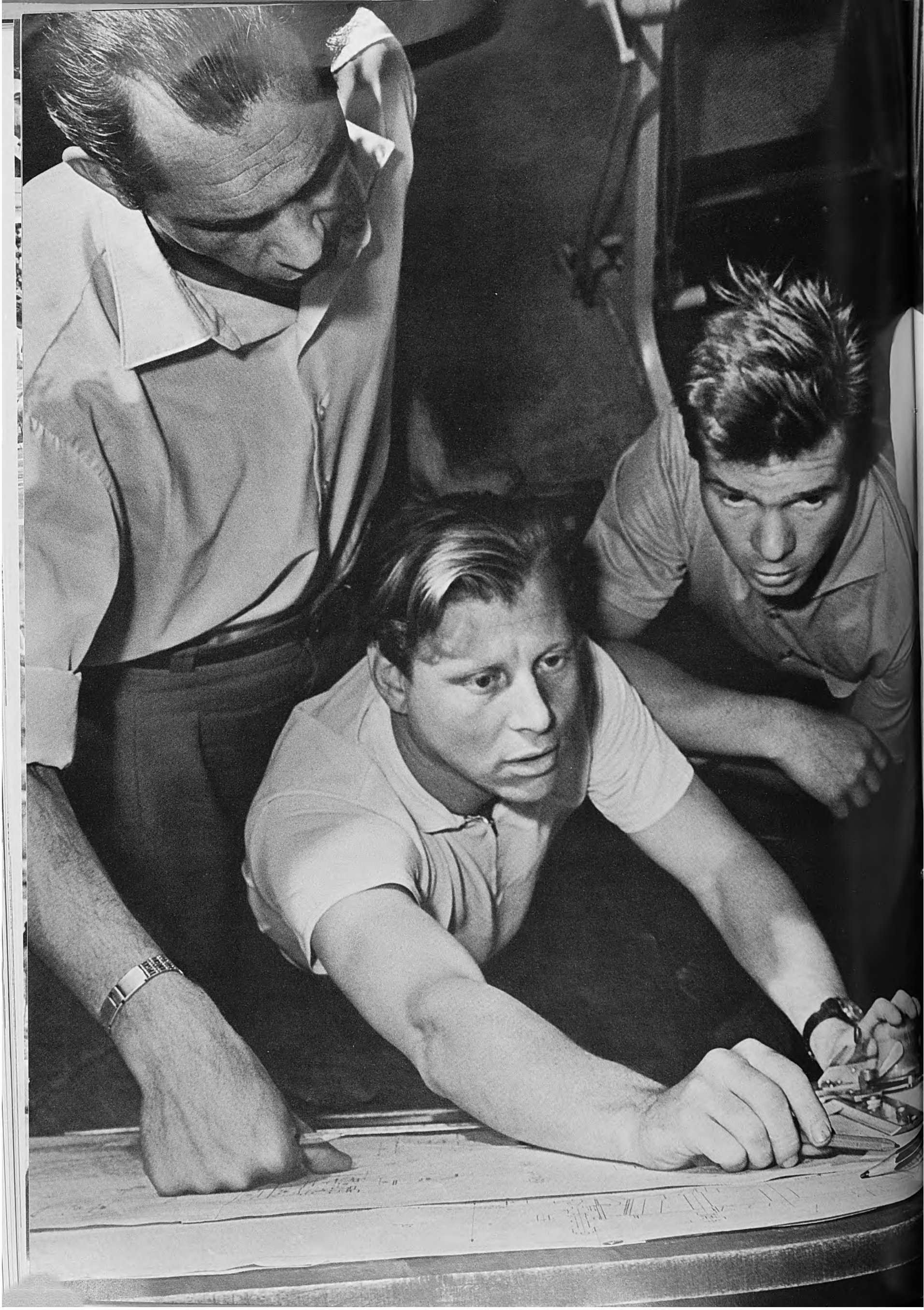
In 1947 he entered the Urals Polytechnic Institute. He graduated in 1952, and in the 10 years that followed climbed a few more rungs—to chief mechanic and then chief engineer of the plant. In the spring of 1963, when the former director of the plant, Victor Krotov, was appointed chairman of the Middle Urals Economic Council, Pavel Malofeyev took over his job.

The plant he heads turns out 2,000 carloads of heavy equipment a month. It supplies blast furnaces, rolling mills, blooming mills, walking excavators, powerful presses, rotary furnaces for cement factories, oil drilling units which cut deep into the ground. There is not a steel mill, oil field or large construction site in the USSR where machines with the Urals trademark are not in operation.

Seventy-five per cent of all Soviet iron and nonferrous metals ores are processed with crushers, mills and agglomeration equipment made at the Urals machinery plant; 80 per cent of the oil wells in the USSR are drilled with units the plant supplies; 75 per cent of the pig iron is produced in blast furnaces made at the plant; and the blooming mills it makes account for 25 per cent of all the rolled metal the country produces.

Malofeyev spends all day Thursday in his office receiving callers. That is when workers, local housewives, and students come in with their needs, grievances or suggestions. They want to know about housing construction and the distribution of new apartments, dining facilities, kindergartens and nurseries, schools and clubs, sports areas and vacation resorts. All of which seem very far removed from plant operation, but they all fall within the director's jurisdiction because the annual plan of the plant and the collective agreement with the trade union cover such a wide range.

Take housing, a problem that comes up frequently in these Thursday visits. Housing was a very acute problem a few years ago, and it is still a sizable headache. In the thirties, when the plant was under construction, a whole town of wooden cottages and barracks grew up around it. There were 400 barracks alone, housing several families each. In the thirties that was the best they could get, but things are different now. Times have changed, and needs and living standards with them.



This chart shows what progress the plant has made in the last ten years on housing:

NEW HOUSING

Year	Number of apartments built	Number of families given separate apartments
1952	122	60
1953	287	160
1954	396	140
1955	216	110
1956	315	125
1957	470	280
1958	1213	600
1959	1657	1100
1960	1791	1500
1961	2075	1800
1962	2222	2000

We see then that in the past ten years alone Urals machinery plant workers moved into almost 11,000 new apartments, and that about 8,000 families received their own apartments (the larger apartments were shared). And what became of the wooden barracks? Only 60 of the former 400 remain, and their days are numbered. Even the street once called Barachnaya (Barrack Street) is no more; lined with modern five-story apartment buildings, it is now called Ulitsa Kultury (Culture Street).

After three in the afternoon you will rarely find Malofeyev in the office. Look for him on the fifth floor, in the offices or institute laboratories. The plant director also serves as the director of the designing and technological institute, and presides at meetings of its Scientific and Technical Council.

The research institute is the brain of the Urals machinery plant. Like the plant, it also ships its products—not metal and machines, but drawings and specifications—all over the country. Since the beginning of the seven-year plan, the institute has designed 60 pieces of new equipment built by the plant.

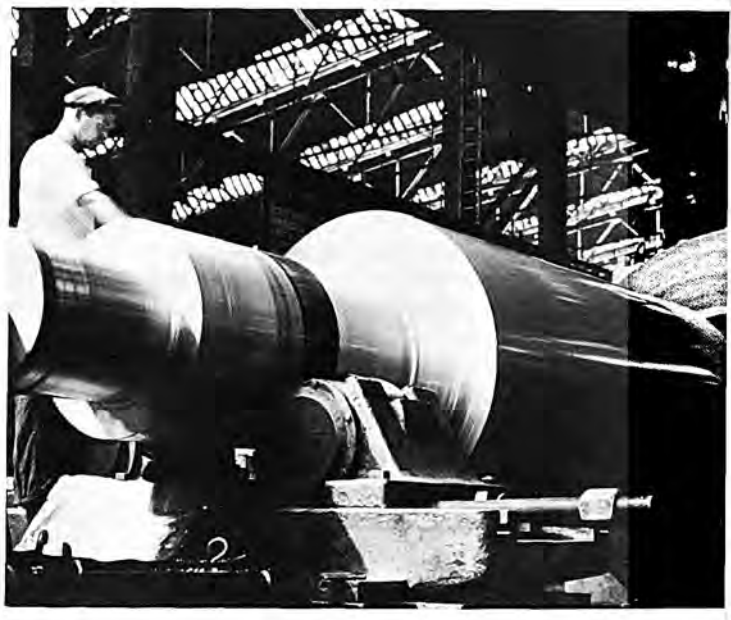
The institute is now working on the design of Rolling Mill 450. Almost a mile long, it will weigh 15,000 metric tons and its motors will have a 57,000-kilowatt capacity; a carload of rolled metal will come off this mill every 10-15 minutes. Like all the institute designs, it embodies the creative thought of thousands of people.

Malofeyev rarely leaves the plant before eight. A long day, but if it were not for a phone call from his wife Nadezhda, he'd be staying longer: "Isn't it about time to come home, Pavel? You've already put in two shifts . . ."

When the director is reminded that the seven-hour workday holds for him as well as any of the shop workers, he laughs.

"But I am a double director—of the plant and the institute—which means that I should be putting in double seven hours." ★

Designers (left to right) Alexei Varaxin, Victor Dyshkant, Yevgeni Gelfenbein and Oleg Sokolovsky check drawings for a continuous steel-pouring installation. The plant makes mill equipment, excavators, large presses as well as oil drilling units.



A rolling shaft being worked on the boring machine in the large parts machine shop. The plant turns out 2,000 carloads of heavy equipment a month. The largest engineering works in Europe, its trademark is stamped on machines used the world over.

A STRIKE AT OUR PLANT?

BY NIKOLAI ANDROSOV

CHAIRMAN OF THE TRADE UNION COMMITTEE
MOSCOW COMPACT CAR PLANT

IS THERE any law forbidding Soviet workers to strike? No. Have workers in our country the right to call a strike? Yes. In March of this year longshoremen in the Baltic ports of Riga, Klaipeda, Liepaja and in Odessa's new port of Ilyichevskoye refused to load coal for France. They struck in solidarity with the French miners who were demanding higher wages and democratic rights. The Soviet port workers were supported by the USSR Central Trade Union Council.

But, you will probably say, that was merely an expression of workers' solidarity. How about such things as wages, hours, working conditions, speedups, layoffs, automation and union recognition, which so often lead to strikes in the West? How are such things handled in the USSR?

Of course we have disagreements and clashes between workers and management. But there is plenty of room to settle these disputes without resorting to strikes. As a matter of fact, many of the rights for which workers elsewhere have to go on strike are written into Soviet law. Take the question of dismissal. Management has no right to fire a worker without the consent of the trade union. The basic wage scale is fixed by the state in agreement with the trade union, and no one has the right to change it. So is the length of the workweek. As for union recognition, the law requires management to negotiate an annual collective agreement with the workers. And in the past few years the unions have been given an even larger voice in the management of industry and the state. Permanent production conferences of workers have been set up at every factory and mill. Theaters, clubs, health and vacation resorts, and other cultural and educational institutions are now run by the trade unions. The unions have been more actively exercising their right to initiate legislation. Under these conditions they have no need to fight for freedom of activity and consequently no need to resort to strike action.

I might use the plant I work at as a concrete illustration. We make the Moskvich compact cars, very popular at home and abroad—they are being exported to more than 30 countries. Our output keeps growing from year to year. Last year's over-all output was 31.2 per cent higher than that of 1959. The workers' earnings rose 6.9 per cent in the same period. The wage increase percentage was lower than the output increase, but that can be explained by the fact that the introduction of new machinery and more advanced technology is largely responsible for higher productivity, not the additional labor put in. Note too that when our annual production program plans for increases in labor productivity and volume, it also plans for wage increases. That being the case, you can judge for yourself whether the workers have to fight for higher wages.

And yet conflicts do arise from time to time. For example, turner Anatoli Brylev of the motor shop operated two lathes machining camshafts. When a new semiautomatic unit was installed, his earnings dropped because the operation became so much simpler.

The management neglected to take into account that Brylev's skill entitled him to higher pay, and thereby it had violated the law forbidding any cuts in the earnings of workers transferred to new jobs. The plant's trade union committee asked the management to transfer Brylev to another job where he could earn as much as he had before, which the management did.

This sort of problem—jobs eliminated by automation—is a major strike issue in Western countries. We Soviet trade unionists do not consider automation a threat. To us it is an essential means for raising labor productivity and with it earnings, and at the same time making the worker's job easier. We are very much interested in pushing automation and we keep a strict check to see that management fulfills its commitment to mechanize and automate production as stipulated in the collective agreement.

Under last year's collective agreement the motor shop was mechanized throughout—more than a score of special-purpose lathes, trains of machines and six mechanized mass-production lines were installed; individual sections of the assembly shop were reconstructed; the conveyor for transporting brake drums was modernized; and the new method of painting two-color car bodies in the static field with subsequent drying in a thermoradiation chamber was introduced.

These and other innovations meant that we had to revise the pay rates for various operations. In such cases our principle is that a workers' earnings cannot be cut. The new rates are fixed with the participation of the trade union. No new rates can be introduced without our consent and approval. The standards and quotas set are those the average worker can reach without detriment to his health. We also allow time for rest periods and setting-up exercises.

The new rates are introduced only after most of the workers master the new techniques and machinery. For instance, a revamped process and better work distribution raised labor productivity in the machining of cylinder blocks. New rates had to be fixed, and it was done with the participation of the men themselves. Their earnings rose very considerably. In this case all the operators were utilized despite the improved process.

As elsewhere, automation and improved technology does, of course, make certain skills superfluous in our country. But our constant expansion of production makes it possible for us not only to use the released workers but to hire new ones. Also, as we automate, we retrain the workers.

Retraining superfluous workers and their transfer to other jobs are planned by the management in advance, so that by the time a new technological process is introduced there are already a sufficient number of trained men available. The rest of the workers are transferred to other jobs of their choice. The management finances the retraining of workers, and the union's function is to see that the men's skills are properly utilized.

The following figures show the large scale on which training and retraining of workers is done at our plant: Last year 3,000 workers improved their skill, 557 persons attended schools to learn the new techniques, 111 persons learned new skills, and another 1,200 finished special courses in production technology. There were 495 engineers and technicians who took various refresher courses. In addition more than 1,000 of our people studied at the evening secondary schools for young workers and 970 at schools of higher learning.

These worker-students have no problem of placement. They either learn to handle the new automatic lines or learn a new skill or trade, or, if they choose, they can move to some other plant where their old skills are in demand. Here is an illustration: A few years ago we began to spray car bodies. When we installed an automatic line, some of the painters (Mikhail Kholin, Mikhail Nikitchenko, Victor Kaplin and others) became adjusters. Today Nikitchenko is a foreman in the painting section. The others learned new skills and are now working in other shops. This is how we handle this potential strike problem.

From time to time we see stories in the Western press about strikes in the USSR. Last year certain newspapers, the Paris *Figaro* for one, told their readers about a strike in Kemerovo. The report was based on a note in the Soviet press which took the city's economic leaders to task for their failure to improve workers' living conditions and held them responsible for the substantial fluctuation of manpower in the city's building trades.

The Western press was quick to interpret this as a strike. When the matter was cleared up by the Soviet Novosti Press Agency (APN), the newspapers concerned published a denial, and the Western news agency responsible for the false report published a retraction. Unfortunately, not every distorted account of Soviet life in the Western press gets this kind of treatment.

Higher labor productivity makes for higher real wages. How? Every enterprise has a fund set aside which is used to improve the working and living conditions of its staff. The fund represents a percentage of the profits the enterprise makes. It will, of course, vary with the volume of output, labor productivity and overhead. At our plant this fund grew from 768,000 rubles in 1959 to over a million in 1962. The money from this fund, augmented by state allocations, is spent on new housing, nurseries and kindergartens, medical services, rest and recreation facilities, etc.

Last year, for instance, our plant built five five-story and two nine-story apartment houses. Fitter Anatoli Isayev and his wife (who also works at our plant) received one of the new two-bedroom apartments. Their combined monthly income is about 240 rubles; they pay only 12 rubles of it for rent. For nursery and kindergarten care for two of their children they pay 20 rubles a month, a fraction of the actual cost. The difference is made up by the enterprise fund (in the final analysis, by state funds). Their third child goes to grade school. The

whole family gets its medical services free at the plant's polyclinic.

This past year 53,000 rubles were spent from the enterprise fund on health and vacation resort accommodations, which the workers either get free or at reduced rates—30 per cent of the actual cost. Last year every fifth worker got his vacation accommodations free or at this much reduced rate. The fund also paid for summer camp accommodations for 1,550 of the workers' children and for kindergarten-in-the-country accommodations for 740 younger children.

We can see then why every worker would be interested in a larger output and in raising the labour productivity. It gives him higher earnings, of course, but it also puts more in the enterprise fund, which comes back to him in the shape of indirect personal income. A strike would only mean time wasted that could be spent producing for himself and others. In effect, striking against the government means striking against himself.

One other thing about Soviet workers that makes foreign visitors raise their eyebrows. This particular instance is from my plant. Voicing the feelings of his whole team, fitter Alexei Bulatov asked that their output quotas be increased 10 per cent. It stands to reason that they would not make such a proposal if it were not in their personal interests. It was made only after Bulatov's team, by improving and rationalizing work procedures, had pushed the team quota up by 11.6 per cent. What that did was to increase every man's earnings by an average of 10 rubles. And incidentally, each of them mastered another skill so as to be able to substitute for one another when necessary.

Bulatov's idea was picked up by adjuster Alexei Baskakov of the automatic shop, by fitter Anatoli Isayev, by team leader Vladimir Shiryaev of the motor shop and by many others. The management and the trade union helped them work out new technological methods, cut down time-consuming processes and mechanize individual operations. The movement spread to every shop and yielded a 4.6 per cent rise in the plant's labor productivity.

The workers, engineers and technicians constantly turn in new ideas to improve their work and methods. Last year alone upward of 3,000 proposals and suggestions were submitted to the plant's rationalization and invention bureau. Most of them were adopted and saved the plant nearly 1.5 million rubles.

I could cite you similar examples from many other plants. At the recent plenum of the Central Committee of the Communist Party of the Soviet Union, the point was made that 18 million inventions and rationalization proposals were introduced in our industry in the past 10 years, with a saving of approximately 10 billion rubles.

Can all this be explained by saying that the worker is interested in more money for himself, and only that? Hardly. The explanation must obviously be sought in the increased awareness and changed mentality of Soviet people. Not only does the management feel a sense of personal responsibility for the productivity of his factory, and therefore his society, but so do the workers.

We Soviet people think in terms of a "common pool" into which all profits flow and from which everyone draws according to the quantity and quality of the work he contributes. We are working to make that pool large enough to give everyone an abundance. Essentially, this is why Soviet workers have no reason at all to strike. ★

THIS IS HOW IT HAPPENED

A Trade Union Dismisses a Construction Worker Chief

BY PYOTR YASHCHENKO

I WAS introduced to Ivan Shatokhin at the Rostov-on-Don City Construction and Architecture Department. He had been appointed a few days earlier to the modest post of civil engineering technician. Before that he had held the post of a construction worker group chief of one of the trading organizations in the same city.

Now Shatokhin is a rank-and-file worker carrying out the orders of others instead of giving orders to other people. There are also substantial changes in his wage—he gets 89 rubles a month instead of 150.

What was it that caused Shatokhin such palpable moral and material losses?

When he was a chief, Shatokhin ignored the opinion of the workers, was rude to them and often lost his temper.

The construction workers often criticized their chief at meetings, and following their demand the presidium of the joint committee of the Union of Workers of State Trade and Consumer Cooperative Enterprises discussed Shatokhin's behavior. He was warned that if he did not change his attitude toward people the trade union committee would raise the question of his dismissal.

The warning had its effect, but not for long.

The Soviet labor laws contain a clause granting the trade union organs the right to break the labor contract between an enterprise or an establishment and an employee that harms the interests of trade union members (Article 49, Labor Code). All the district, regional and other higher trade union committees are vested with such rights.

The local trade union committee set up a special commission to examine the work of the group headed by Shatokhin. The commission included two workers, a bookkeeper, a mechanic and an economist.

The information supplied by the commission was discussed by the local trade union committee. Besides the chief, the committee asked a large group of workers to attend the meeting. All those present heard the report of the commission chairman and Shatokhin's explanations. Here are the reactions of some of the workers:

Nikolai Gudenko, carpenter: "Our chief was not fair to everybody. It sometimes happened that construction workers of the same trade did the same jobs but got different pay. I have been working at construction sites for a long time and know that such things are allowed only by poor administrators."

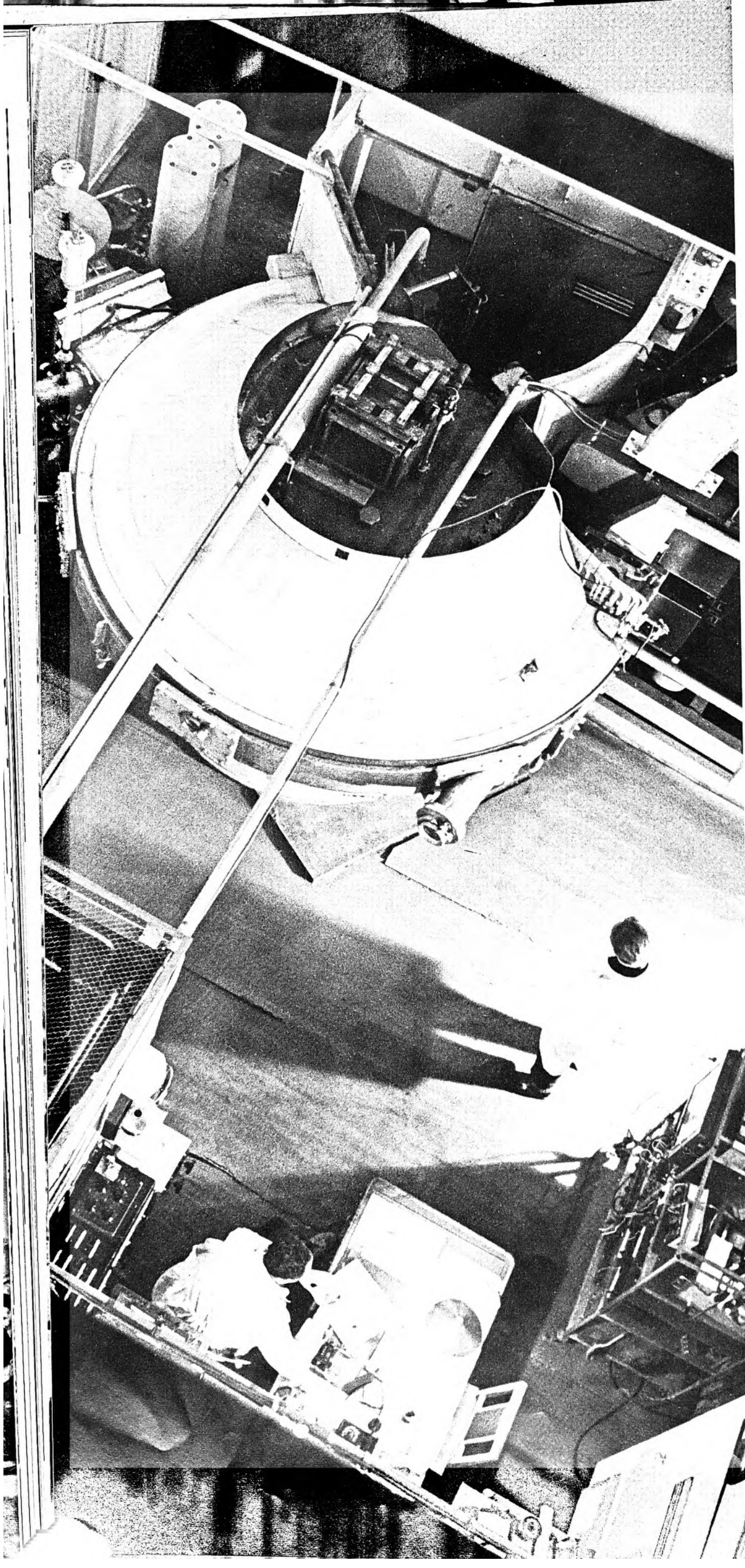
Pavel Yudin, house painter: "We had no vacation schedule. Some went on leave when they pleased, others were deliberately detained by the chief. I feel that he should not remain in this post."

In a unanimously adopted resolution the local trade union committee requested its superior trade union organ to bave Shatokhin released from his job.

This request was taken up by the presidium of the joint committee of the Union of Workers of State Trade and Consumer Cooperative Enterprises at a meeting attended by ten of its eleven members, including workers, shop assistants, trade inspectors, two trade union workers and one lawyer. Shatokhin was also invited to this meeting.After a detailed discussion on the committee's findings, the presidium demanded that the Rostov Economic Council release Shatokhin from his post. At the same time he was reminded that he had the right to appeal the presidium decision in a district court within ten days. According to the law, the court must consider the appeal within a week's time.

"Did you appeal the decision?" I asked Shatokhin.

"No, I had no case," he replied frankly. ★



Academician Lev Artsimovich, a Lenin Prize laureate.

FOR ALMOST TWO DECADES, physicists the world over have been experimenting with a variety of methods to obtain high-temperature plasma and keep it stable, experiments that have a direct bearing on the problem of harnessing the energy of the light elements—hydrogen, helium, lithium and the others. The researchers hope ultimately to produce, maintain and control a thermonuclar reaction, to fuse the nuclei of the light elements, a process that will put the virtually inexhaustible resources of these elements, if not at our service, then at the service of future generations. This is a concentration of scientific effort on the task of creating, here on our planet earth, new stars and suns tamed, on demand, to surrender to man their colossal stores of energy. No one, however, except for the creators of H-bombs, have yet found ways of utilizing this energy.

The difficulty is that nuclear synthesis, which releases the enormous quantities of energy latent in the nuclei of the light elements, can take place only at very high temperatures, something on the order of a hundred million degrees. For a nuclear reaction of that intensity to take place we must therefore first heat the substance to this high temperature.

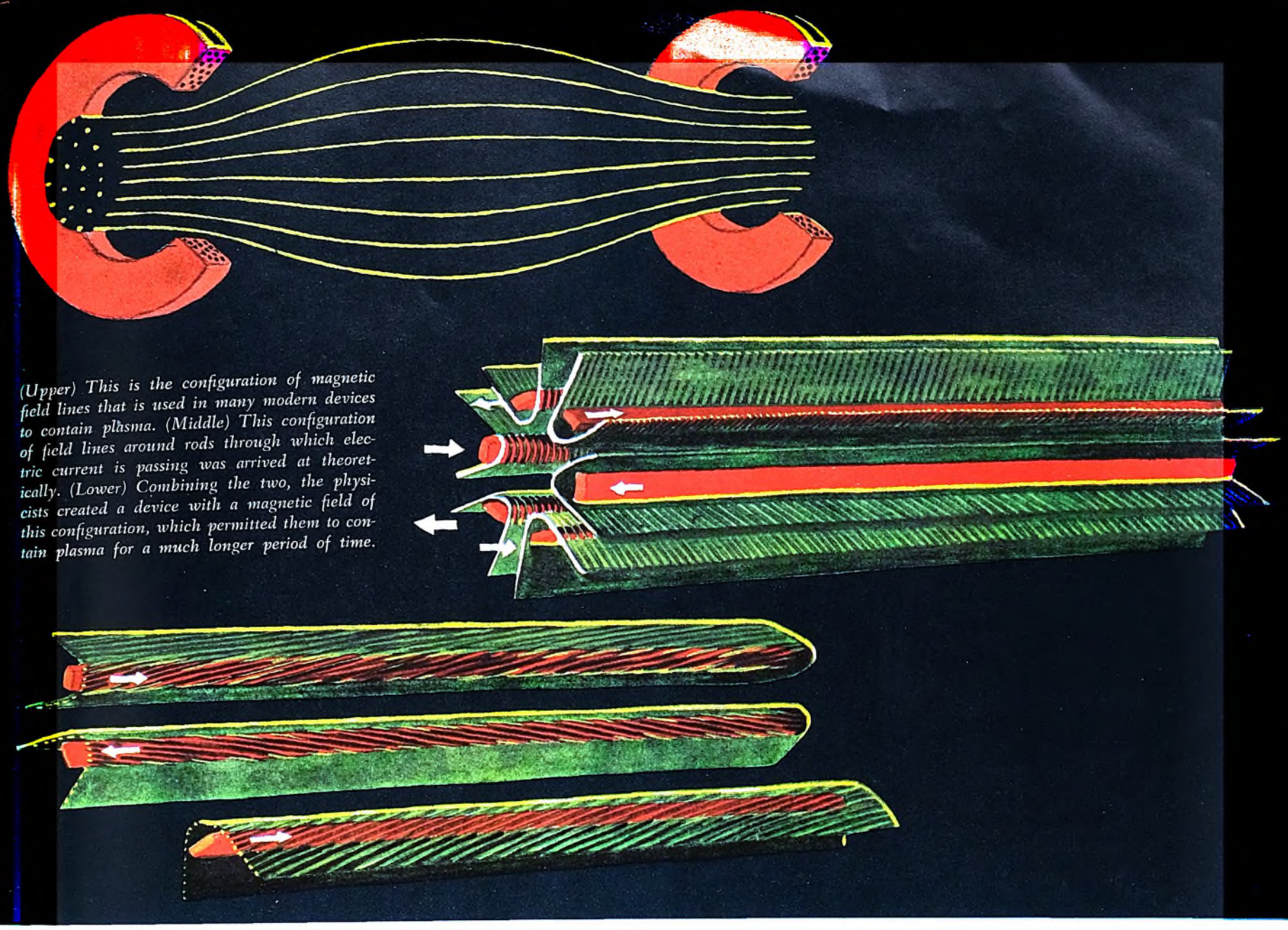
But at super-high temperatures substances assume a plasma state, that is to say, they no longer consist of neutral atoms, but of a conglomeration of fast moving charged particles of two sorts—electrons and atomic nuclei.

Not only must we obtain this high-temperature plasma, but we must keep it in this heated state a sufficiently long time for the atomic nuclei to react with each other.

And here we have the main task and also the main difficulty in research of this kind—the fact that plasma has an easy tendency to give up the heat it has acquired when it splashes charged particle streams against the walls of its containing vessel. Some very effective method of heat insulation must be provided so that the plasma does not interact with the chamber walls.

The only conceivable way, thus far, of preventing the heat loss is the one suggested 12 years ago by Soviet Academicians Andrei Sakharov and Igor Tamm, by use of a magnetic field. A strong magnetic field surrounding the plasma can cut energy losses very considerably. But the problem there is that for the charged particles that make up the plasma the magnetic field acts as a kind of barrier which they cannot break through, it forms a sort of "magnetic bottle."

For some years now scientists in various countries have tried to put this idea to work, but with, so far, not very encouraging results—the plasma heated to several million degrees had a lifetime of only a few millionths of a second.



(Upper) This is the configuration of magnetic field lines that is used in many modern devices to contain plasma. (Middle) This configuration of field lines around rods through which electric current is passing was arrived at theoretically. (Lower) Combining the two, the physicists created a device with a magnetic field of this configuration, which permitted them to contain plasma for a much longer period of time.

TAMING STELLAR MATTER

BY LEV ARTSIMOVICH
ACADEMICIAN

The Soviet Union has developed many types of experimental thermonuclear installations or "magnetic traps"—"Ogra," which was the first in the world to produce high-temperature plasma, and a whole family of "Tokomaks." One of these prototype installations served as the parent of an installation that gave us new results.

For a long time before that we could find no effective way to keep plasma stable. Often enough, in trying to contain the plasma in balance with a magnetic field, we felt as though we were riding a single-wheel bicycle on a thin, loosely hung string.

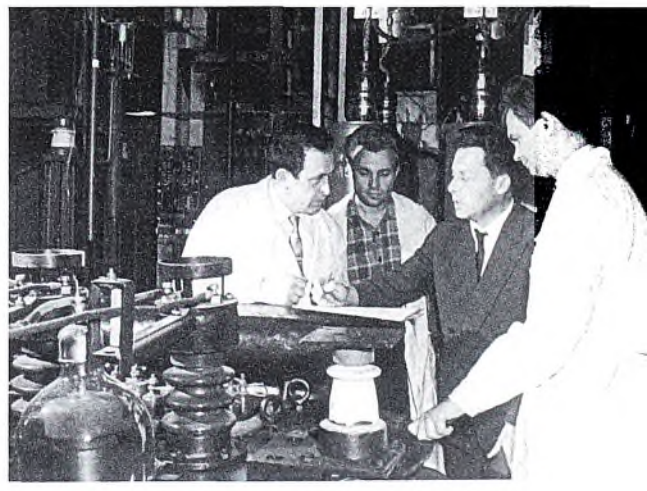
Yet in spite of everything, the way was found. Gradually, the principles that should underlie the design of an installation to keep plasma stable began to take shape.

Two years or so ago, the attention of Soviet physicists was caught by the fact that plasma could be contained in a stable form in a magnetic field whose strength increased with distance from the center of the plasma clot. Another essential was that the field inside the plasma not be reversed at any point. Needless to say, it is no small task to build a magnetic system to meet these two requirements, but it can be done. Soviet physicists have worked out a theory of magnetic fields with various configurations. These are obtained by overlapping fields formed by an intricate maze of electric wiring, with currents flowing in many, and often diametrically opposite, directions. This creates a dense network of invisible ropes with a pull that grows stronger as we move away from the center where plasma is injected.

An installation devised in 1962 used as its working principle a version of this idea of the magnetic field growing in intensity toward its periphery. This installation, PR-5, was built by the plasma research department of our institute and commissioned early this year. Two months later, we had the first, and to my mind very significant results. Mikhail Ioffe, Ryurik Sobolev, Yuri Baiborodov, who designed the installation and conducted all the experiments, obtained a plasma with a temperature of roughly 40 million degrees and a density of the order between 1 and 10 billion particles per cubic centimeter inside the complex magnetic field and under low vacuum. The plasma had a volume of several dozen liters.

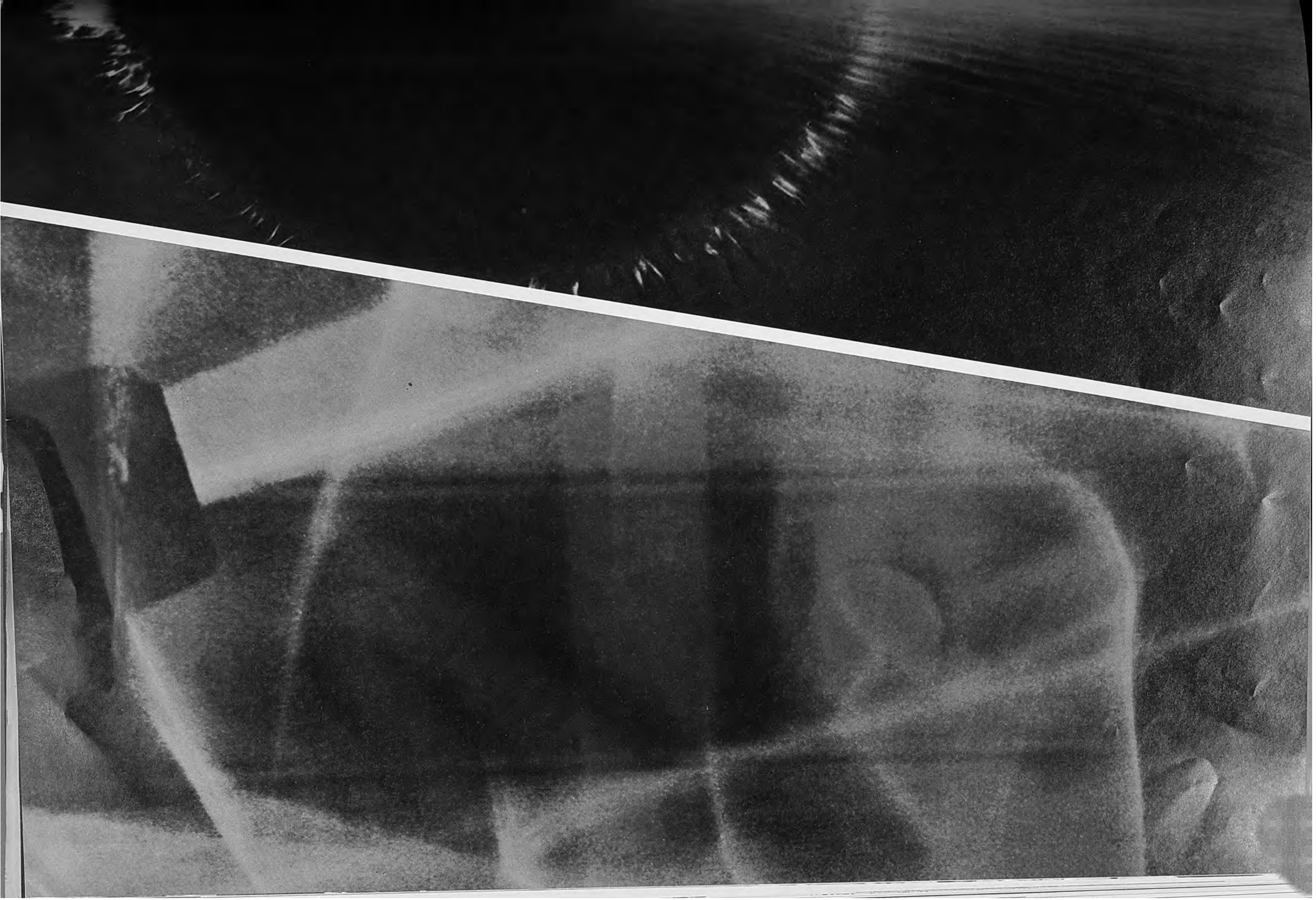
The plasma is easily contained in the magnetic field and keeps, not for a lifetime measured in millionths of a second, but—even by the most conservative estimates— for no less than several hundredths of a second, a lifetime 1,000 times as long. In terms of the time scale we are used to in daily living this is, of course, very short, but by the time scale for microprocesses that occur in plasma, it is a very large time span indeed. In a hundredth of a second each charged particle has time enough to make dozens of thousands of "runs" back and forth in the "magnetic trap" and cover dozens of miles.

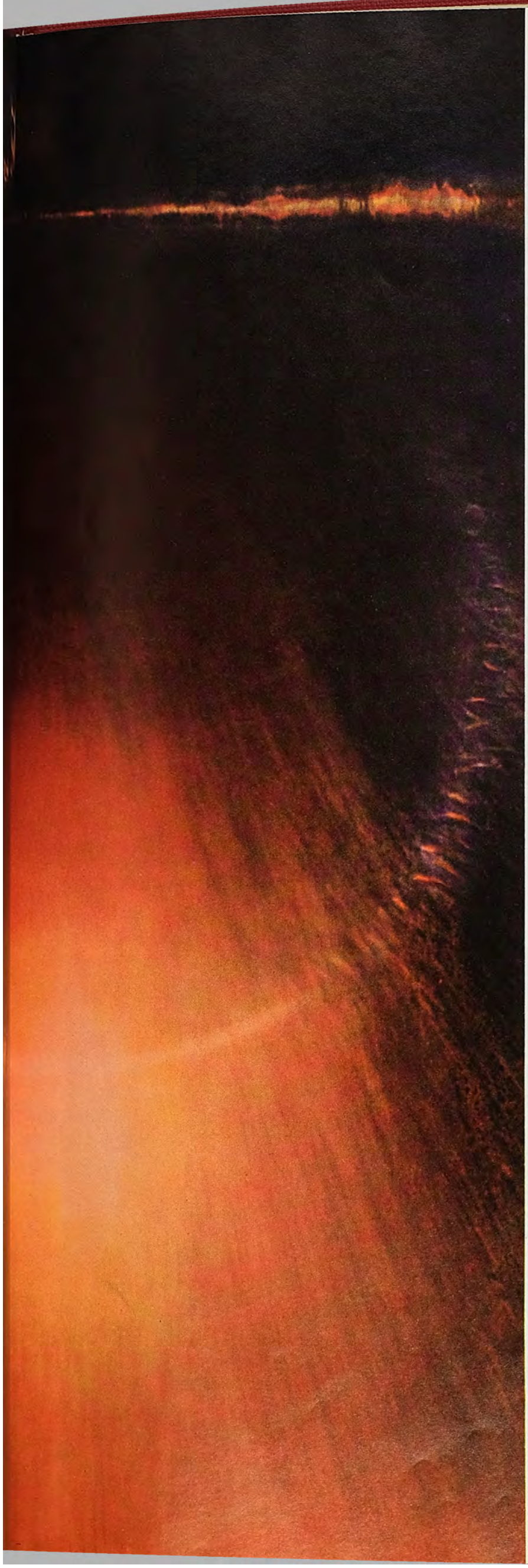
We will, of course, be moving beyond these first results. The task is to increase plasma density many times over and to raise its temperature still higher. That is what Soviet scientists are now researching in their efforts to make stellar matter work for communism.



Researchers Y. Baiborodov, V. Petrov, M. Ioffe and R. Sobolev developed the PR-5 magnetic trap.

Photos on the two following pages:
Nuclear life. (Left) Birth, evolution and death of plasma. (Center) Traces of tungsten particles flying through plasma. (Right) Ion beams.





Ansu Osayo Kamara from Sierra Leone bolsters his textbook study with clinic training. He is a medical student at Friendship University in Moscow.

REGARDLESS OF SKIN COLOR

Brisegno Julio is from Nicaragua. Like a Soviet medical student, he pays no tuition and gets the usual maintenance stipend.

Asare Filicia Cherevaa looks after a patient. When she finishes her studies, she'll go back to Ghana a qualified doctor.

BY ELENA POPOVA

PHOTOS BY YEVGENI TIKHANOV

"IT was in this clinic that I felt like a doctor for the first time," Asare Filicia Cherevaa from Ghana told me with a happy smile. She isn't a doctor yet—she is still attending medical school—but I understood what she meant, that this was her first professional contact with a patient.

Asare and her classmates, second-year students in the medical faculty of the Patrice Lumumba Friendship University, are taking their practicals in Moscow Clinic No. 64. This is their first hospital experience. These young men and women do not, of course, diagnose, prescribe treatment or do any surgery. They are getting their preliminary practical training, learning how to apply their classroom and laboratory studies, getting acquainted with the job of a doctor by assisting one. Their duties, simple as yet, they execute with enthusiasm and dispatch.

Clinic No. 64 is a modern multistory structure with several wings and departments for surgery, therapy, neurology and urology. The hospital has its own well-equipped laboratories and a staff of highly competent specialists—doctors, nurses and laboratory technicians all ready to teach these students the hospital routine, the use of equipment, how to bandage, administer drugs, handle the gravely ill, give injections, apply cupping glasses and the thousand other details that constitute the healer's art.

Ansu Osayo Kamara of Sierra Leone has calm dark eyes and an unhurried manner that inspires confidence. Valentina Penbek, the internist with whom he has been working all this week, says he has the makings of a good doctor. And Georgi Pogorelov, one of the seriously ill patients at whose bedside Ansu spent several hours today, told the young African: "Come more often, Ansu. You have clever hands and a kind heart."

The day we visited the hospital a 70-year-old woman was having a kidney removed. Surgeons Mikhail Vilkin and Victor Korablev were doing this serious and relatively rare operation. Precision instruments registered the condition of the patient every second. The nurses moved about soundlessly. Everything was done in complete and absorbed silence. All you heard were the curt orders of the surgeon.

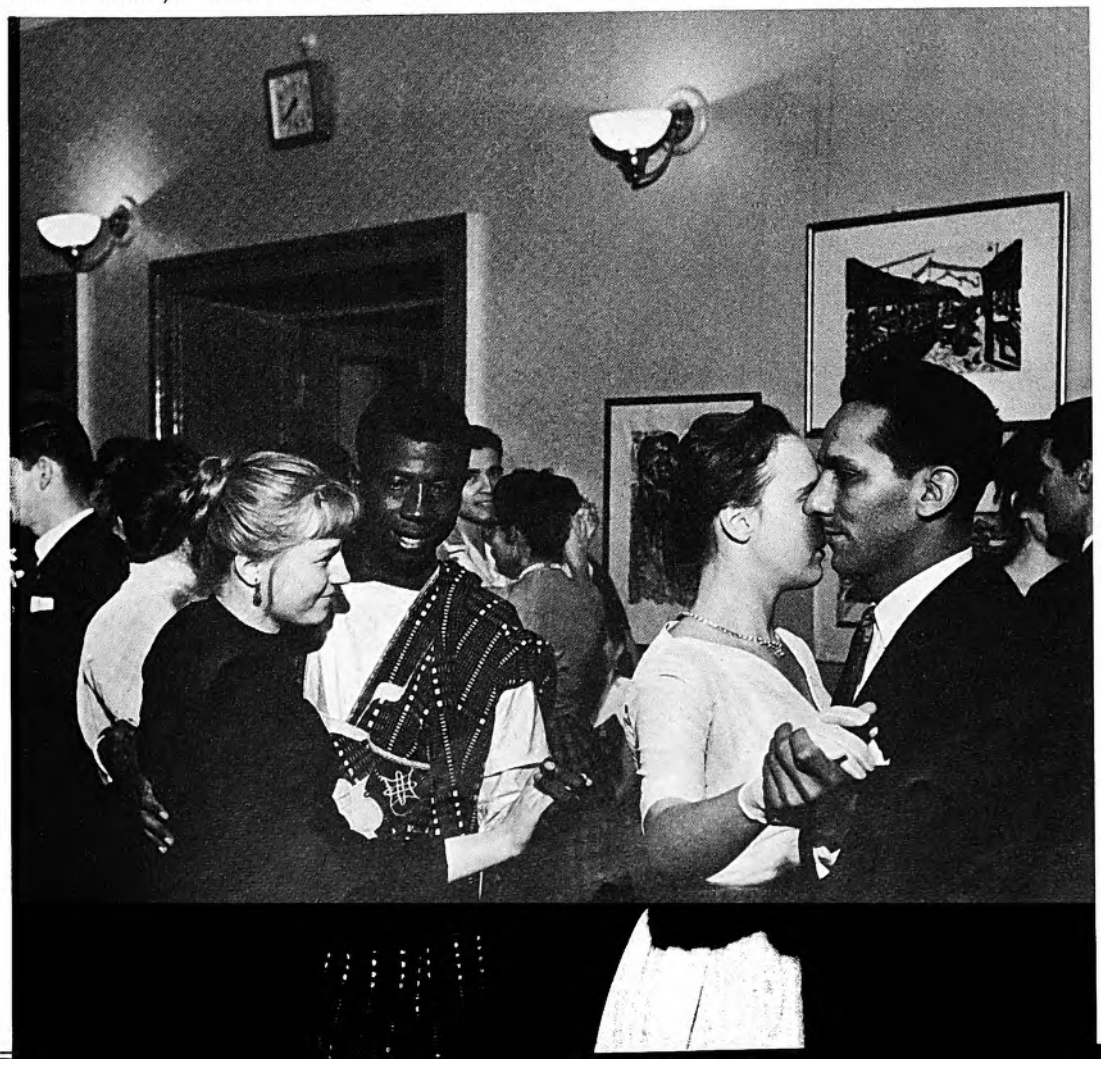
Thirty trainees stood around the operating table. These young men and women from Ghana, Lebanon, Cameroon, Bolivia, Haiti, Indonesia, Ceylon and Mali looked on with bated breath, all attention. The doctors and nurses in what used to be a distant and strange land were now their friends and teachers. Above the white masks the eyes of these students reflected their admiration for the surgeon, their sympathy for the patient, their eagerness to learn, eyes promising that they would place the knowledge they were acquiring at the service of their people.

Brisegno Julio from Nicaragua, Chairman of the University's Student Council, put it into words. He told me, "A medic's job is to help people. We see wonderful examples of it all the time here in the Soviet Union. We want to be the kind of doctors yours are."

Internist Yelena Polotskaya is in charge of the practicals. The first training course, she explained, lasts for two weeks. In that short time, the students manage to cram in a surprising amount of practical application of the anatomy, physiology, biochemistry and pharmacology they learn in class.

There is one thing every student has to learn the hard way, the doctor said, and illustrated her point with a recent incident. One of the hospital patients suffered a sudden attack of epilepsy, and three of the African girls who saw it fainted dead away. But the interesting thing was that as soon as they came to, they wanted to go to the patient's aid—it was the profession speaking in them. Human suffering, Dr. Polotskaya added, is something the physician should never permit himself to get used to. ★

Not all work for these students from Haiti, Bolivia, Indonesia, Mali and a dozen other countries.



our calendar

December 5. Every year the people of the Soviet Union observe Constitution Day. The third Soviet Constitution, adopted in 1936 and still in force, differs from those of 1918 and 1924 in the further democratization of the social and political life and the state system of the peoples of the USSR. This is shown concretely in the provision of equal suffrage for all citizens in contrast to the unequal suffrage provisions of the early years after the October Revolution of 1917; it is shown also in direct as compared to multistage or indirect elections and in secret ballot instead of the former practice of voting by a show of hands.

Instead of several legislative bodies the 1936 Constitution instituted a single higher organ, the Supreme Soviet of the USSR (Soviet Parliament). For the first time, the Constitution gave legal expression to the equality of rights of all citizens of the USSR: to work, to rest and leisure, to education, and to maintenance in old age, irrespective of origin, social standing, sex, race, nationality or religion.

This Constitution, for the first time, also reflected the absence of unemployment in the Soviet Union. The USSR has since made vast progress in its economic, cultural and social life and in international affairs, thus making necessary a revision of the 1936 Constitution. The first session of the sixth Soviet Parliament, in 1962, formed a special commission, headed by Nikita Khrushchev, to draft a new Soviet Constitution.

December 6, 1960. The Statement of the Meeting of Representatives of Communist and Workers' Parties held in Moscow in November 1960 was published.

The statement described the present age, examined the international situation, and stressed the practical possibility of avoiding a third world war. "The choice of social system," reads the statement, "is the inalienable right of the people of each country. Socialist revolution is not an item of import and cannot be imposed from without. It is a result of the internal development of the country concerned, of the utmost sharpening of social contradictions in it. ***The Communist Parties, which guide themselves by the Marxist-Leninist doctrine, have always been against the export of revolution. At the same time, they fight resolutely against imperialist export of counterrevolution."***

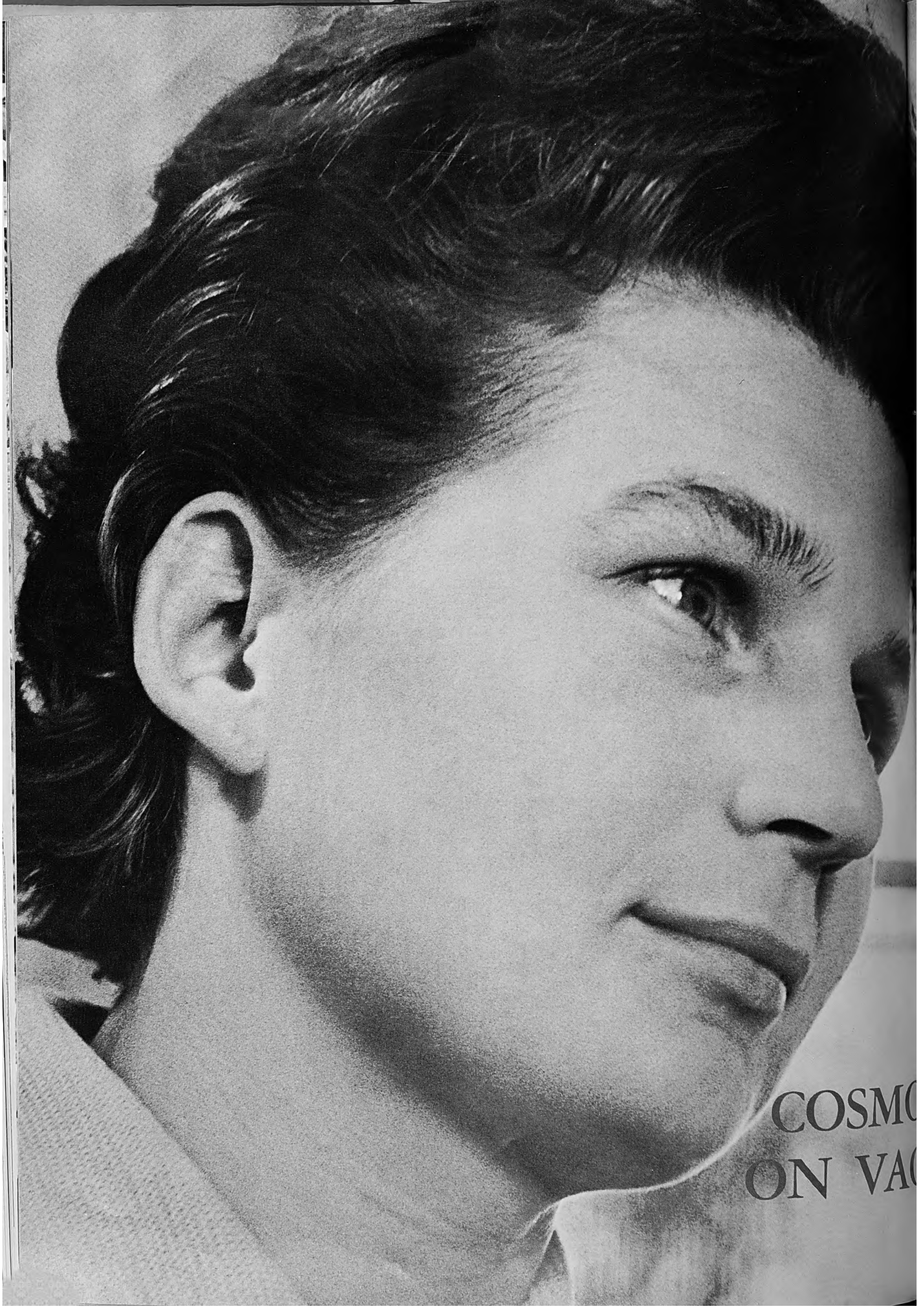
December 30, 1922. The First Congress of Soviets of the USSR adopted a Declaration, and approved the Agreement, on the Formation of the Union of Soviet Socialist Republics on the basis of voluntary membership of the republics in the USSR and the equality of all member republics. The agreement was signed by representatives of the Ukraine, Byelorussia, the Federation of the Transcaucasian Republic, and the Russian Soviet Federative Socialist Republic (RSFSR). Later other republics acceded to it.

The congress elected the supreme legislative body, the Central Executive Committee of the USSR. Mikhail I. Kalinin was elected chairman of this committee, and Vladimir I. Lenin was elected chairman of the Council of People's Commissars.

Establishment of the single, multinational Soviet state of the USSR (having more than 100 nations and nationalities) strengthened the friendly cooperation among the peoples of all the Soviet republics and united their economic, political and military resources.

Thanks to the October Revolution of 1917, to the socialist unification of the peoples of Russia, and to the all-around assistance rendered them by the free Russian people, the formerly backward borderlands of czarist Russia achieved unprecedented progress in their national economic, political, scientific and cultural development.

For example, under the Soviet Government the industrial production of the Central Asian republics had by 1960 increased more than 60 times, Tataria 147 times, Bashkiria 163 times, and so on. ★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LADY NAUT VATION

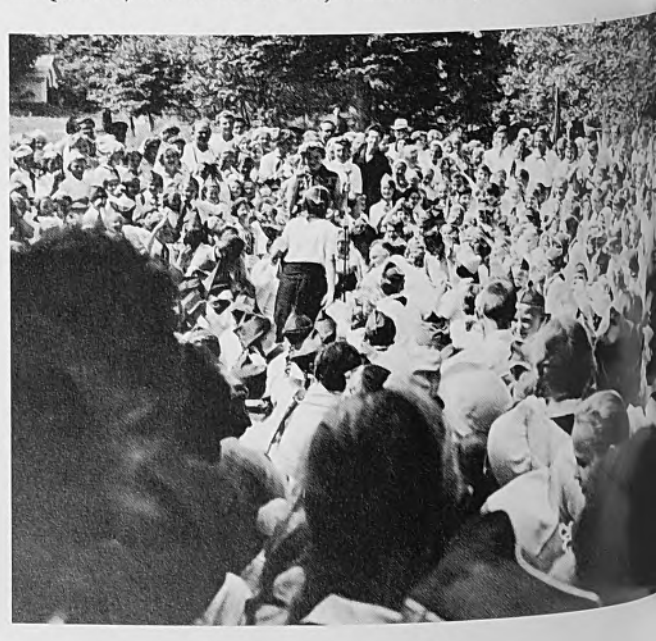
PHOTOS BY ALEXANDER MOKLETSOV

Spacewoman Valentina Tereshkova vacations with her mother after an epic 71-hour orbital flight.

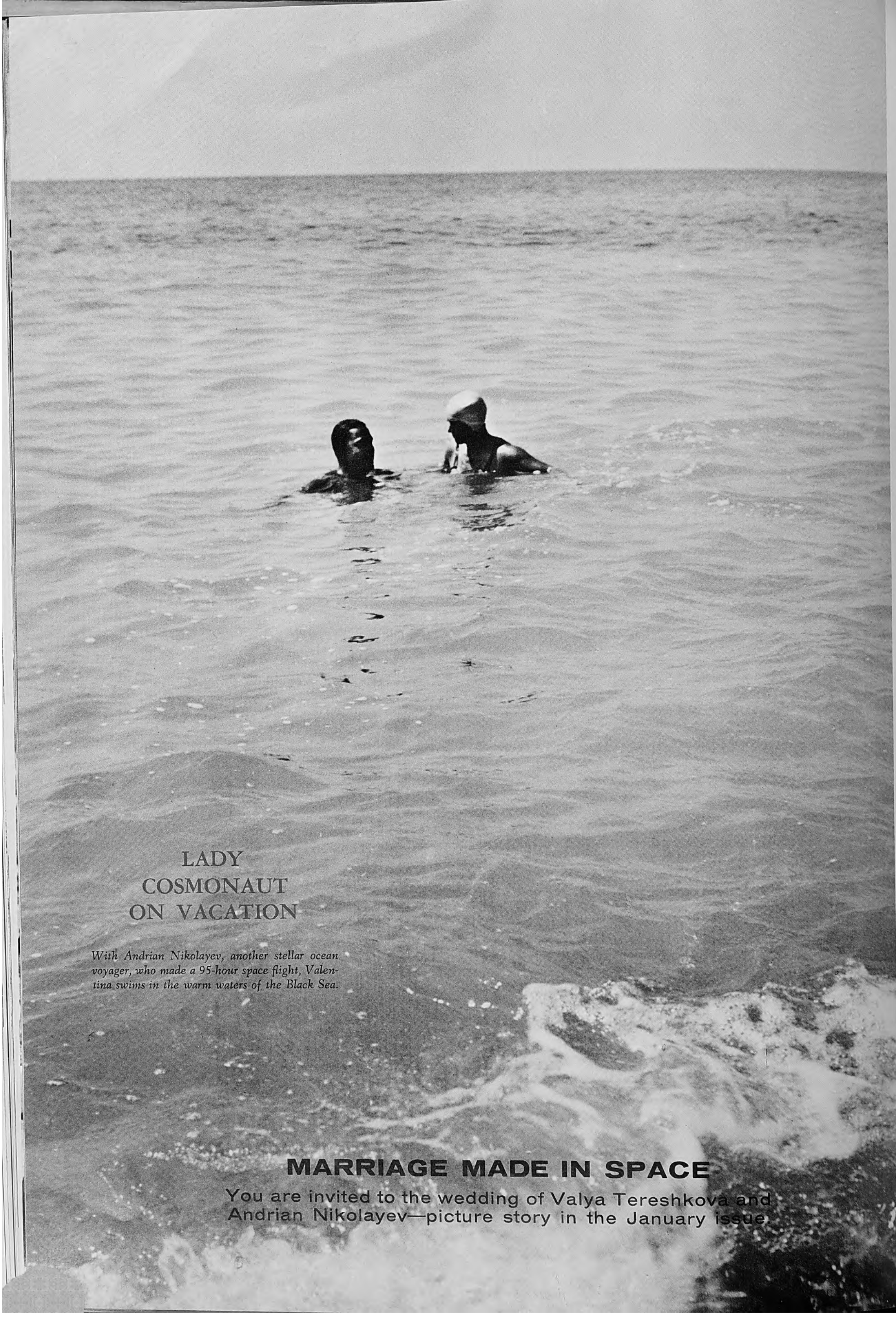
LADY COSMONAUT ON VACATION

Volga water to refresh a traveler home from a 1.2-million-mile trip around the planet.

(Above) The world's first lady cosmonaut gets a tumultuous greeting on a visit to her home town, Yaroslavl, and another (below) from Young Pioneers at a nearby camp, all of whom decide they want to be space pilots.



(Below) The people of Yaroslavl welcome their illustrious fellow citizen with the traditional bread and salt. (Right) At the Krasny Perekop mill, where she worked as a weaver before she became a sky diver, plane pilot and cosmonaut, Valentina tries her hand at one of the familiar machines.



LADY COSMONAUT ON VACATION

With Andrian Nikolayev, another stellar ocean voyager, who made a 95-hour space flight, Valentina swims in the warm waters of the Black Sea.

MARRIAGE MADE IN SPACE

You are invited to the wedding of Valya Tereshkova and Andrian Nikolayev—picture story in the January issue.

REVIEW OF WORLD CINEMATOGRAPHY

BY ALEXEI ROMANOV
CHAIRMAN, STATE COMMITTEE FOR CINEMATOGRAPHY
USSR COUNCIL OF MINISTERS

THE THIRD Moscow International Film Festival was more representative than the two held previously; it was really and truly a review of world film art.

The festival was once again dedicated to "A Humanist Film Art, For Peace and Friendship Among Nations!" Representatives of 63 countries attended.

Competition films were submitted by 49 countries, and 51 countries entered non-competing ones. The 850 foreign delegates and guests included 51 public figures, 102 directors, 113 actors, 135 reporters and critics, 290 producers and film distributors.

A feature of the festival was the participation of countries where cinematography is taking its first big step—Burma, Bolivia, Ireland, Iceland, Cyprus, Kuwait, New Zealand, Syria, the Sudan and Tanganyika. The films of these countries evoked very sincere and general interest and were given an especially warm welcome.

A tradition of the Moscow Film Festivals is the discussion of artistic problems that concern film workers in all countries. Among the many problems discussed at this festival were movie realism, its kinship with the people, and the place and role of the artist in our modern society. Film workers of various artistic and philosophical convictions spoke of the artist's responsibility to his people and the need for pictures that reflect the lives people really live, pictures that unite the hearts and minds of millions in the struggle for peace, progress and a better future for mankind.

Another distinguishing feature of the Third Moscow Festival was its truly mass character. The films, both those in and out of competition, were shown in several of the capital's biggest halls and movie theaters and were viewed by about half a million people. Competition pictures were seen daily by 12,000 people in the Kremlin's Palace of Congresses, by 14,000 people in the Sports Palace and 7,300 people in the Rossiya Theater. Moviegoers were the first judges of the films shown; they were responsive and demanding but unbiased and always fair.

The festival's Grand Prix went, as you probably know, to the film *8½* by the Italian Federico Fellini "for outstanding creative and production work in which the internal struggle of an artist in quest of the truth is reflected." Among the indisputable merits of the film the jury cited Fellini's skill, his high purpose and the picture's essential honesty.

We agree completely with the jury. Nevertheless the puzzling question arises: Why does this film, unlike his earlier picture *The Nights of Cabiria,* leave some viewers bewildered and others disappointed and disturbed? The Soviet and foreign press noted correctly that most Soviet and some Italian movie-goers do not like the film—and not because they do not "understand" it. The reason, we think, is that the whole ideological and philosophical concept of the picture is vague, contradictory and inconsistent with a humanistic world outlook. The texture of the film is shadowy and morbid and its form unusually complicated. By turning the inner world of his hero inside out, by exposing the most unseemly and darkest side of his character, Fellini created a profoundly pessimistic film, having nothing to do with the life of the people, a film in which hopelessness and mental depression are pervasive.

We think that Federico Fellini is a great artist and hope that his new films will be less one-sided and anguished, will show man courageous and indomitable, not reduced to despair and hopelessness. And by the way, on his return home Fellini said that he wanted to make such films.

So far as the gold and silver medal winners—and by the same token, the all-over results of the festival—are concerned, we cannot pass over in silence, as did the press in various Western countries, the very decided victory of the socialist film makers.

The international jury unanimously awarded most of the major prizes to the films of socialist countries for significance of theme, their sensitive and courageous treatment of current problems and their high level of artistry.

Foreign press comment on the festival was favorable on the whole. For example, the American entertainment industry's paper, *Variety,* said in its July 24 issue:

"The Moscow Festival had an international impact. It had much greater support from all the leading European countries in the motion picture field than any other similar event in Europe—it had more stars, more delegations and certainly more films."

Another article in the same paper noted that the leader of the American delegation at the festival, George Stevens Jr., called it "an event of the greatest political importance." Italian newspapers pointed out: "All films that won prizes or honorable mention at the festival are more or less of world-quality caliber."

The festival participants spoke highly of the hospitality and attention they enjoyed in Moscow. Needless to say it is a great pleasure for those of us who organized the festival to hear such comments. Regrettably, some publications made judgments and comments which served only to muddle their readers.

Thus a number of newspapers saw the awarding of the Grand Prix to Fellini's film as a kind of a "concession by Soviet Communists" to Western ideology, tantamount to a rejection by Soviet art workers of the basic principles of Soviet art.

We categorically reject any attempt to equate the decision of the international jury with the reaction of Soviet audiences to Fellini's film. And we reject just as categorically any interpretation of the jury's film award as a kind of concession on our part in the ideological struggle.

Objective and unbiased reporting on the festival helps to create an informed world opinion, to strengthen the friendly contacts between film workers of different countries and, consequently, peace and progress.

Courtesy of the newspaper Izvestia

MUSCOVITES MEET STANLEY KRAMER

BY ALEXANDER AVDEYENKO

TO spell it out, Stanley Kramer had better luck with his two noncompetitive films—*Judgment at Nuremberg* and *The Defiant Ones*—at the Third International Film Festival in Moscow than the American film industry did with *The Great Escape*, officially entered for competition. Audiences and critics were divided on *The Great Escape* (except for the superb acting of Steve McQueen who won the festival prize for the best male role), but everybody liked Stanley Kramer's films. The social message of his pictures and their artistic merit appealed to the Muscovites.

Kramer was probably the most popular figure at the festival, addressing an audience of six and seven thousand at the Kremlin Palace of Congresses and the Palace of Sports respectively when his film *The Defiant Ones* was presented. He also met moviegoers at the Rossiya and Kosmos movie theaters.

Muscovites applauded him warmly when he spoke of the high purpose of cinematography and what it could do to strengthen friendship and understanding between nations. He made the point repeatedly that his films had a critical trend, for the most part, and that American film makers honestly concerned with progress were not afraid of criticizing their country's shortcomings. This statement, too, drew the applause of his Soviet audiences, who feel just as free to point out deficiencies in Soviet living and, what is more important, are certain that remedial steps will follow. Many Soviet films, widely shown and very popular, point out the inadequacies and insufficiencies that hamper our progress.

It was not easy to meet Kramer and talk with him during the festival; he was always busy viewing films (as a judge), being interviewed or talking to Moscow audiences. As soon as he appeared in any of the halls of the Moskva Hotel, he was surrounded by newsmen. It was pure luck that I managed somehow to get to talk to him at all.

To my question about the significance of the movies in modern life Kramer said he thought it was the most effective medium for the achievement of understanding.

His estimate of the Moscow Festival was very high. "I think that the most important trend in world cinema is the film festival exchange. The films which are exchanged must reflect the country's problems."

On the film makers' purpose, he said:

"I feel it to be a continuing search for the truth. It is with great difficulty that we find the whole truth. But the art is search and search is the responsibility of the artist. I hope there will be continuing search because in search one finds differences, one finds doubts. These doubts are necessary, necessary if people are to understand what it is that worries and troubles other people. And this is what I intend to do both in my own country and in looking at other countries."

I asked Kramer whether he agreed with what many film directors and critics say, that the world cinema is going through a crisis.

"I don't think we are undergoing a crisis, we are undergoing change. I think it is a change for the better. I think that film makers are becoming more dedicated to their arts, they are developing individual characters they understand. And therefore I think that the change is going to lead to better films."

As to how he regards the search for new cinema forms, Stanley Kramer answered:

"I use whatever form suits me better technologically. But I do not purposely search for ways in which to tell my story. I think it comes from my heart; it's something I feel emotionally, something I want to do, and it comes out as I feel it."

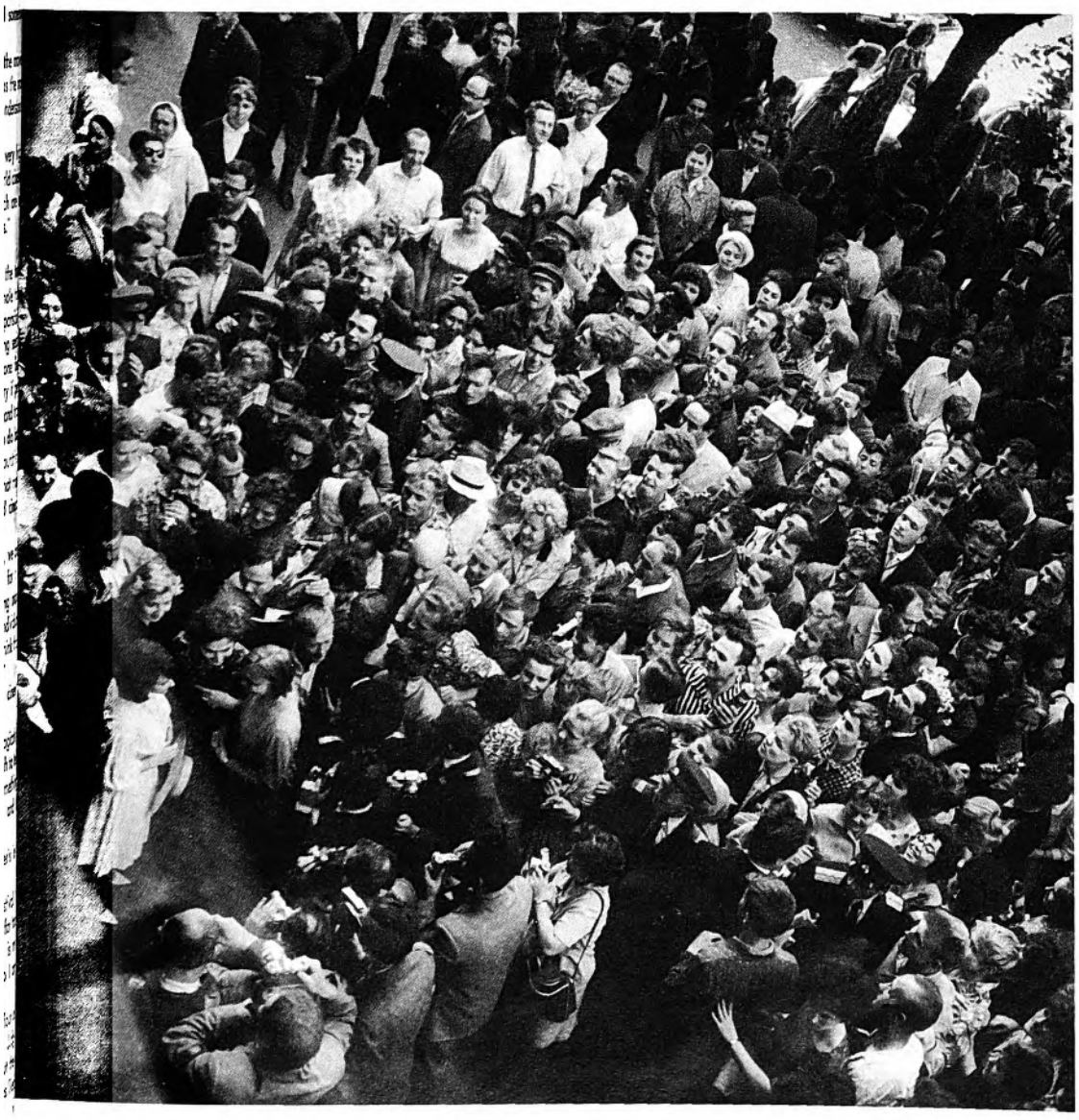
My last question was about Stanley Kramer's impressions of the festival.

"I am happy to be here, I came for the festival. I think it is a well arranged festival. I'm seeing far too many films, more than I can absorb. But it is my exciting job as a member of the jury, and so I am doing my job."

Now the Soviet people have not only seen four of Kramer's films—*On the Beach, Reap the Wind, Judgment at Nuremberg* and *The Defiant Ones*—but they have met the producer and he them. Both parties liked the meeting. ★

The Kremlin Palace of Congresses, where Kramer's The Defiant Ones *was previewed by an audience of 6,000.*

Movie fans show American film stars Tony Curtis and Christine Kaufman the magazine issued for the festival.



Autograph hunters veritably besieged the Moskva Hotel in the capital where the festival participants stayed.

Danny Kaye brought the house down with his rendition of the popular Soviet song "Let There Always Be Sunshine."

A Paean to the Harmony of Man

BY YELENA KOSTINA
ART CRITIC

"THERE IS MUCH you can reconcile yourself to which is alien to your nature, but it brings no joy. That is why I consider sincerity to be the very basis of art. Sincerity can be found in ideals prevailing at a given time. It creates the style and is an affirmation of the times in which we live. Through the ages have come the overpowering confusion of Michelangelo, the reverent stateliness of Poussin, the penetrating clarity of Vermeer and the gloom of Perov. Joy to the artist who finds the images to fit and reinforce his ideas, an art which suits the times."

These words from the autobiography of Alexander Deineka serve as a guide in our appreciation of his work.

Every single decade in the creative life of the 64-year-old painter is conspicuous for creations reflecting momentous events in his country's history. Deineka's apprenticeship did not last long; he soon found what he wanted to say, with the result that his early works are every bit as convincing, vivid and integral as his most recent works.

Even back in the twenties Deineka had an impact on the young Soviet art. His contributions were unusual and fresh despite a certain measure of asceticism which was the vogue in those days. His early paintings, like *Down in the Mine, New Workshops* and *Mill Girls*, show scant regard for detail and an endeavor to transfer to canvas the spirit of labor of free people.

The work which stands out most in that period is *The Defense of Petrograd*. Here we see the heroism of the grim days of the Civil War and the feelings of Soviet people toward the revolutionary events: the calm assurance, courageous pride and firm faith in victory. Therein lies the virtue of the picture. The painter spurned any romanticizing of events, avoided pathos and purely external accessories. No fluttering flags. No one waves a rifle. No smoke of guns and battle. . . . The picture is of people. Some are marching to the front, and others, nursing their wounds, are returning. Off to the front go the Red Guards: workers, peasants and women, clad in their working overalls, rifles slung over their shoulders. Their faces show firm concentration, calm resolve. They answer the call of their Party, the call of their workers' and peasants' government, the call of their proletarian conscience to defend their native town, and with it the revolution. The solidarity of their ranks is a symbol of the unity of the working class. In the same vein as *Defense of Petrograd* is the painting *By the Left, Quick March*, based on the poem of the same name written by Mayakovsky on the eve of the First World War.

Behind all of Deineka's art is a love for life and for man. It is easy to recognize the heroes of his pictures by their freedom and calm assurance. Look at the love and tenderness in the face of *The Mother* bearing a sleeping infant on her shoulder. Or take the lovely and chaste *Bathing Girls* with their delicately pink, nacreous bodies caught in the graying shade of a riverside country scene, a picture at once both monumental and feminine. *Lunch in the Donbas* is of earnest, dark-complexioned youngsters clambering out of the water onto a muddy bank, faces which appear extraordinarily brave, the whole, in fact, giving a feeling of epic strength and awe. In the painting *Future Flyers* some lads are sitting on a bank, backs to the viewer, watching planes take off and land on the sea. By the taut backs and the eager gestures one can imagine the excited looks on their faces. Boundless skies with scudding clouds create the impression of freedom, romance, so dear to the dreams of the young lads about to make their own way in life. The artist continues the theme of everyday life in his pictures *Relay Race, Hurdle Race, By the Sea* and *Construction Sites Around Moscow*. The rhythm, the movement, the precision and expressiveness comprise the principle threads which permeate his paintings.

Yet there is quite another side to the man, as observed in his works devoted to the Second World War. It is as though a bolt of rage, pain and hatred of the fascist aggressors has seared his soul. The painter's art becomes violently passionate and bursting with patriotic fervor.

Outskirts of Moscow, November 1941 is a faceless panorama, as if poured out in a single breath. On a dull snowy day a lone truck makes its way into the distance, past the bristling barbed wire of the antitank barriers. This is a vivid tale of those grim times which befell Russia.

Also in the bitter years of the war Deineka painted *Expanse*, which, like a fresh spring breeze, dispersed the foul air of those hard war days. The restful landscape with its meandering brook, the lush green woods, sturdy young girls running up a hillock after swimming—all this represents life eternally youthful, life which cannot be crushed, broken or destroyed by an evil force.

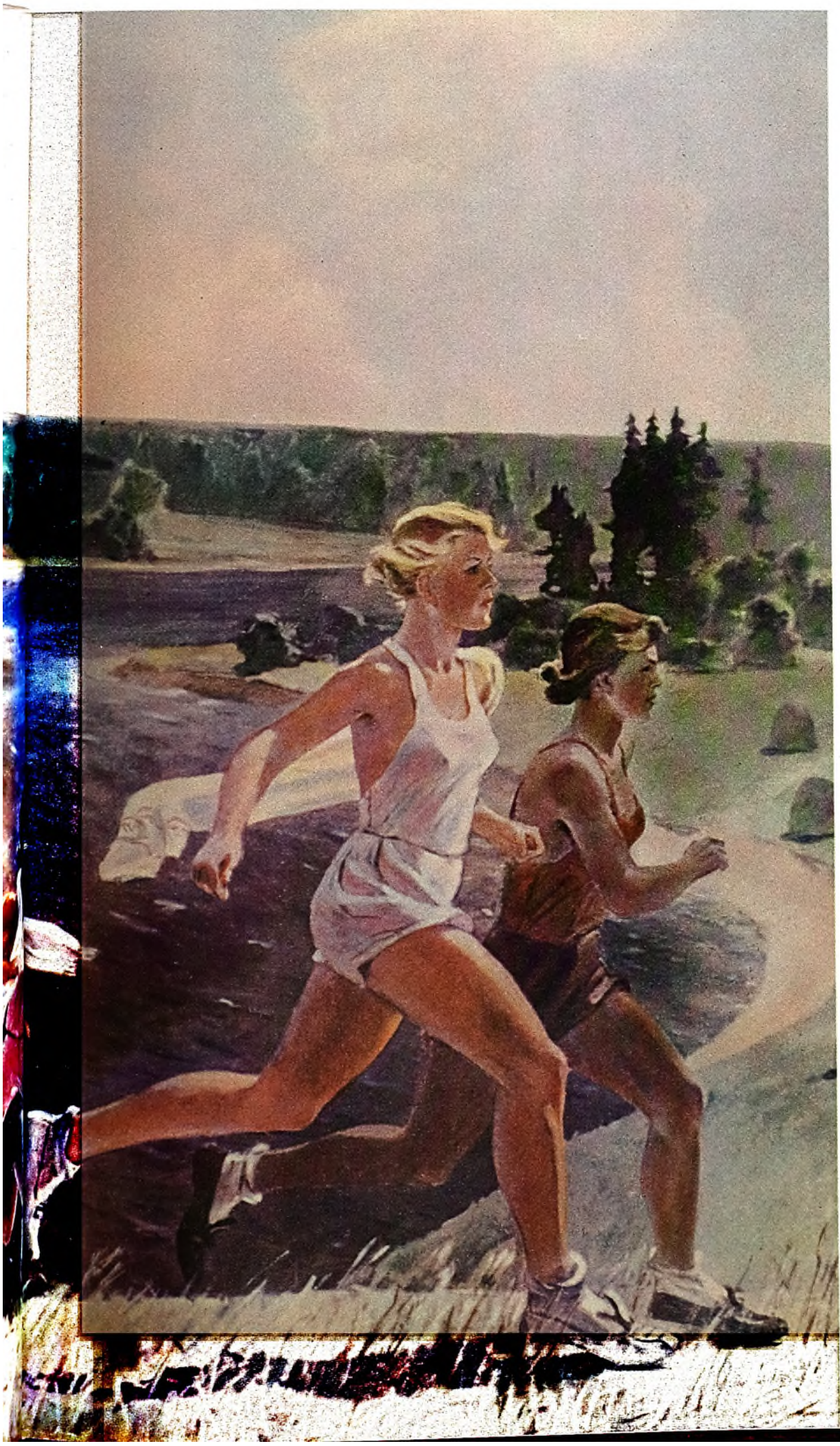
Deineka is a man of many talents. He is equally at home with easel painting or black and white sketches, with posters, landscapes, panels, frescoes or mosaics. He has also tried his hand at sculpture. On trips to Italy, France and America he completed a cycle of superb landscapes in water colors. In addition he provided striking illustrations for Henri Barbusse's *Fire*, decorated panels for Soviet pavilions at international exhibitions in Paris and New York, produced a series of mosaics for the Moscow Metro and painted several portraits of world-famous scientists for the entrance hall of Moscow University.

He is at present putting the final touches on sketches made during his journeys through France and Czechoslovakia. He is also completing some studies in colored majolica which will decorate the entrance to Moscow's Likhachov Auto Plant. The finished work will represent several large groups of figures embodying the ideas of friendship, peace and happiness. In a new housing project in the Southwest District of Moscow Deineka is working on some stained glass panels and mosaics whose theme is "Labor Liberated."

Sixty-four years—that's quite a long time—but to the artist, and this is the most precious feature of Deineka's work, youth has not been left behind, nor has the feeling of life pulsating been dulled by the years. In this connection, the Deineka in his sixties concedes nothing to the Deineka in his twenties.

Defense of Petrograd 1928

ART



Drawings in America 1933

Expanse 1944

Next page:
Ice Hockey Players

THE FATE OF A MAN IN THE BALANCE

BY ALEXEI NIKANOROV

TWO men and a woman in a room with the door shut. Nobody is allowed in while they hold their conference. They are deciding the fate of a man.

We are sitting in the courtroom and waiting. The witnesses have given their evidence, the prosecutor and the lawyer for the defense have made their speeches, and the defendant has had his last word. What will the sentence be? What will the judges say?

Who are these judges? The two elderly workers are the people's assessors, and Nina Dobryanskaya, the small woman in a dark suit and a white blouse, is the people's judge. Behind the closed door of the conference room, she is going over the case with the people's assessors.

The case is Yura Serov—17 years old. A juvenile delinquent. A boy, his life already twisted. A joyless childhood. A father who was killed in the war. A mother who remarried and left him to be brought up by a grandmother and an aunt. Why? Perhaps she thought he would not take to his new father. Or perhaps she just didn't care enough.

He turned in on himself. His only interest was radio. He worked out new hookups, tinkered with his father's old set, kept replacing parts, dreamed of creating something unusual.

Granny and Auntie were delighted at his serious turn of mind.

Then he changed. He hardly ever laughed, almost never played, made no friends. He mistrusted every hand stretched out to his. The children around him made friends, they fought and argued and laughed. They joined hobby groups at the Young Pioneer Palace, went on excursions to factories, hiked out to the country together. Withdrawn and taciturn, he refused to let himself be drawn into their company. The other children left him to himself, and the teachers found no way of getting through to him.

One day he met a gang of boys his age in the street. They were thieves. What drew the boys to the streets, to petty thievery? The danger? The romanticism? Couldn't they see the romanticism of the glowing life around them, the romanticism of the work everybody was doing? Apparently not. Their parents and teachers had somehow left them adrift. And then somebody came along who convinced them that work was for fools and that a smart guy could get along without working.

Yura was fascinated by the gang. There was the money to buy the radio parts he wanted. It was easy living, they told him. He met "The Hare." "The Hare" was a year younger than Yura but an oldtimer at the business. He had already done a term in a corrective camp. He talked glibly of the pleasures of a free and easy life. Yura was captivated by the risks and dangers and excitement. He went on his first "job." He and "The Hare" knocked out a taxi driver and made off with his cash. They were caught within the hour.

That was how 17-year-old Yura Serov landed in the courts.

Juvenile delinquents. What breeds them?

It is a fact that crimes born of exploitation of one man by another, of the polarization of great wealth and poverty, of the cult of coercion, luck and the right of the stronger man—that the social roots of such crimes were destroyed in our country a long time ago. But still there are certain circumstances which give rise to crime, including juvenile delinquency. Some families are still needy, suffering the consequences of the war; they lack a father's helping and guiding hand. The mother brings up several children single-handed. While she works, the children are left to themselves. They drift to the shady side of the street.

Finances and housing are factors—important ones. But we are getting rid of those. We are doing house building on a big scale. Large families are moving out of their crowded rooms into new apartments. We know that not everybody is well-off, but that is temporary, something we'll grow out of. We give special money grants to big families. We set up boarding and prolonged-day schools. We organize study and sports groups in apartment houses. YCLers and pensioners lead hobby classes in schools and playgrounds.

Our courts have committees to deal with cases of juvenile delinquency. They help the delinquent find himself. A person who lands in court for the first time is not only a criminal, he is someone with a troubled mind and wounded soul. To punish him for the offense is the simplest part of the problem. The more difficult part is to help him out of his trouble, to make him healthy-minded.

A great deal depends on the parents. What can a son learn from an indifferent father, or from a mother who goes to the other extreme and thinks that everything her baby does is wonderful? That kind of upbringing, if you can call it upbringing, makes children selfish, conceited and lazy. We are fighting against that sort of "upbringing," fighting it with everything we have—our newspapers, radio, motion pictures and millions of books. We fight it because we know that this aversion to work, this wanting to live soft ends up in crime.

Children whose parents are incapable of bringing them up must be helped. We are always on the lookout for gifted teachers. Real educators are rare. It takes talent to show children the romance of labor, of collective building. It takes men and women with honesty, courage and humanity.

But what about Yura Serov and his fate?

We are sitting in the courtroom and waiting. The judge's chair, its high back carved with the emblem of the republic, is empty. So are the chairs of the people's assessors. The public prosecutor and the lawyer for the defense sit waiting. The 17-year-old delinquent in the dock sits waiting.

The three in the conference room have equal rights. All three will be responsible for the sentence. They will guide themselves by the Code of Laws with its articles, paragraphs and terms of imprisonment from . . . to . . ., and by their own life experience. Punishment is law. It is human conscience. But it is also humanism. How combine the two concepts? Great humanists of different times and different persuasions have spoken against punishment. But we cannot abolish punishment as simply as all that. What we must do is to create a society which will have no punishment because it will have no crime. We are building such a society. In the past few years legal punishment in the USSR has been made less severe. In the work of helping delinquents find their way back the public is helping the courts.

We cannot, however, condone the inveterate criminal. We have to think of those whom they murder and victimize, of those they destroy, of children like this one in court. Shall we show any mercy to the inveterate criminal who corrupts the younger generation? Don't we have a duty, as humanists, to shut him away from society?

Those three in the conference room are formulating the terse phrases of the sentence. They are weighing all the pros and cons. The prosecutor had asked for three years of corrective labor camp, and the lawyer for the defense had asked for a suspended sentence since the defendant confessed and repented. They hope the repentance was sincere, that the boy was not just pulling at their heartstrings to get off easy. Shall they send him to a children's corrective labor camp? For how long? A year? Two years? The camp is no bed of roses. But he must understand, must learn to withstand it. If he does, then that year would be all the time he would ever serve.

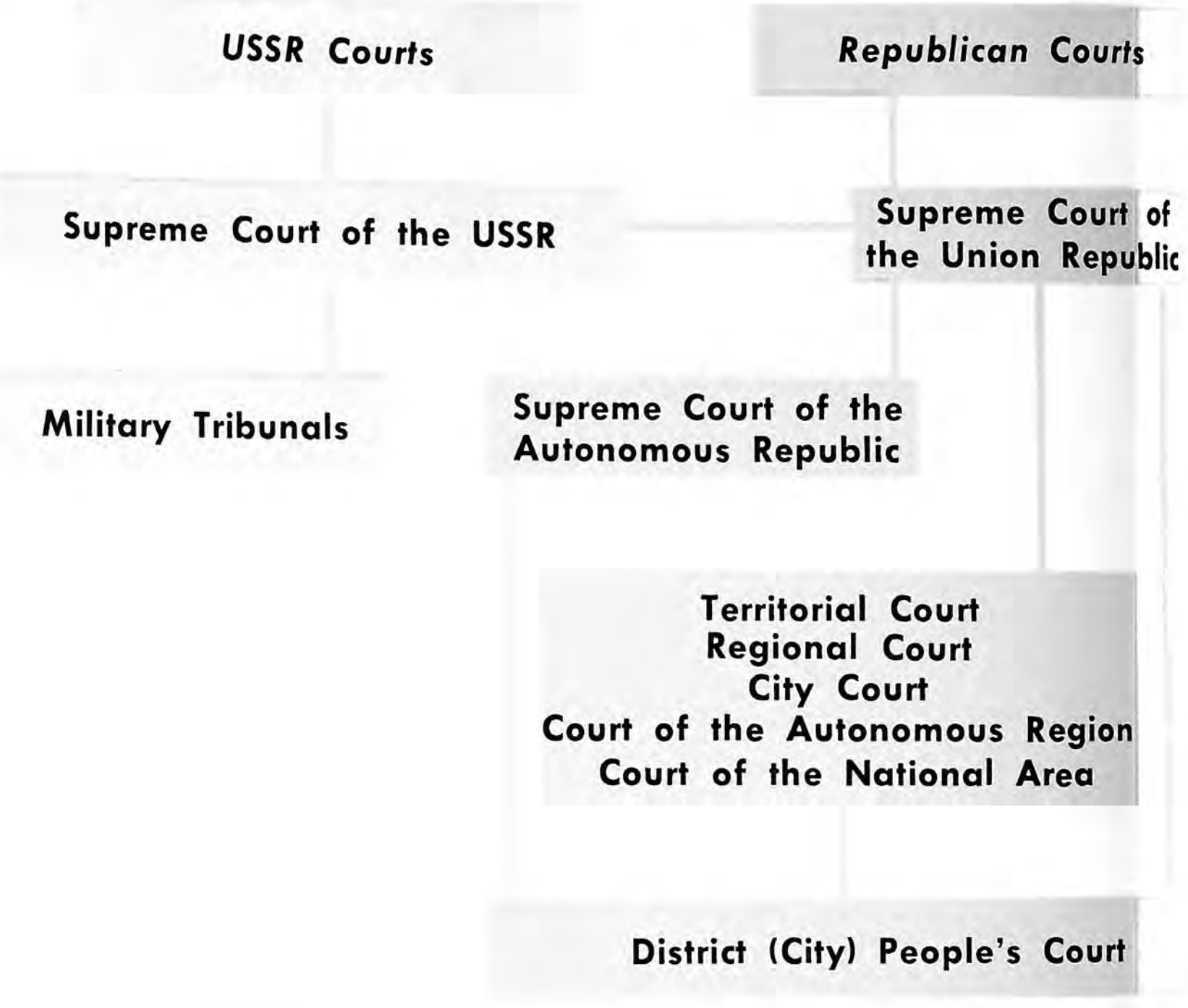
A year, or perhaps less. The criminal code says that if a juvenile delinquent proves by his exemplary conduct and his attitude to work and study that he has mended his ways, he may be set free after serving one-third of his sentence.

Or things can turn out differently. Maybe punishment will not correct but harden the delinquent? "The Hare" did a term and he is back again. Now he will be punished more severely. He is a tougher problem, and it will take a lot of time and trouble to straighten him out. But he too will be placed in uncompromising, wise and gentle hands, hands that can mold and change him.

As for Yura—it may be they will decide that he needs a period off the streets, time to think, to go to school, to live under a disciplined regime, time to change himself. And when he comes out, there will be interested and friendly people to help him study, work and live. He will not be alone.

We are sitting in the courtroom and waiting. The door will soon open and the judges come out. Nina Dobryanskaya, looking straight into Yura's staring eyes, will say: "In the name of the Republic. . . ." Yura's relatives will hang their heads. His mother will cry. But Yura will have to look at them and remember that no crime, even the smallest, goes unpunished.

Two men and a woman in a room with the door shut. Nobody is allowed in while they hold their conference. They are deciding the fate of a man. ★



THE SOVIET JUDICIAL SYSTEM

BY PROFESSOR ILYA PERLOV, LL.D.

ONLY ONE BODY administers justice in the USSR. The courts. At the same time the organs of the Procurator's Office, the agencies of preliminary investigation and inquiry, and finally the bar help the courts administer justice successfully. The Procurator-General of the USSR, the procurators of the union republics, and other procurators subordinate to these combine in exercising supervision to ensure that the preliminary investigation bodies strictly observe the law and that sentences, judgments, rulings and decisions be well founded, based in the law.

The principles underlying the organization and work of the Soviet courts are completely democratic. Judges and people's assessors are elected to their posts, held accountable for their work, and subject to recall. Hearings are held in public. There is participation in trials by public prosecutors and public defenders, and all investigative bodies and bodies of inquiry act in strict observance of the law and of rules of procedure.

Soviet courts are divided into two categories, republic and USSR. Comprising the republic court systems are the district (in some cases equivalent to city) people's courts, the supreme courts of the autonomous republics, the territorial, regional and city courts, courts of autonomous regions and of national areas, and the Supreme Court of each union republic. The USSR courts consist of the Supreme Court of the USSR and the military tribunals.

Functioning in each district is a district people's court, and in each city which has no district division, a city people's court. The people's court is actually the basic unit of the Soviet judicial system, standing closer territorially to the population than all other courts; it hears the great majority of criminal, civil and administrative cases. Election

to the people's court is, again, completely democratic, people's judges being elected by the population of each district (or city) by secret ballot, on the basis of universal, direct and equal suffrage, for a term of five years, and people's assessors by general meetings of collectives of working people for a term of two years.

The next higher bodies in the judicial system of union republics with regional divisions are the autonomous republics' supreme courts, the territorial, regional and city courts (in large cities such as Moscow and Leningrad) and the courts of autonomous regions and national areas. All of these are elected by the respective Soviets for terms of five years. They constitute a system of appellate courts, and their function is to hear appeals from and protests filed against sentences passed and decisions rendered by the lower district (or city) people's courts. They also act as courts of first instance (original jurisdiction), sitting in certain more complicated cases over which they have jurisdiction by law. These courts are composed of two collegiums, a judicial one for civil cases, another for criminal cases.

Since 1954 these courts have also had presidiums consisting of a chairman, vice chairman and several court members. The function of a presidium is to consider protests filed against people's court sentences, judgments, rulings and decisions already legally in force, as well as protests filed against decisions rendered by the judicial collegiums of the higher courts themselves in hearing appeals from people's court decisions. In short, these presidiums are judicial bodies with supervisory powers.

In those union republics which have no regional divisions, as for instance the Moldavian and the Estonian Republics, appellate and supervisory functions with respect to the people's courts are exercised directly by the Supreme Court of the union republic.

The highest judicial organ of a union republic is its Supreme Court, elected by the Supreme Soviet of that republic for a term of five years. In republics with regional divisions, the Supreme Court of the republic is an appellate court, hearing appeals from decisions of the supreme courts of the autonomous republics, the territorial, regional and city courts, courts of the autonomous regions and courts of the national areas. It also possesses supervisory powers in respect to all the above-named courts as well as to district (city) people's courts. The Supreme Court of each union republic acts as a court of first instance in cases which have been specifically placed under its jurisdiction by law.

The Supreme Court of a union republic has a judicial collegium for civil cases, a second such collegium for criminal cases, and a presidium. It also sits as a plenum.

The plenum, which consists of all the members of this court, hears cases as a matter of judicial supervision and also hands down interpretations to guide the lower courts on application of the law.

The highest organ in the country's judicial system is the Supreme Court of the USSR. This is elected by the USSR Supreme Soviet for a term of five years.

The Supreme Court of the USSR functions in the following manner: it has one judicial collegium for civil cases, a second judicial collegium for criminal cases, and a military collegium. It also has a plenum.

This plenum, composed of all the members of the Supreme Court of the USSR plus the chairmen of the supreme courts of the union republics, is the country's highest judicial instance. Under the supervisory powers vested in it, it reviews protested cases and issues interpretations to guide other courts in the application of the law during court hearings.

The Supreme Court of the USSR as well as the supreme courts of the union republics have the right to initiate legislation; they submit to the Presidium of the USSR Supreme Soviet and to the Presidiums of the Supreme Soviets of the union republics recommendations for repealing or amending laws. By studying judicial practice and generalizing on this basis, by bringing to light outdated norms as well as weaknesses in the law, and by showing the need for the enactment of new laws, the highest judicial organs of the USSR and of the union republics actively contribute to further improving Soviet legislation. ★

GUILTY OR NOT GUILTY— WHO DECIDES?

BY ALEXANDER GORKIN

CHAIRMAN, USSR SUPREME COURT

Earlier this year the author delivered a lecture on the Soviet judicial system to an assemblage of diplomats accredited to the USSR, which was followed by questions. Below is an abridged version of the lecture and some of the answers.

IN THE USSR justice is administered only by the courts, and all citizens are equal before the law and the court, irrespective of social or property status, office, nationality, race or religion.

Who Are the Judges?

All courts in the USSR are elective.

Every citizen of the USSR who enjoys the right of suffrage is eligible for election as judge or people's assessor. There is no property or other qualification; all that is required is that the candidate shall have attained the age of 25.

An analysis of the make-up of the judges elected reveals three, in my opinion, typical details.

The judges have been elected from among the nationalities inhabiting a particular republic or territory. For instance, in the Lithuanian Republic 90.6 per cent of the judges are Lithuanians, and in the Armenian SSR 95.0 are Armenians.

Seventy-four and nine-tenths per cent of the people's judges have a higher legal education; in the Ukrainian Republic the percentage is 83.2, in the Uzbek Republic 91.3, and in the Georgian Republic 93.7.

Thirty and one-tenth per cent of the people's judges are women. In the Latvian SSR the percentage is 54.0. I have sometimes been asked whether sentences passed by courts presided over by women differ from sentences passed by courts presided over by men.

As a representative of the masculine half of the human race I can say that in hearing cases and passing sentences women judges are, I believe, more alert than we men; they go into the facts of the case most thoroughly, catch the finest points, and pass sentences in strict accordance with the law.

The people's judge, while independent and subject only to the law in the trial of cases, has to give an accounting to his electors of his work and the work of the people's court. The reports of the people's judges to their electors strengthen their ties with the population and ensure control by the electors over the work of the people's court. Accountability has also been fixed for higher courts to the bodies which elected them.

Equal Rights

The judge and the two people's assessors enjoy equal rights in the hearing of a case. Decisions on questions arising in the course of the trial, also judgments, sentences or rulings are adopted by a simple majority vote. Should the judge and the people's assessors disagree, whoever is in the minority (whether the judge or either people's assessor) has to submit to the will of the majority but may set forth in writing his dissenting opinion, which is made a part of the record of the case.

Thus, in contrast to existing jury systems where the jurors decide only whether the accused is guilty or not guilty and whether he deserves a milder penalty or not, the people's assessors decide not merely whether or not the defendant is guilty, but they also have a say on all other questions to be decided by the court: qualification of the crime, the penalty to be imposed after taking into consideration the facts in the case and the personality of the accused, whether the sentence should be suspended, and all other questions that come up during the trial of the case. The people's assessors in the USSR enjoy far greater rights than jurors.

The people's assessors receive their regular wages or salary while discharging their duties in court. Those who do not work in factories or offices are reimbursed for the expenses incurred in connection with their service in court.

Procedure of Hearing Cases

The jurisdiction of the different courts in criminal and civil cases is defined by the Codes of Criminal and Civil Procedure of the Union Republics.

The district (city) court is the first and at the same time the main link of the judicial system. Being courts of first instance (original jurisdiction),

the people's courts try the bulk of the criminal and civil cases, including cases involving crimes against the life, limb and dignity of citizens; misappropriation of state or public property; crimes against the personal property of citizens; malfeasance and economic offenses; and crimes against public security and public law and order.

The people's court has jurisdiction in all property disputes between private citizens, enterprises, other establishments and organizations.

Courts give special attention to the protection of citizens' labor rights. Thus, in 1962, 91 per cent of the suits brought for compensation for injuries sustained in connection with work done in a factory or office were decided in favor of the complainants.

While territorial and regional courts, courts of autonomous regions and national areas are higher courts with respect to the people's courts, they act as courts of first instance, trying the more complicated cases, such as crimes against the state, gangsterism, premeditated murder under aggravating circumstances, and so on. They also hear the more important civil cases which they deem it necessary to try themselves.

As a court of second instance, an appellate court, they hear appeals from and protests filed against judgments, sentences and rulings of the district people's court which have not come into legal force.

However, the chief function of the regional and territorial courts is to supervise the activity of the people's courts and to rectify errors committed by the latter in hearing criminal and civil cases.

Appeal and Review of Cases

Procedural law has established that a sentence or judgment of a court does not immediately come into legal force, a sentence pronounced in a criminal case coming into force after seven days, and a judgment rendered in a civil case after 10 days. During this period the persons concerned, or those representing their interests, may file an appeal with the higher court if they believe the sentence or judgment is unjust. The procurator has the same time limit for filing a protest against the sentence or judgment of the court if he finds it to be contrary to the law or not warranted by the facts. The filing of an appeal or a protest suspends the execution of the sentence or judgment until the case is examined by the higher court.

Where a higher court finds that the sentence passed or judgment rendered by the court of first instance is proper, the court will affirm it and it is ready to be executed. After that the defendant or his lawyer may apply to have a protest entered by way of supervision. Should the chairman of the regional court or the regional procurator, or the chairman of the Supreme Court of the union republic, or the procurator of the republic, find the sentence or judgment to be improper, he may demand the case file and enter a protest with the appropriate higher court. Where necessary the chairman of the Supreme Court of the USSR or the Procurator-General of the USSR files a protest with the Judicial Collegium for Criminal or Civil Cases, or with the plenary session of the USSR Supreme Court.

A court of second instance either affirms a sentence or a judgment pronounced by a court of first instance or sends the case back for a new trial by the court of first instance, or orders a new preliminary investigation, or modifies the sentence or judgment. In modifying a sentence, the court of second instance may mitigate a punishment, but it has no right to impose a more severe punishment.

Supreme Courts

The Supreme Courts of the union republics are the highest judicial organs of the union republics, having original jurisdiction in criminal and civil cases of exceptional importance. They exercise supervision over the judicial activity in their republics by reviewing cases on appeals from or protests filed against judgments, sentences and rulings of the lower courts, and on protests entered against judgments, sentences, rulings and decisions pronounced by any court in the republic which have come into legal force.

Cases of infraction of the law by servicemen are tried by military tribunals. Supervision over their judicial activity is exercised by the Supreme Court of the USSR. Today military tribunals try only cases of crimes committed by those serving in the Armed Forces and all espionage cases.

The highest judicial organ in the Soviet Union is the Supreme Court of the USSR.

The Supreme Court of the USSR, as a court of first instance, hears criminal and civil cases of exceptional importance (such as the Powers case and the case of especially large misappropriations in Kirghizia). It acts as a court of second instance (a court of cassation) with respect to military tribunals of military districts and fleets.

The present Supreme Court of the USSR was elected in April 1962; it consists of 16 justices (including the chairman of the Supreme Court and his two deputies) and 45 people's assessors. The 15 chairmen of the Supreme Courts of the union republics are ex officio members.

Principles Underlying the Judicial System

No person may be placed under arrest except by decision of a court or with the sanction of a procurator;

No one may be found guilty and subjected to a criminal penalty except by sentence of a court;

All citizens are equal before the law and the court;

Judicial proceedings are conducted in the language which the persons participating in the trial understand;

Cases are heard in public;

The accused has the right to a defense.

These are the basic legal norms ensuring the inviolability of the person and strict observance of the law in the USSR.

To guarantee objective decisions in criminal and civil cases, judges make their decision only in accordance with their inner convictions on the basis of the law and in strict conformity with the facts in the case as established by the court. No one may order the court or recommend that it hand down a particular verdict in a specific criminal or civil case. The independence of judges and their subordination only to the law is a constitutional principle.

Judicial proceedings are conducted in the language of the union or autonomous republic or autonomous region, and where the constitutions of the union or autonomous republics provide for it, in the language of the national area or in the language spoken by the majority of the population in the district. Persons not knowing the language are guaranteed the opportunity of fully acquainting themselves with the material of the case through an interpreter, and likewise to use their own language in court. Infringement of these rules will be cause for setting aside the sentence.

An accused may not be kept under arrest for more than two months during the investigation of the case. In exceptional cases the Procurator-General of the USSR may extend the time of custody, but for no longer than nine months. That, however, is rather rare.

The Rights of the Accused

The court, procurator and investigator have no right to put the burden of proof on the accused. It is forbidden to compel the accused to give testimony by the use of force, threats or any other illegal means. It should be mentioned that during the Stalin personality cult period there were cases in which the democratic principles of legal procedure were violated, but the principles have been re-established, and the Communist Party of the Soviet Union and the Soviet Government watch closely to make sure that they are strictly observed.

The rights and duties of participants in a trial are clearly defined by law.

The accused has the right to offer explanations in respect of the charges preferred against him and submit evidence; to present motions; to acquaint himself with all the material of the case on the termination of the preliminary examination; to have defense counsel; to challenge; and to appeal from acts and decisions of the investigating officer, the procurator or the court.

The court must give the accused an opportunity to prepare his defense before the court sitting begins. The court is charged with the duty of handing the accused a copy of the indictment not less than three days before the case comes up for trial. Failure to hand him a copy of the indictment, or tardiness in handing it to him, is regarded as a gross violation of his right to a defense, and the verdict pronounced by the court where such violations exist is to be set aside.

At the hearing of a case in a sitting of the court the accused has the same procedural rights as the other participants in the trial to present evidence, take part in examining it and to offer motions, and he has the right to a final plea. He also has the right to put questions to the procurator, witnesses, lawyers and other persons participating in the trial.

At trials before a court of first instance, cases are heard with the participation of the accused. The trial of a case without the presence of the accused, except in cases provided for by law, is a gross procedural violation and constitutes cause for the setting aside of the verdict.

The law holds it inadmissible to increase the punishment of the accused or to apply to him a law covering a graver crime when the case is reviewed by a court of cassation or by way of supervision.,

A review by way of supervision of a verdict of guilty, or ruling or decision of the court on the ground that the penalty was too mild or that it was necessary to apply to the convicted person a law covering a graver crime, and likewise a review of a verdict of acquittal or an order or decision of the court to quash the case are permitted only within one year from the time they have come into legal force.

Foreigners committing a criminal offense in the USSR are answerable under Soviet law. In such cases, embassies have the possibility of inquiring through the USSR Ministry of Foreign Affairs or other proper channels about the case of their detained national, petition for an interview with him, provide for the protection of his rights in the manner prescribed by law, and so on.

Guarantee of Justice

The defense counsel is allowed to participate in the case as soon as the accused is informed that the preliminary investigation has been completed and has been handed all the material of the case for acquainting himself with it.

Where the persons charged with the commission of a crime are minors or because of physical or mental deficiencies are unable to exercise their right to defend themselves, the defense counsel is permitted to take part in the case from the time the charges are preferred.

The defense counsel is either retained by the accused or is appointed by the court, if such a request is made by the accused.

From the moment the defense counsel is permitted to participate in the case, he has the right to interview the accused; to acquaint himself with all the material of the case and copy out needed information; to offer evidence; to present a motion; to participate in the court examination; to make challenges; to lodge complaints against actions and decisions of the investigator, procurator or court. With the sanction of the investigator the defense counsel may be presented during the interrogation of the accused and during other acts of investigation carried out at the request of the

accused or his counsel. A lawyer, once he has undertaken to act as counsel, may not withdraw from the case. The accused may retain any lawyer to defend him; where he cannot afford to pay a fee, a lawyer will be appointed by the court for whose services he does not have to pay.

Article 23 of the Fundamentals of Criminal Procedure for the USSR, the Union and Autonomous Republics provides that the defense counsel is duty bound to employ all ways and means envisaged by the law to bring out the facts which may exonerate the accused or mitigate his liability and to give him the necessary legal aid.

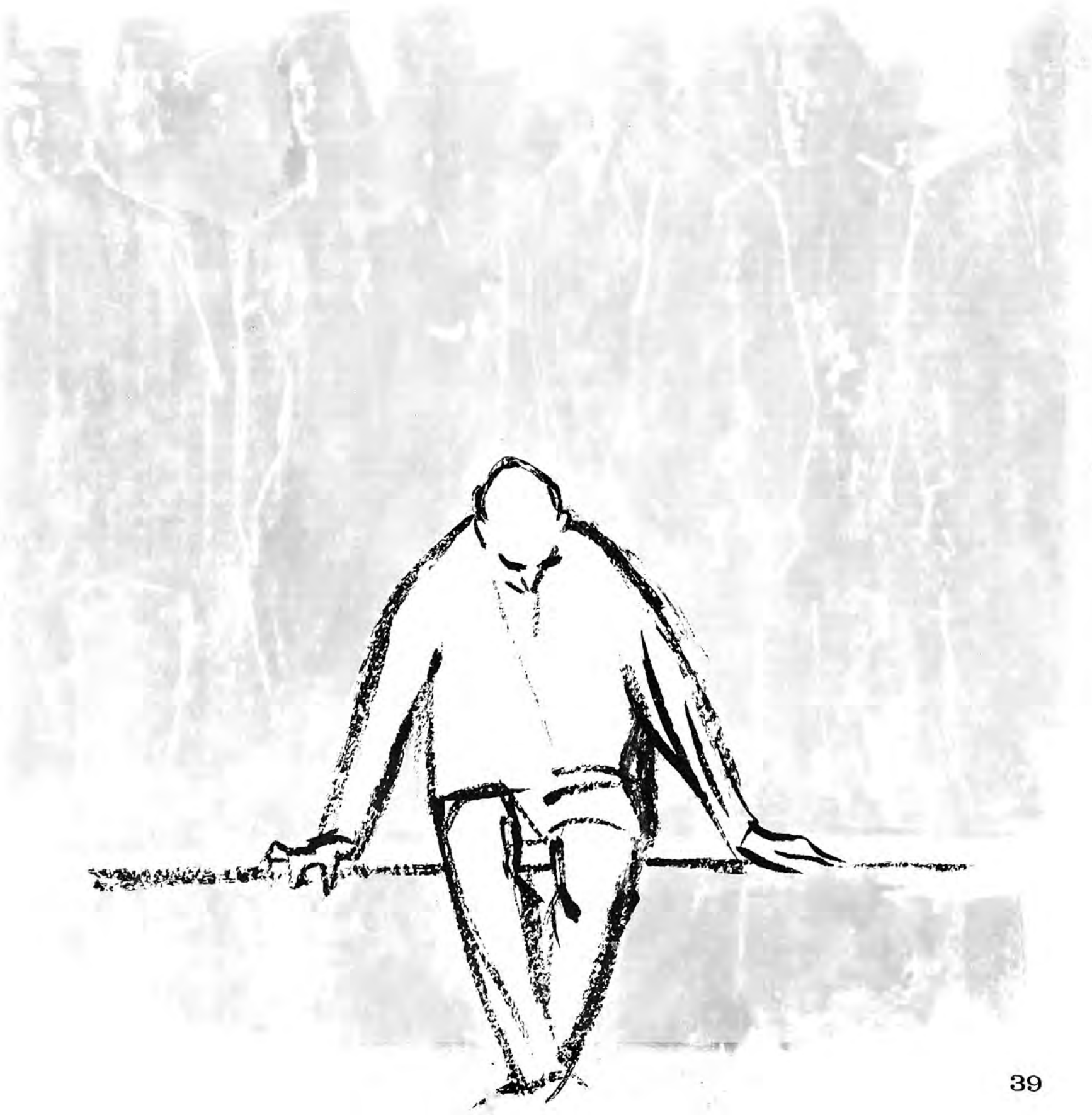
The procurator participates in the administrative sessions and the sittings of the court during the hearing of criminal and civil cases, conducts the prosecution on behalf of the state, and starts and supports civil actions in court. Procurators exercise supervision to ensure that sentences, judgments, rulings and decisions of judicial bodies are legal and well founded and that sentences are carried out by filing an appropriate protest with the higher court.

In all courts cases are heard in public except where state secrets are involved. Other cases that may be heard *in camera* are those which concern crimes committed by persons under the age of 16, cases involving sex crimes, and others where it is deemed necessary to prevent disclosure of information of an intimate nature regarding those concerned in the case. In all such cases the court must state in its decision the reason for holding the hearing *in camera*. Verdicts in all cases are pronounced in public.

Retroactivity and Limitation

Article 6 of the Fundamentals of Criminal Legislation for the USSR and the Union Republics provides that the criminality of an act and liability for punishment are determined by the law operative at the time the act is committed. A law removing punishability for an act or reducing the penalty for it is retroactive, but a law instituting punishment for an act or increasing the penalty for it is not.

There have been isolated cases in which courts have applied a law retroactively, but only where in the particular case the Presidium of the Supreme Soviet of the USSR had passed a decision giving the court the right to apply the law retroactively. But the courts did not exercise this right in all cases. The law was applied retroactively in respect of a few persons who had misappropriated especially large amounts of state property or who had engaged in illicit deals in foreign exchange on a particularly large scale.



Under the principle of limitation established by Soviet law criminal proceedings may not be instituted against a person after the lapse of certain periods following the commission of a crime; the periods being fixed by law in accordance with the term of the penalty provided for by the law for the crime committed. To illustrate, the minimum period fixed by the Criminal Code of the Russian Federation is one year. The limitation does not operate while the person who has committed a crime stays in hiding to escape investigation or trial. At the same time the law provides that such a person cannot be held criminally liable if 15 years have passed from the day the crime was committed and he has committed no fresh crime during that period. The statute of limitation covers also the execution of a sentence. In the case of a person sentenced to death, should the court not find it possible to apply the statute of limitations, it may commute the sentence of death to imprisonment.

The Aim Is Reform and Re-education

We hold that no one is born a criminal, but becomes one under the impact of social factors.

Under Soviet criminal law a penalty is not merely a punishment for the crime committed, it also has for its purpose the reform and re-education of convicted persons.

You may ask: Is there no contradiction here?

I think there is none. In the conditions prevailing under the Soviet system, the causes of crime lie in the shortcomings of the educational work, stemming from the slowness in overcoming and getting rid of such survivals of the past as private property psychology, moneygrubbing and parasitism, the desire to give society as little as possible and grab from it as much as possible, from a careless attitude toward work and public property. A high percentage of criminal offenses is committed under the influence of liquor—another painful survival of the past. For instance, some 75 per cent of especially dangerous crimes, such as murder under aggravating circumstances, are committed while in a state of drunkenness. We believe that as the educational work is stepped up and the survivals of the past are gradually eliminated, the soil for crime too will be removed.

The further rise in material security and advance of the cultural standards and social consciousness of the people will make it possible for us to eradicate crime and eventually to replace state measures by measures of public influence and education.

The law provides the following types of punishment for criminal offenses: corrective labor without deprivation of liberty; fines; public censure; exile; banishment; deprivation of the right to occupy certain posts or engage in certain activities; and deprivation of liberty. Members of the Armed Forces may be sent to a disciplinary battalion.

A sentence of deprivation of liberty may not exceed a term of 10 years, except for especially grave crimes and for particularly dangerous habitual criminals, in which cases the sentence may run to 15 years. However, where the person was under 18 when he committed the crime, his sentence may not exceed 10 years.

Soviet legislation has renounced the imposition of extraordinarily long terms of deprivation of liberty as that does not serve the purpose of reforming those who have committed crimes.

Widely employed in judicial practice is the suspended sentence, where the court, in fixing the penalty at deprivation of liberty or corrective labor, deems it inexpedient to have the person who is found guilty serve the sentence imposed. In such cases the sentence is suspended if the convicted person does not commit another similar crime, or one no less grave, within the probationary period fixed by the court.

Suspended sentences are fairly common. For instance, in Byelorussia last year they made up 12.4 per cent of the total sentences passed in cases with a preliminary investigation, and in the Lithuanian SSR 14.5 per cent.

We are sometimes asked why the Soviet Union has capital punishment. In the future, as the social consciousness of *all* members of our society develops and as the survivals of the past are eliminated, this measure of punishment will certainly be abolished. Today, however, such a step would, in our opinion, be premature, and this is attested to by the hundreds of letters we receive from private citizens approving the imposition of this punishment on criminals who have committed grave offenses.

A sentence of death by shooting is an exceptional measure of punishment, imposed for such grave crimes as high treason, espionage, sabotage, terrorist acts, banditry and premeditated murder under aggravating circumstances.

Under legislation enacted in 1961 and 1962 a death sentence may be passed in a number of other cases, among them for especially large misappropriations of state or other public property; taking a bribe under aggravating circumstances; counterfeiting or violating regulations covering foreign exchange operations involving large sums or dealing in such operations as a business; rape under aggravating circumstances, and attempts on the life of members of the militia or of the voluntary public order squads.

Under laws in force, a sentence of death may not be imposed on persons who were under 18 at the time the crime was committed, or on women who were pregnant when they committed the crime or at the time the sentence is passed. In general, I cannot recall a single instance of a woman being sentenced to death in our country. And if there were cases here and there of a court of first instance imposing a sentence of death by shooting, the higher court, as a rule, substituted deprivation of liberty for shooting. In other cases the sentence of death by shooting was commuted to deprivation of liberty by the Presidium of the Supreme Soviet of the union republic or of the Supreme Soviet of the USSR.

In fixing a greater liability Soviet legislation had in view criminal acts which, while rarely met with in our country today, are highly dangerous acts which are committed with subtle technique by inveterate criminals.

Misappropriation of state or other public property is not just an "economic" crime, it is a very grave crime against the people, for it is designed to undermine the very foundation of the country's economy, created by the labor of the people, by impairing the people's well-being.

A study of concrete criminal cases has shown that the organizers of large misappropriations are morally degraded people, not infrequently convicted in the past for similar or other grave offenses. To accomplish their criminal ends they resort to forging documents, to fraud and bribery, and they do not hesitate to use any machinations. They have robbed the state, collective farms and consumers, in some cases over many years, corrupting and inveigling other morally unstable people into crime, bribing officials and bringing elements of demoralization in the work of economic and government bodies.

Persons sentenced to deprivation of liberty serve their sentence in corrective labor colonies, and those under 18 in labor colonies for juveniles. Deprivation of liberty by way of imprisonment may be ordered by the court only in the case of those who have committed a grave crime or of particularly dangerous habitual criminals. Persons sentenced to imprisonment who have served not less than half of the term of their sentence may, if their behavior has been exemplary, have their imprisonment commuted to detention in a colony by order of the court.

Convicts serving their sentence in a corrective labor colony or in prison are put to productive work, learn a trade and attend general educational courses, and they may send home part of their earnings for the support of their family. After serving their sentence they take up a life of honest labor. Local Soviets and economic bodies are charged with the duty of finding jobs for them and helping to rehabilitate them.

As a result of the character training they get in the colony or prison, and the influence exerted by their place of work, it is rare for a released convict to commit a fresh crime.

In the Soviet Union there is essentially no organized professional crime. Cases of recurring commission of crimes after release are comparatively rare. In judicial practice we have not come across gangster organizations or professional bands of robbers.

Release Before Expiration of Sentence

Very important for reforming and re-educating criminal offenders is the conditional release before expiration of the term, or commutation of sentence, where the convicted person has by his exemplary behavior and honest attitude toward work proved that he has reformed.

Those who were under 18 when they committed crimes may be released by the court after serving a third of their sentence, and others after serving one-half or two-thirds of their sentence, depending on the nature and gravity of the crime.

Functioning under local Soviets are supervisory commissions, made up of representatives of public organizations, to keep an eye on the conditions in which convicts are kept in places of deprivation of liberty, to help officials of corrective labor colonies carry on character-training work among the convicts, and to help released convicts find jobs and become rehabilitated.

Supervisory commissions have the right to recommend convicts for release before expiration of their sentence or to commutation of their sentence.

Playing an important role in the re-education of convicts is the patronage exercised over corrective labor colonies by factories and collective farms. Factory collectives arrange lectures for the convicts and talks on topics of the day, and help colony and prison administrations organize cultural activities and vocational training. After serving their sentence, many of the convicts find work in the plant or on the state or collective farm which exercises patronage over the corrective labor colony in which they served their sentence.

Thus the Soviet state, through the system of measures carried out by government bodies and public organizations, endeavors to have every person who has committed a crime show by conscientious labor and exemplary behavior while serving his sentence that he has reformed and as speedily as possible accustomed himself to honest labor for the good of all.

The Role Played by the Public

Elected democratically, the Soviet courts are widely supported in all of their activities by public organizations and collectives of working people.

The educational role of the courts is ensured by the fact that all cases are heard in public with the participation of people's assessors, and that the more typical and important cases are heard by the court in sittings at the factory, collective farm or other establishment where the crime was committed. The press, radio and television are used to report and comment on the trials.

Legislation of the USSR and of the union republics makes it possible for public prosecutors and public defenders elected by public organizations or collectives of working people to participate in the trial.

In 1962, there was a public prosecutor in 11.5 per cent of the cases heard in courts of the Estonian Republic and 12.9 per cent in those of the Ukrainian Republic; public defenders appeared in 6.2 per cent of the cases heard in the Turkmen Republic, and 6.9 per cent in the Moldavian Republic.

The laws of the USSR and of the union republics provide for turning over an accused to the custody of public organizations or collectives of working people. Where a petition to that effect is submitted, the court, the procurator's office, the investigator or the militia (with the consent of the procurator) have the right to quash a criminal case with respect to persons who have committed a crime that does not constitute a great social danger and who have sincerely repented. In such a case, the accused whose cases have

been quashed are turned over to the custody of the public organization or collective of working people which has petitioned to re-educate and reform them.

Testifying to the effectiveness of this form of re-educating lawbreakers and preventing crime is the fact that of the number of persons turned over by courts or investigators to the custody of public organizations only 1.1 per cent were convicted by people's courts in 1961 for the commission of a fresh crime, and 0.5 per cent in 1962.

Judicial workers report on their work to the population, lecture on legal questions and give talks on the state of crime in a particular district or town and the measures taken to combat it. In 1962, the reports by people's judges on their work numbered 60,698, and lectures and talks delivered by them on legal subjects—204,944.

Voluntary Public Order Squads and Comrades' Courts

Participation of the public in the struggle against breaches of public order and immoral deeds varies greatly in form. There are voluntary public order squads, comrades' courts, commissions for the affairs of minors, and so on.

The public order squads are voluntary bodies made up of the more socially conscious workers at plants, offices and housing managements, and collective farmers on the farms, who carry on considerable preventive and educational activity. Their method is by persuasion and by taking measures to prevent breaches of public order.

Playing an important part in the struggle against violation of labor discipline, immoral deeds and lawbreaking are the comrades' courts.

These courts function on the basis of a special statute; they are elective public bodies whose task is actively to help in educating people. Their principal task is to prevent lawbreaking and acts harmful to society, to educate people through persuasion and public influence, to create a climate of intolerance toward any and all antisocial acts.

Comrades' courts may apply the following measures to those found guilty: require them publicly to apologize to the injured party or collective; issue a comradely warning; issue a public reprimand with or without publication in the press; impose a fine not exceeding 10 rubles, provided the act did not involve violation of labor discipline. A comrades' court may confine itself to hearing the case in public and not apply any of the measures enumerated above if the guilty person has sincerely repented, publicly apologizes to the collective or to the injured party and voluntarily makes good the damage inflicted.

Commissions on the Affairs of Minors

For prevention of lawbreaking by those under age, implementation of measures for combating neglect of minors, and for rehabilitating children and juveniles and protecting their rights, commissions for the affairs of minors are formed, functioning under the executive committees of district, town, territorial and regional Soviets; they operate with wide participation of the public.

The commissions may bring pressure to bear on parents or guardians who fail to give proper attention to the upbringing of their children, creating conditions favorable to lawbreaking by children or juveniles.

The commissions are charged with examining cases of minors under 16 who have committed socially dangerous acts. They have the right to ask the court not to impose a penalty or to impose a milder penalty, to suspend sentence, to expunge a conviction before the expiration of the term, to release the minor before he has served the full sentence, or to commute the sentence.

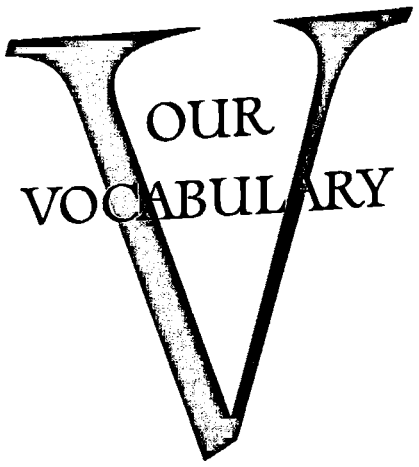
Educational and preventive measures against violators of the rules of the socialist community are carried out also by standing commissions of local Soviets, of factory and local trade union committees, parents' committees cooperating with schools, boards of trustees of children's homes and boarding schools, street and house committees, and many other independent organizations.

Recent years have witnessed the enactment, at the request of the working people, following an extensive discussion in the press, of a law for combating idlers and parasites. Persons doing no socially useful work may, by order of a people's court, or a court made up of fellow citizens, be banished from the town or village in which they live for a term of from two to five years and are made to go to work. This is not a criminal penalty, its application is not counted as a conviction, and it does not entail any other restriction of rights following banishment.

The law provides that before a person leading a parasitic life may be banished, he has to be admonished to find a job and given a time limit for it, and where necessary he is helped to find work and become rehabilitated. Where the banishment is unwarranted, on a protest filed by the procurator by way of supervision, a higher court or the executive committee of the particular Soviet will review the decision, and where there are good grounds therefor will set it aside.

Now that the Soviet Union has entered the period of full-scale building of communist society, the constantly rising material security, cultural standards and social consciousness of the people are creating the conditions for the eradication of crime, and eventually penal measures by the state will give way to measures of public influence and education.

The all-round development and perfection of socialist democracy—active participation by all citizens in governing the state and in the guidance of economic and cultural development, improvement in the work of the state apparatus and greater popular control over its work—are creating the necessary prerequisites for it. ★



Socialist law. An essential element in the evolution toward a communist society is expanding democracy and greater protection of the rights of the Soviet citizen. Socialist law, said Lenin, is an important instrument in the reconstruction of society.

The law in the USSR is founded on genuinely democratic principles. Judges and people's assessors are elected and accountable to the electorate; they may be recalled before their term is finished. Cases are tried in public with a public prosecutor and a counsel for the defense participating. All courts and organs of investigation and inquiry are required to adhere strictly to the law and established legal procedures.

The most important aspect of socialist law is strict observance and execution of Soviet laws by all state organs, institutions, public organizations, officials and Soviet citizens.

Public counsel for the defense. A representative of the factory or office where the person on trial is employed. It will usually be a worker or an engineer who has considerable standing in his shop and is familiar with the working and living conditions of the defendant. Today these public counsels often appear in court; sometimes they vouch for his good behavior on probation. Soviet law permits public organizations and the personnel of factories and offices to assume responsibility for an offender. They pledge to re-educate him and see that he does not repeat the offense. Of every 200 persons on such probation in 1962 only one came up for trial again.

Maintenance of public law and order. Each of the 15 republics has a ministry for the maintenance of law and order. The militia (police force) is subject to the ministry.

The militia sees to it that the national laws and local ordinances are observed. It protects state and public property and the safety of the citizen, investigates crimes and makes arrests. The militia issues passports and regulates traffic.

People become militiamen in the same way they become fitters or engineers, the choice is purely voluntary. The militia gets considerable help in fighting crime and offenses from the voluntary public order squads, the comrades' courts, and other groups of public influence.

Public control. These are citizen groups at factories, offices, construction sites, farms, institutions and apartment buildings that assist the Party and state control committees. "It is necessary," said Lenin, "for the broad non-Party masses to check up on all affairs of state and themselves learn to govern." Guided by the decisions of the Twenty-second Party Congress, the November Plenary Meeting of the Central Committee of the CPSU (1962) re-established and creatively developed the Leninist principle of Party and state control which had been violated in the period of the personality cult. Now there is a single Party and state control body nationally (the Party and State Control Committee of the Central Committee of the CPSU and the Council of Ministers of the USSR) and corresponding control bodies in the republics, territories, regions, cities, districts, collective and state farm management boards and industrial zones. These bodies rely on the public generally and the millions of volunteer inspectors in particular to establish strict control over the relationship of labor to consumption. They help fight bureaucracy, speculation, parasitism and theft of public property. The activities of these citizen inspectors are widely publicized in the Soviet press.

People's assessor. Soviet courts of first instance in civil and criminal cases have a three-man bench—a judge and two people's assessors.

People's assessors are elected by a show of hands at general meetings at factories, offices and collective farms from among the people employed there. They must have reached the age of 25. They are elected for two-year terms and serve two weeks a year or somewhat longer if a case they are on is not finished. Decisions of the court are by a simple majority. The people's assessors have the same powers as the judge. In a disagreement with the judge on the verdict or sentence their decision is the one adopted. Unlike jury members, they decide not only whether the accused is guilty or innocent but also the degree of punishment and all other pertinent questions.

People's assessors are men and women in all occupations. No special legal education is required. The decisions they arrive at are determined by their life experience and their own ethical values and understanding of the law. Members of the Communist Party make up less than half the total number. During the two weeks or more a year they serve, people's assessors receive their regular wages or salary. Those not employed are reimbursed for expenses incurred while on the bench. ★

PHOTO OF THE MONTH

By Gennadi Koposov

This photo won second prize at the Fourth USSR Exhibition "The Seven-Year Plan in Action." The furry object in the foreground is Dimka, the son of an Evenki hunter. He lives with his parents in the Evenki National Area, Krasnoyarsk Territory in the Far North, and often keeps them company on hunting trips. Automation notwithstanding, reindeer is still the most reliable mode of transportation in this part of the world.

QUERIES FROM READERS

QUESTION: "How many Communists are there in the Soviet Union?" asks a social studies class at Harrodsburg High School in Harrodsburg, Kentucky.
ANSWER: Ten million.

QUESTION: "May a member of the Communist Party of the Soviet Union leave the Party if he wishes?" This question and the five that follow also come from Harrodsburg High School students.
ANSWER: Yes, he may, since the Communist Party, like every other public organization in the Soviet Union, is a voluntary association.

QUESTION: Why isn't the launching of a Soviet spaceship announced beforehand and why isn't it shown on television?
ANSWER: Soviet cosmonauts have been asked this question time and again at press conferences after their flights. It was asked of Mstislav Keldysh, President of the Academy of Sciences of the USSR, at the press conference he called for Valeri Bykovsky and Valentina Tereshkova. Academician Keldysh said: "The American *Mercury* weighs two tons, while our ship weighs about five tons. That is why we can fly longer and farther. But you realize that if a rocket can put a five-ton ship into orbit, it can do the same with another kind of load. Until there is an agreement on general and complete disarmament the Soviet people cannot give away secrets which serve their defense purposes."

QUESTION: Why was capitalism permitted in the USSR during the NEP period?
ANSWER: To help socialism triumph, paradoxical as that may sound. At the time (1921, immediately after the Civil War and foreign intervention) the country was in ruins. Without reconstruction it was impossible to begin to industrialize the country and build socialism. Lenin suggested a breathing period during which free trade and capitalism would be permitted, within strict limits. That stimulated farming and helped rebuild industry. The partial revival of capitalism, the rise of kulaks (rich peasants), and the opening of small private enterprises were no significant threat to the socialist system, since all the leading positions in industry, the banks, transport, foreign trade, and so on, were in the hands of the Soviet state. It is interesting to note that time has justified the policy. The socialist countries which came into being after the Second World War also had to go through transition periods similar to NEP.

QUESTION: How is a premier of the Soviet Union elected? How did Nikita Khrushchev get to be premier?
ANSWER: Election of a premier takes place at the first session of the new USSR Supreme Soviet, which is our parliament. The present Supreme Soviet was elected in March 1962. It held its first session in April, at which time the government tendered its resignation. Deputy Nikolai Podgorny, then Secretary of the Central Committee of the Communist Party of the Ukraine, took the floor to commend the work of the outgoing government and its head, Nikita S. Khrushchev. Premier Khrushchev, said Podgorny, had initiated and carried through a program of domestic and foreign policy that had furthered communist construction and world peace. Podgorny stated that on behalf of deputies from Moscow and the largest regions of the Russian Federation, and deputies from the Ukrainian and Uzbek Republics, he was introducing a resolution approving the work of the previous government and instructing Premier Khrushchev to present to the Supreme Soviet a proposal for the composition of a new government. The resolution was adopted by a unanimous show of hands. That is how Nikita Khrushchev was confirmed as premier.

QUESTION: Do the 15 union republics trade freely among themselves? Are there any travel restrictions between Soviet republics?
ANSWER: The union republics of the USSR are bound together by the closest and most friendly economic ties. An example is the fair held regularly in Riga, capital of Latvia, where trade organizations from the Russian Federation, Byelorussia, the Ukraine, Moldavia, Georgia and other republics come to sell their goods. When it is mutually profitable, the republics form a common economic region with a single economic council. This has happened in Central Asia, where four union republics—Uzbekistan, Turkmenia, Kirghizia and Tajikistan—comprise the Central Asian Economic Region. Their common economic problems lead naturally to close cooperation and mutual assistance.

Soviet citizens may travel in any of the union republics without restrictions and there are no customs barriers between Soviet republics. Naturally, all citizens of union republics are citizens of the USSR as well.

QUESTION: "I have heard that when the new Program of the Communist Party was discussed, non-Party people as well as Party members took part. Is that true? If so, why did non-Party people take part?" These questions are from Miss Mary Marshall of Chicago.
ANSWER: Yes, non-Party people took part. When the draft of the new Party Program was up for discussion more than 72 million non-Party men and women participated. They did more than merely discuss the draft. They made suggestions and corrections and offered amendments. Since the new Program outlined the steps the country would take for the next 20 years in the full-scale building of a communist society, it was only natural for every Soviet citizen to be vitally concerned. The Communist Party of the Soviet Union makes a general rule of discussing its big projects and plans with the whole country.

QUESTION: "Can an American write to a Russian and be certain his letter won't be censored?" asks Harry L. Epply of the Harry L. Epply Book Co., 155 N. Gardner St., Scotsburg, Indiana.
ANSWER: Yes, Privacy of correspondence is protected by law, as recorded in Article 127 of the Constitution of the USSR.

QUESTION: "Are there philanthropic organizations in the USSR?" The question comes from Joseph Kaye of Chicago, a regular reader.
ANSWER: No, for the simple reason that we don't need them. The state system of social insurance, to which wage and salary workers make no contributions whatsoever, no unemployment, free education of all kinds and free medical care of all types, adequate old age and disability pensions, sick benefits amounting to the average wage or salary, and low rents all eliminate the need for charitable organizations.

But if by philanthropists you mean those big-hearted people who give society their knowledge or their property and ask nothing in return, we have such people, quite a lot of them.

Museums and picture galleries are often presented with private collections of paintings and other art objects. The Tretyakov Gallery has a collection of 88 famous Russian paintings which it received as a gift from Professor Ivan Sarkizov-Serazini. He also presented an invaluable collection of the autographs of great writers to the Chekhov and Pushkin museums.

As a rule, people present their collections, libraries, savings or houses to the town they live in. The museum in Yakutsk, capital of the Yakutsk Autonomous Republic up north, now has valuable paintings by Rembrandt, Van Dyke, Murillo and Repin, the gift of Professor Mikhail Gabyshov of Yakutsk, whose collection of paintings was valued at 100,000 rubles. Professor Gabyshov did not leave a will, but his wife and sons knew of his wish to present the collection to the Yakutsk museum.

The unique Museum of the History of Medicine in Riga, the only one of its kind in the world, was started by Professor Pavel Stradyn, a Latvian doctor who spent 30 years collecting items for the museum on his travels.

QUESTION: Can an American poet get his work published in the USSR so long as it does not deal with social ideas?
ANSWER: Yes, and not only poems about nature. Poetry of ideas will also be published. The problem is translation. But Soviet translators are deservedly famous. American literary critics say, for example, that translations into Russian of so American a poet at Walt Whitman are brilliantly done. Books by American writers are published and read widely and are translated into many languages besides Russian. Since the beginning of the Soviet period the works of 230 American writers have been translated into 50 of the languages spoken in the USSR—including Russian, Ukrainian, Tajik, Georgian, Kazakh, Armenian and Latvian—in a total of 102 million copies.

QUESTION: "Is it true that quantity comes before quality in housing construction in the USSR?" The question is from Harold Backer of Washington, D. C.
ANSWER: No, that is not true, in spite of our very big housing program. More than 7,000 persons get the keys to new apartments every day of the year. In the past six years almost a third of the Soviet population has moved into new living quarters. The Soviet Union holds first place in the world for volume and rate of housing construction. We build twice as many apartments per capita of the population as the United States or France.

Are all the apartment houses high standard? Well, with so much construction and the fact that at the same time we have to train new workers, the old Russian saying of "less but

better" is bound to be violated at times. It isn't that we prefer quantity to quality; we try to build a lot and we try to build it well. Your Secretary of the Interior Stewart Udall, a man who undoubtedly knows building problems, will tell you so. He said, during a visit to the Soviet Union, that he was amazed at the scope of housing construction in the USSR. Bratsk, the young city in Siberia that is growing up around the giant power plant now being built on the Angara, was one of the places Mr. Udall's group visited. There, he said, they had seen a great many new houses as attractive and well-built as those at home.

QUESTION:"Is it the custom in the Soviet Union to give Christmas presents? What kind and to whom?" The questions are asked by Jim Kollinsky, a New York college student.

ANSWER: We give New Year's presents to relatives and friends. The kind of present depends on the taste of the giver, what he can afford, and how he feels about the recipient.

QUESTION: "Does a man need a college diploma to work as an engineer?" The question comes from George W. Hukle of 1325 Humuula H, Hailua, Oahu, Hawaii.

ANSWER: Yes, although sometimes an experienced technician may fill the post of engineer, in cases where practical knowledge makes up for a lack of formal education in engineering. But such a technician will usually be taking evening courses toward a degree. The Soviet Union has about one and a half million graduate engineers—more than twice the number in the U.S. We annually train almost three times as many engineers as does the United States. One third of them earn their diplomas at night school or through a correspondence course. There are no tuition fees, of course. In addition the engineering student's place of employment is required by law to give him time off with pay for examinations and time to write and defend his graduation project.

QUESTION: George W. Hukle also wants to know to what trade union an engineer belongs.

ANSWER: To the trade union of the industry in which he works. A power engineer will belong to the trade union of textile workers if he works at a textile mill, or to the trade union in the chemical industry if he works at a chemical plant. He will be a member of the union to which all the people working in his factory or mill belong, including the director of the mill, its engineers and technicians. Incidentally, as trade union members, they all have absolutely the same rights and duties.

QUESTION: "Is it true that spectators are forbidden to smoke inside places where athletic matches are held?" Peter Cleiner of San Francisco, California, wants to know.

ANSWER: Yes, it is. It makes for better conditions for the athletes. When he was in the United States, Brumel complained that he was not used to performing in a smoke-filled arena.

QUESTION:"Do your men tell jokes about deceived husbands?"asks Robert Roden of Detroit, Michigan.

ANSWER: Yes, they do. And they laugh at them—sometimes without realizing they are laughing at themselves.

QUESTION: Do all Soviet writers have the same freedom of thought and expression as Tvardovsky and Yevtushenko?

ANSWER: Yes. All writers and poets in our country have equal rights and opportunities. Where they are not equal is in their endowment of talent.

The possibility of freely expressing his viewpoint is no problem for the Soviet writer. Tvardovsky, for example, speaks his mind not only in his own poetry; as editor in chief of *Novy Mir*, one of the most popular literary magazines in the country, he publishes material which reflects his views and those of the editorial board. Other writers on the editorial boards of magazines are in a similar position. But just as all writers are guaranteed freedom of thought and expression, so all readers have the right and freedom to criticize the work of an author. And they do. Sometimes the criticism is very sharp. Then the reactionary press in the West writes that Soviet authors are being "picked on." The authors themselves have a different attitude toward this criticism—they feel they are responsible to their public, to the people as a whole.

QUESTION: "Are there many railroads in the Soviet Union?" asks a railwayman from Seattle, Washington.

ANSWER: About 81,000 miles. In length of lines the USSR is right behind the United States. A total of 11,185 miles, more than in the U.S., have been electrified.

It is not only a matter of length though. Our network of railroads is built on a unified plan. We have no duplicating or competing lines, and that makes for greater efficiency. Volume of freight traffic per mile is much higher than in any other country in the world.

QUESTION: George Riffew of Research Drive, Box 574, Olympia, Washington, asks: "Do you have organizations to prevent corporations that generate electricity from fleecing the public?"

ANSWER: No, because there are no privately owned corporations in the USSR. Government agencies generate and distribute electricity. And the Soviet Government is interested, first and foremost, in the well-being of its citizens and proves it, in this case, by providing them with cheap electricity.

Incidentally, during the past few years it has become customary for people to read their own electric meters, make out their own bills according to a set rate, and pay them at the local bank.

QUESTION: "What is the feeling of the Soviet Union about adding chemicals known to be harmful to foods to make them appear fresh?" asks Joseph Spokciono of 152 Hiawatha Road, Oakland, New Jersey.

ANSWER: That is against the law in the Soviet Union. Doctors from the State Inspection Administration check all food production enterprises. Anyone caught adding harmful chemicals to a food product to improve its looks is prosecuted.

Various substances (vitamins, for example) are added to food, of course, but only to make the food more nutritious or to give it a higher caloric content. Take bread for instance. Lecithin is added to sweet rolls intended for people who suffer from atherosclerosis. This is done by adding soybean flour, which has a high lecithin content; that and other substances in soybean flour help reduce the cholesterol content in the body. The recipe for the rolls was worked out by the Bread Institute and the Academy of Medicine. Before the rolls were put on sale they were tested in clinics for two years.

QUESTION: A young mother, Jean Marlow of Boston, Massachusetts, wants to know how we explain to our children where babies come from.

ANSWER: The same way parents always have —by telling them "the stork brings them," "we found the baby in the cabbage patch," or "we bought him at a store." Sometimes a child will look at his newborn brother or sister and declare that "it wasn't worth buying." But like parents everywhere, ours continue to "buy" them. It goes without saying that later, at school, in eighth- and ninth-grade biology, the children are given a scientific explanation of the phenomenon of reproduction.

QUESTION: Mr. Ralph Greene, RFD No. 1, Somers, Connecticut, writes: "One of the tasks of a socialist society is to strengthen peace. Are there any laws in the USSR against conscientious objectors?"

ANSWER: We gather from this question that Mr. Greene sees a contradiction between the striving for peace and military service. There is no contradiction. Until an agreement on general and complete disarmament is signed and the threat of war no longer exists, the Soviet citizen must think of his country's defense. That is the sacred duty of every citizen of the USSR, says the Soviet Constitution. Accordingly, the Constitution requires general military service, with no exceptions. Under Article 80 of the Criminal Code of the Russian Federation, evasion of military service is punishable by a prison term of from one to three years.

QUESTION: "Do people in the USSR like to write letters?" is the unusual question asked by young reader Jim Cohen of New York.

ANSWER: People in the Soviet Union receive five billion letters a year. Roughly, if we subtract children too young to go in for letter-writing, it averages two letters a month per person. That is probably less than in your country. As for liking to write letters, that seems to depend on age. Young people prefer the telephone, telegraph, radio and videotelephone. Older people, in spite of the cosmic speed of our century, still enjoy keeping in touch with relatives and friends by mail.

QUESTION: "Do clergymen from other countries visit the USSR?" asks Carl Soule, 777 United Nations Place, New York 17, New York.

ANSWER: Fifty church delegations from different countries have visited the USSR in the past three years.

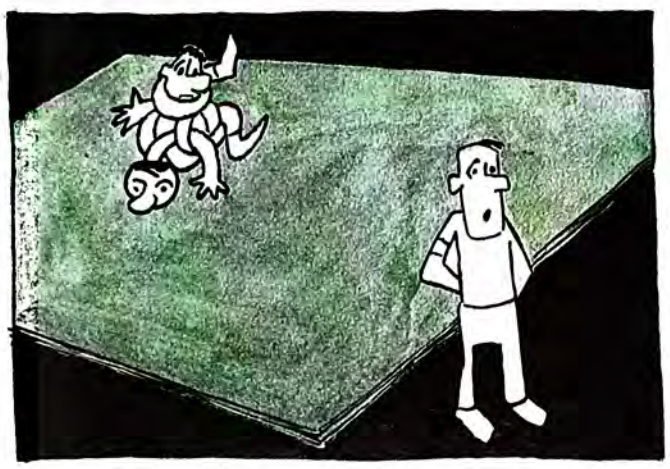
QUERIES FROM READERS

KROKODIL

IS OUR GUEST

Milk department of a self-service food store.

"Hey there, you forgot your baby!"



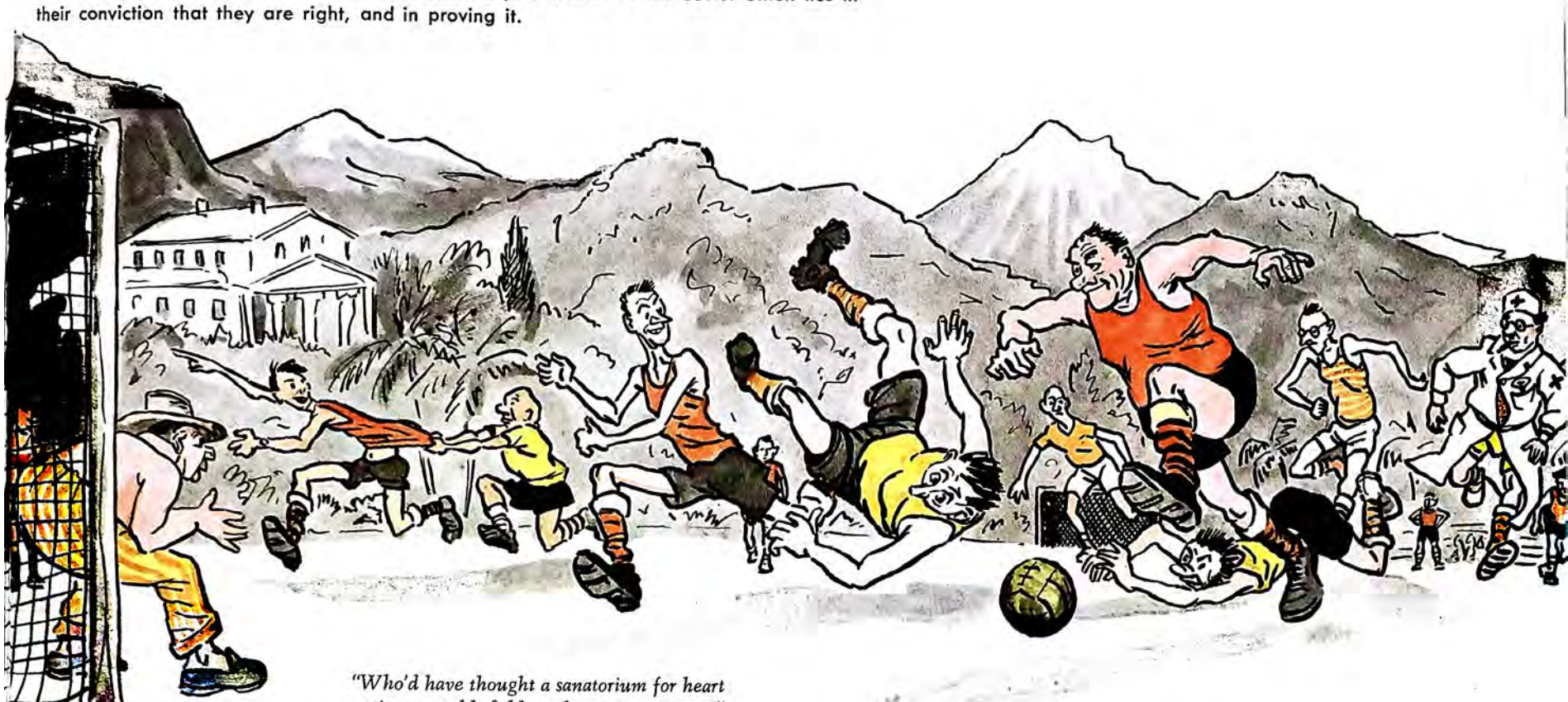
"Anyone in the audience good at untying knots?"

"I spoiled her. One pipe used to do the trick."

FIVE YEARS after the October Revolution, in 1922, No. 1 Vol. 1 of *Krokodil* (Crocodile), the very popular humor magazine appeared. Vladimir Mayakovsky, Alexei Tolstoy, the poet Demyan Bedny, Ilf and Petrov of *Little Golden Calf* fame, and other poets, satirists and cartoonists were contributors.

Now entering its forty-first year, *Krokodil* is as gay, lively and stinging as ever. No indifferent watching from the sidelines for *Krokodil;* it is right there shooting its barbed comments and cartoons at the passing parade, it's war cry: "No quarter to banality, bombast and bureaucracy!" *Krokodil* is omnipresent, its pitchfork prodding the bureaucrats, the botchers, the bunglers, the sluggards and the philistines out of their snug burrows. Very uncomfortable when that pitchfork holds you up for public inspection! The magazine's regular column "*Krokodil* Helped" reports on the consequences of some of its perennial exposés. There are many publications similar to *Krokodil,* like *Perets* (Pepper), the leading humor magazine of the Ukraine. Cities elsewhere in the country and some big factories and farms put out smaller *Krokodil*-type magazines.

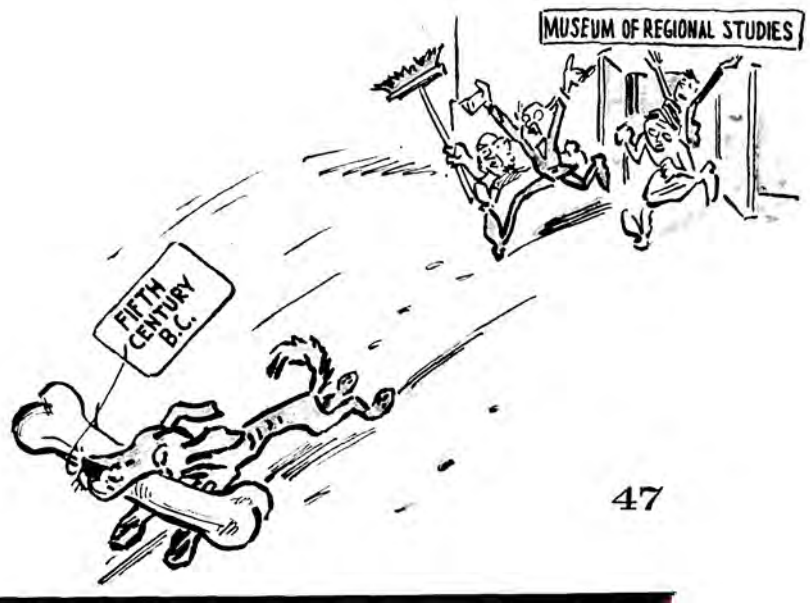
The strength of *Krokodil* and other such satirical publications of the Soviet Union lies in their conviction that they are right, and in proving it.



"Who'd have thought a sanatorium for heart patients could field such a strong team!"

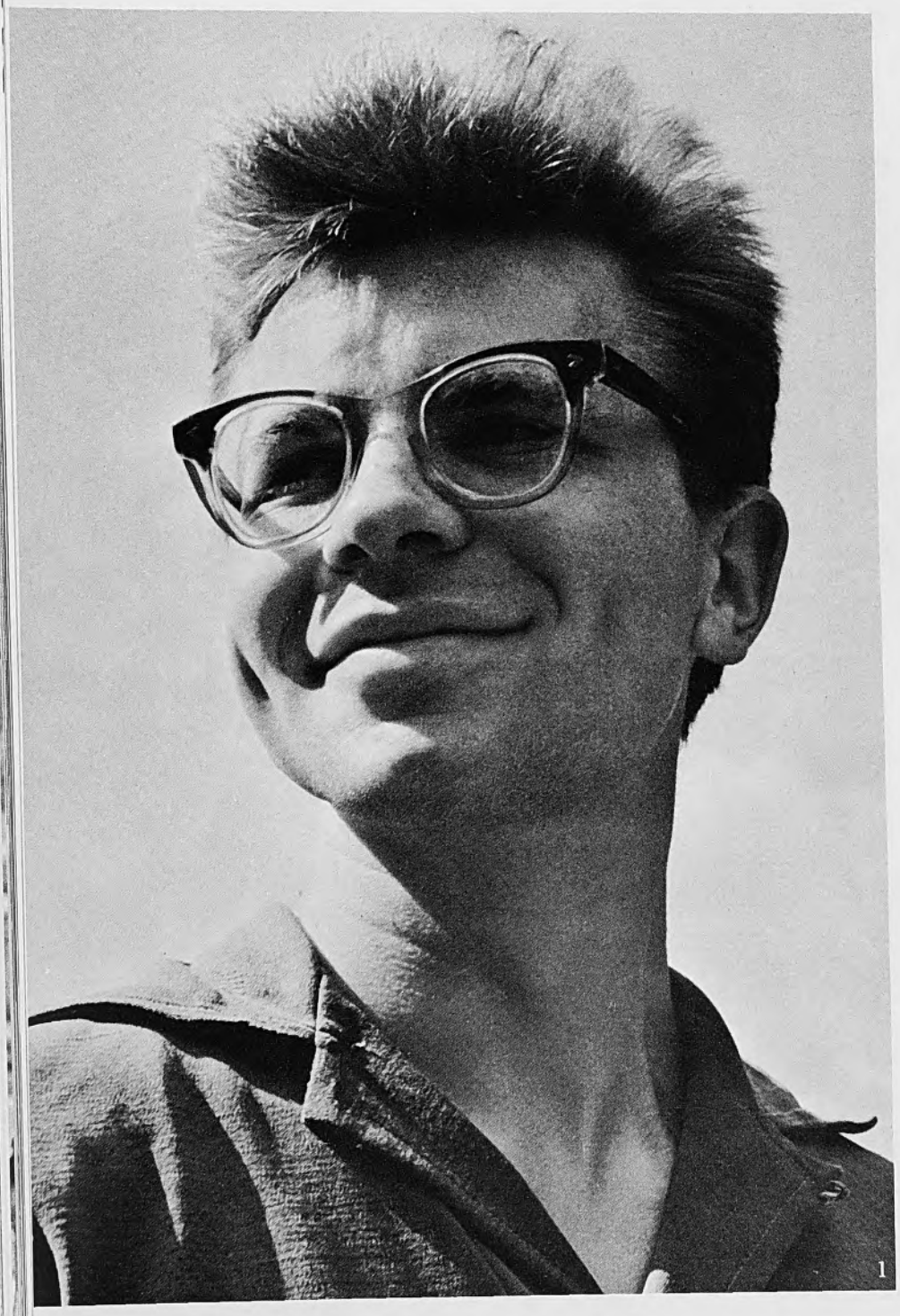
Sobriety test.

"And you wanted to buy an accordion."



STUDENT DORMITORY

BY ANDREI SAKHAROV
PHOTOS BY GEORGI PETRUSOV



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7

1.

Kostas Dubauskas is the son of a Lithuanian worker. He is majoring in electronics and wants to work as an engineer in his native Vilnius. Kostas likes basketball and blondes. His pet hate is the ring of the alarm clock that his roommate Lotar Keller (of the GDR) sets every night.

2.

Tanya Fedotova comes from Karaganda, in Kazakhstan. Her father is an engineer, and her chosen field is electronics. Tanya's day is crowded with lectures, sports, the theater and visits to museums and art shows. Her responsibility is to check on all student dormitory rooms.

3.

The Moscow Electrical Engineering Institute, their alma mater. During the first two years students must learn a trade. Tanya is a qualified second-category welder; Kostas is an assembler. Like Tanya, Kostas is a dorm supervisor and does not tolerate untidiness.

4.

The day at the dorm begins with setting-up exercises. Then the students breakfast, tidy up their rooms, and rush off to their lectures—only a short walk. The Student Council stewards take turns in enforcing dorm rules. The council also arranges cultural events.

5 and 6.

Lectures are over anywhere between one o'clock and three; Tuesday is the day off. For Tanya and Kostas it's "business first." So after dinner in the cafeteria and a short rest, he goes to work in the mechanical drawing room while Tanya goes to the lab, or it's vice versa.

A SONG you hear frequently in the dormitories of the Electrical Engineering Institute in Moscow begins, "This dorm is home to us. . . ." For the 6,000 students living in those buildings, the phrase is more than a sentiment. This is where they work, play, make friends, fall in and out of love, argue, debate and, in the moments left over, daydream about where life will take them.

Years after they have left these halls, the song brings memories. To one it recalls the night before a crucial exam—every exam was a matter of life and death—when he was feverishly trying to memorize the material, smoking cigarette after cigarette and now and then, with hands pressed to his forehead, telling himself, "Well, that's the end, I'll flunk it for sure." And how the next day he raced into his room after the exam, laughing with relief, and began to clean the desk of cigarette butts—just to have something to do—feeling great (until the next exams, of course).

To another the song brings a vision of that brightest and most beautiful girl he had met at a school dance and fallen "madly and eternally" in love with—for all of a week. Still another's thoughts drift back to the debating society, where he talked himself hoarse and felt like a Cicero.

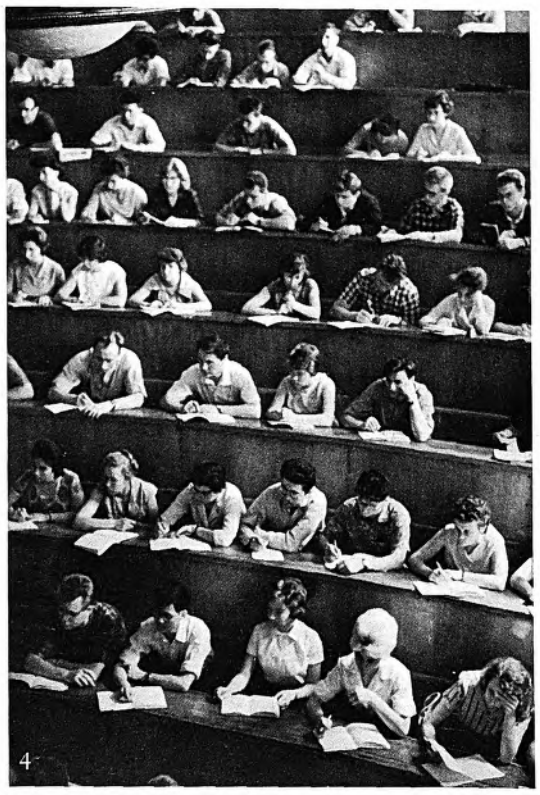
The state provides accommodations for all out-of-town students. For his room, linens and the rest the student pays one ruble 80 kopecks a month out of his monthly stipend of 42 rubles.

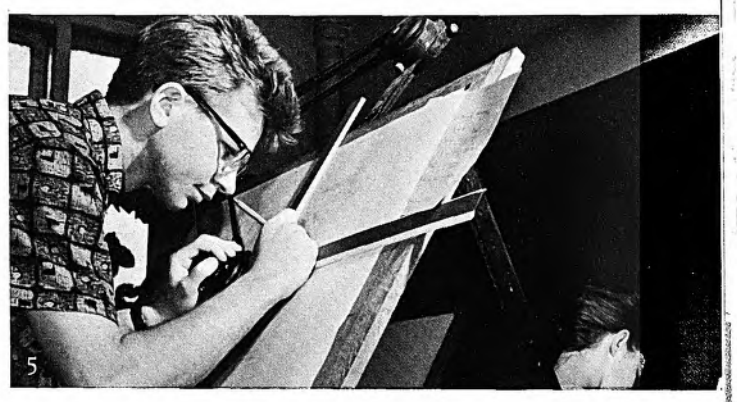
The dorm buildings have a lounge and recreation rooms. There is a conveniently located cafeteria where meals are served at very modest prices. The stadium is close by, so close that you can jump out of the ground-floor windows right onto the field. Nearby is the House of Culture with its many activities—amateur dramatics, chorus, hobby groups, dances, plays, film showings.

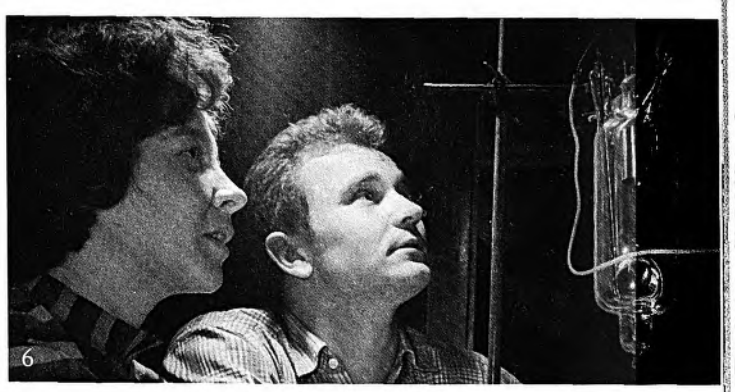
The institute has its own resort hotel at Firsanovka, near Moscow, where many students weekend. The cost of a two-day stay, including meals, is only two rubles at this anglers' paradise.

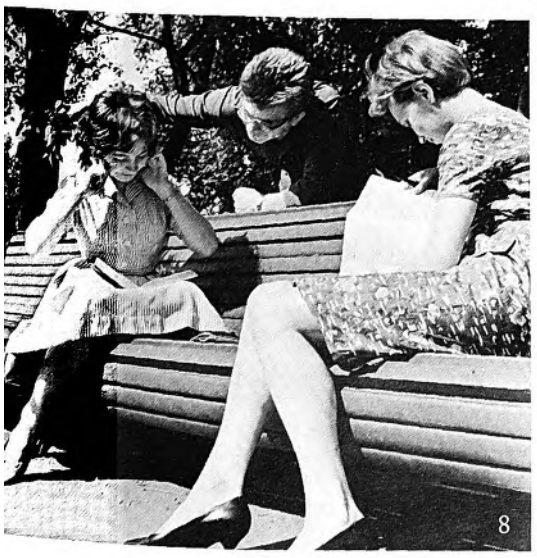
It is about all these things—including that important day every month when they collect their stipends and, luxuriating in their riches, spend half of them immediately and count the kopecks left until next pay day—that the gay song is about.

These third-year students, Kostas Dubauskas and Tanya Fedotova, are living the song right now, he in room 517, and she in room 421. ★









7.

Kostas and his roommates (Vyacheslav Tsygankov from Smolensk Region, Lotar we spoke about before) are preparing for an examination in machine design. The spring exams are the hardest, lasting almost one whole month. Only then are the rooms fully occupied.

8.

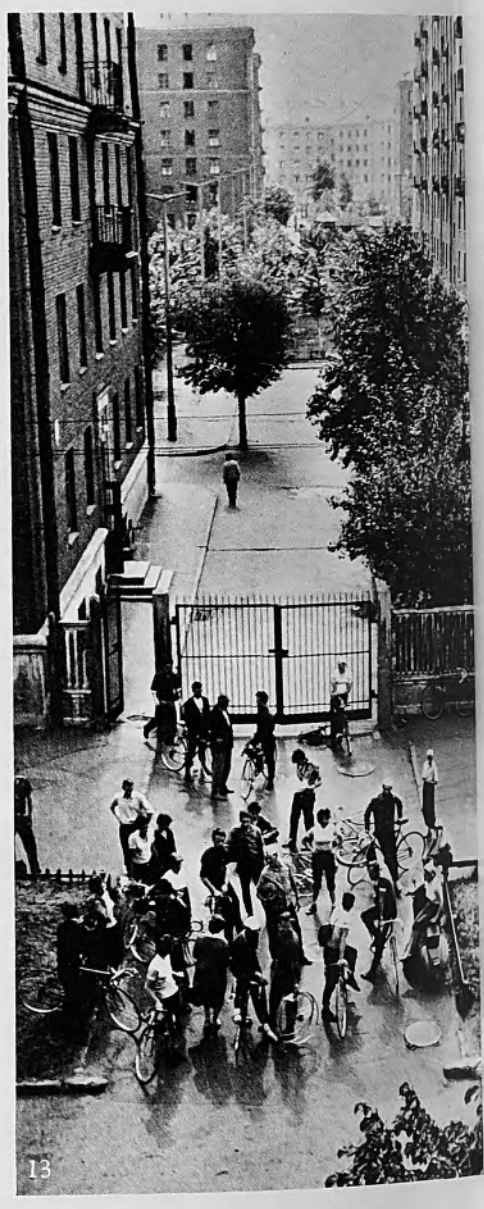
Tanya is a plugger. Kostas spends less time studying and is always ready with a joke or something to tease the girls. But when he's taking his exams, then it's a different story. He always does well, which is why Tanya says: "Sure he can afford to waste time, he's smart."

9.

The two of them like to go to the stadium. Tanya is a track athlete; basketball is Kostas' favorite sport. There are facilities for a host of other sports, including swimming and the ever popular table tennis (the latter are right in the dormitory buildings). Competitions are frequent.

10.

The Spring Festival, held the last week in April, is an occasion for relaxation and revelry. All classes are suspended, and a program of carnivals, international evenings and all sorts of contests—including sports—takes over. It is the variety club's job to supply the props for it all.



11.

The TV room. When a major soccer game is televised, when the attractive lady cosmonaut is scheduled to appear, it's the most popular place. When Valentina made her flight, everyone tried to crowd around the one TV set. Two more will be installed soon, hopefully.

12.

The recreation room is the students' favorite haunt. Here they sing, dance, play games and have get-togethers with writers, artists and actors. Naturally, our friends Kostas and Tanya spend much of their free time here. The decorations are drawings and topical posters.

13.

The start of a weekend. If she can take time from her studying, Tanya likes to go on small excursions. Bicycles and other equipment are provided without cost by the students' tourist center. Kostas spends many weekends at the institute's resort. Students also take tours.

THE SUN IN A DEWDROP

"I wanted to write of the fiery fever
That burned in my heart since the days of the war,
But seeing the sun in a dewdrop aquiver
I devoted my verse to the sun's glorious lore."

BY VALERIA MARICHEVA

GLANCING at the books on the counter of the kiosk, I was suddenly pulled up short. Among the more ponderous volumes edged in gold was a modest little book, as though clad in calico among well-dressed gentry. It was a collection of poems by Yuri Fatnev and bore the title *Beloved*. Doubting my own eyes, I turned the pages. The lines took hold of me at once. To think that I had told their author only six years ago that he would never be a poet!

That was when an elderly man came in to the editorial office of our youth newspaper and very carefully pulled a blue notebook out of his breast pocket.

"I'm Fatnev, Sergei Semyonovich," he said. "Won't you look through these verses written by my son." He put the notebook into my hands. "Please read them carefully," he added, half-pleading, half-demanding.

I leafed through the thick notebook dutifully and found that there were no verses in it worthy of the name. When I gave Sergei Semyonovich my candid opinion, he smiled helplessly, murmuring: "What shall I do? How am I going to tell Yuri?"

Of course I gave him the usual soothing assurances about young people finding their true vocations.

"But you don't understand!" Sergei Semyonovich broke in with a sad shake of his head, "my Yuri has nothing to choose from."

Yuri, he told me, had been an invalid from the age of five.

When Sergei Semyonovich Fatnev went off to the war, his wife Tatyana Gavrilovna was left with three children. Fleeing from the Germans on the scorched roads near the front, she was eventually cornered in the village of Dyatlovichi surrounded by thick forests and marshland.

The Germans reached the place on a gray autumn morning and broke into the hut where she had found shelter. "I haven't got anything! Nothing at all!" pleaded Tatyana Gavrilovna as she pressed her children to herself.

A shot rang out nearby.

"Partisan!" yelled one of the fascists.

"Partisan!" piped little Yuri happily.

The fascist let fly at the child with his iron-heeled boot and ran out of the hut.

Yuri thrashed about in a fever all night. In the woods where the Fatnevs and several other families took refuge from the Germans his wound began to fester. The war left him with a souvenir he would bear all his life, surgical tuberculosis. "My little boy just started the first grade!" mothers announce proudly. But Yuri never started a first grade. Instead, he began to do his lessons at home or from a tuberculosis sanatorium bed, his body encased in plaster.

When I learned this from the father, I felt I had to see Yuri.

He lived in the village bee garden high in the hills. His room was plain: a stove, a table, a bed, a stool—nothing more, except for a bookshelf on the wall.

A beekeeper does not have much to do in the early spring, so Yuri took care of the hives then while his father worked on the farm.

"Aren't you lonely up here?" I asked.

He shrugged his shoulders, as if to say that he was used to being lonely. Nobody to bother him, he could do and think what he liked. Yuri spoke of loneliness as though he knew it well.

He became livelier when I looked at his drawings.

"That's a sunrise," he explained. "I got up at daybreak and did that drawing from the porch. I've put a pine tree in the picture, the pine out there! It was set aglow when the sun caught it."

I liked the landscapes he had done in ink and pencil. When our talk turned to poetry, he asked bluntly:

"Will I be a poet or not?"

"Possibly," I answered evasively. "In time, maybe. If you study and work hard."

I was insincere, of course; I was not saying what I really thought. And Yuri did not seem to believe me either. He shut the blue notebook and put it in his pocket. He came out to the car to see me off, first throwing an old shabby jacket over his shoulders. "But I'm going to go on writing!" he suddenly declared with a note of defiance. "I'm going to be a poet no matter what you think."

When I went back to the office, I wrote an item about Yuri for our newspaper. It was a brief piece in the fourth column that ended by saying Yuri was going into the hospital again.

Many strangers took Yuri's misfortune to heart, wanted to help him, to encourage him. Letters began to reach him from all parts of Kazakhstan. The white walls of his hospital ward seemed to fall away, and life streamed in. "Yuri! Let's write to each other and be friends!" offered Vladimir Bondar, a young worker at the copper-smelting plant in Balkhash. He described his plant, wrote about his comrades, and even gave a detailed account of how the copper was made. "How I'd love to do something for you, something good!" wrote Yulya Ghulei from the Sagiz oil fields in Guryev Region.

Yuri never saw his new friends. But he wrote to them often, asked many questions, answered their queries, and got into arguments with them.

He could imagine Valya Sumina, a cheerful, energetic girl who began each letter with "I've got oodles of news!" She was preparing for the entrance examinations at the Semipalatinsk Teachers Institute. She would tell him about the funny things that happened to herself and her girl friends, and end with the sigh: "How will I ever pass all those exams!" That annoyed him. Why didn't she have more faith in herself? he wrote her in an angry letter.

There were no letters from Valya for a while. Yuri missed them badly. Finally came a letter again with "oodles of news!" She had passed her exams and had gone off to help in the harvesting at a collective farm with fellow students. She thanked him for the poems he had sent; she liked them very much.

One of his favorite correspondents was Lyuda Koporulina, a print-shop worker in remote Volodarovka in Kokchetavsk Region, because he could write endlessly about books to her. Her critical comments were sensitive and interesting.

Lyuda one day sent him a book by Jack London. The accompanying note read: "I subscribed to London especially for you. I'll send you all the books as I receive them. This is a present I want to make you. Don't say no!"

Meeting Yuri again when he came out of the hospital, I liked him better than at the apiary. He had grown up, was in better spirits, joking and smiling.

He proudly showed me all the letters he had received. I wanted some of them for my newspaper. He lent them to me after I'd sworn I wouldn't lose them.

Loneliness was no longer an intimate of his!

That was several years ago; and here I was, reading his published poems. I went on from page to page, beginning to understand what sort of person Yuri Fatnev was:

I wanted to write of the fiery fever
That burned in my heart since the days of the war,
But seeing the sun in a dewdrop aquiver
I devoted my verse to the sun's glorious lore.

He wrote of sun-splashed dewdrops, the fragrance of the grass in the spring, the endless colors of nature.

At night in the hills, staring up at the stars, he thought of the cosmonauts.

A star burned as always, high above.
How I wanted to catch but one twinkle thereof,
Though it was not up there that my forefathers found
Their very first flame which they nursed spellbound.

The stars had better be careful these days
For man by now has changed his ways
And may tomorrow pluck the stars
Returning to earth with their heavenly sparks.

I did not leave that kiosk until I had read the book through. I remembered the boy in the shabby jacket declaring, "But I'm going to be a poet no matter what you think!"

And a poet he has become! His creative work is being watched over by Samuil Yakovlevich Marshak.

Yuri has plans. He wants to write something big, something significant. And perhaps one will someday be reading a great poem of his about peace, a hymn to life and to the sun. ★

WORLD OF BADGES

BY TATYANA TOPILINA

IF YOU DROP IN of an evening at the Moscow home of Valerian Artsimovich, editor of *Soviet Literature* magazine, you are more likely to talk badges, or souvenir pins, than books. He is a confirmed and indefatigable collector. Draped across his bookshelves is a carpet, a magic carpet—because the pins that completely cover it carry you back to the beginning of our amazing century of speed, sputniks and social changes.

One pin showed a clumsy-looking contraption with wings. It was hard to believe that it had some relation to our supersonic aircraft of today. The inscription on this badge and on the one next to it read: "Aviation—Hope of Russia." Prophetic words.

A pin in another row pictured a woman in flowing garments who symbolized the Russian bourgeois revolution of February 1917. This one of subtle design might well have been worn by a *grande dame*, but it is unlikely she would have worn the badge alongside it. This one heralded another revolution, carried through by the Russian workers and peasants a few months later, in October 1917. The letters and numbers on this latter pin were blocked out plainly against a sharply silhouetted hammer and sickle.

Artsimovich's collection included an oval pin with a picture of Lenin, worn in its time by everyone—from red-kerchiefed YCL girls to elderly workers. The same picture appeared later, this time framed in deep mourning. The entire country was grief-stricken by the death of its great leader. Soon afterward, the frame of mourning was replaced by the inscription: "Lenin is dead, but his cause lives on."

There were pins picturing the first tractor built in the Soviet Union, communist subbotniks (work contributed to the country on days off or after hours), the Stakhanovite movement (started by Alexei Stakhanov, who set a record for mining coal), the Blue Blouses (workers' amateur groups), Young Pioneers and YCLers.

After a series of regimental insignia—grim witnesses of the last war—came postwar pins. The country rebuilt its devastated cities, once more had time and interest for soccer, fashions, travel. Many pins commemorated athletic meets, anniversaries of hero cities, international fairs (including the Czechoslovak, American, French, British and Italian), congresses of peace fighters and cancer experts, youth and student festivals. Years and events passed quickly.

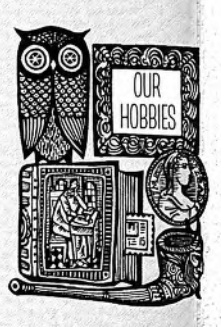
Valerian Artsimovich brought me up to the present by opening a box that held more than 100 pins from many countries honoring the conquerors of space. Among these souvenirs were pins dedicated to the Soviet Union's pioneer Sputnik; to space dogs Belka and Strelka; to *Vostok I, II, III, IV*; to Gagarin, Titov, Nikolayev and Popovich. These pins, reminders that man can break through all barriers, are worn around the globe.

The collector finished the display with the most recent pins issued for anniversaries, exhibitions, athletic matches, and by clubs, theaters and factories.

"How many do you have in all? How long have you been collecting?"

Valerian replied with a smile:

"I believe the total is over 11,000. I calculated that if I brought home a pin a day, it would take about 30 years to collect as many as I have now. But I've spent a good deal less time than that on my collection. I've been buying, exchanging and hunting for pins since 1950. Occasionally I get them as presents; all my friends and acquaintances know my hobby. If you make up your mind to also become a collector, come around again—it'll take a couple of days for me to really show you the whole collection."



1. In 1914 there were few who believed that aviation would bring glory to Russia. It was hard to find people willing to give money for airplane construction. Each contributor received a souvenir pin depicting a flying machine inscribed with the slogan "Air Fleet—Russia's Strength."

2. "Boyarynia with a Banner," symbol of the short-lived February Revolution.

3. On October 25, 1917 (November 7, New Style) the workers and peasants of Russia became the masters of their country. One of the first pins issued by the newly established Soviet Government depicted symbols of labor.

4. On the occasion of the twentieth anniversary of the 1905 Revolution its heroes were honored in the souvenir pins everyone wore at the meetings and rallies held to commemorate the earlier significant historical event.

5. The year was 1923. The First All-Russia Agricultural Exhibition was opened in Moscow on Lenin's initiative. It was attended by the country's foremost farmers, folk craftsmen, and popular folk singers and dancers.

6. In 1932 many young people went to the Far East to build a new city. On its fifth anniversary the residents of this city of youth awarded pins to the best builders inscribed with "To an Honored Builder of Komsomolsk."

7. The year 1942 brought war. Army units that distinguished themselves were referred to as the Guard. All its members wore the prized Guardsman's pin.

8. A Master of Sports in the USSR is entitled to wear a special pin signifying the award of that title. More than 30,000 Soviet sportsmen have one.

9. Veterans of the USSR's Antarctic expeditions under the International Geophysical Year program can be recognized by their commemorative pins.

10. At the Sixth World Festival of Youth and Students held in Moscow in 1957 prize winners in different events were awarded a pin symbolizing youth and friendship. It was in the shape of a flower with five petals.

11. The members of the Mendeleyev USSR Chemical Society have their own badge. There are branches of the society in the capitals of all the union republics as well as in all the major cities of the Soviet Union.

12. There are all kinds of amateur groups in the Soviet Union. This pin is worn by the members of the Sverdlovsk Steelworkers Philharmonic.

13. The USSR-USA track-and-field meets have become a tradition by now. The participants in the 1958 encounter, the first, received this badge.

14. In 1960 a pin was issued depicting the diesel ship *Baltika*, which brought Nikita Khrushchev to a UN General Assembly session in the USA.

15. A badge bearing the inscription "Department Store for Newlyweds" is worn by the helpful salesclerks of that very unusual establishment.

16. A commemorative pin appeared in 1960 to mark the twentieth anniversary of the establishment of the annual Estonian spring song festival.

17. In 1961 a badge was issued by the Romain Theater in Moscow. This popular institution is the only professional gypsy theater in the world.

18. A pin marking the two-hundredth anniversary of the establishment of Moscow University, the USSR's oldest and largest university, came out in 1955.

19. The Moscow reconstruction plan badge depicts the city's new layout.

20. A pin marking the twenty-fifth year of an amateur orchestra. It is the very popular one consisting of Moscow food workers and store clerks.

21. The 1961 USSR Art Show issued a pin for participants and viewers.

22. Soviet chess players are world famous. This badge is worn by those in the first category. That it is a large group is scarcely surprising.

23. The pin commemorates the Twenty-second Congress of the CPSU, which met in 1961 to adopt a new Party Program, that of building communism.

24. And this badge was issued to commemorate the Fourteenth Congress of the Komsomol (Young Communist League), which has 20 million members.

25. This one traveled to more than 100 countries. It was issued in honor of the World Congress for Disarmament and Peace held in Moscow in 1962.

26. The commemorative pin issued on the fiftieth anniversary of the newspaper *Pravda*, central organ of the Communist Party of the Soviet Union.

27. Soviet speleologists were particularly active in investigating the dozens of Crimean caves in 1962. This pin is a reminder of their finds.

28. In connection with the fortieth anniversary (in 1962) of the Young Pioneer organization each youngster at its largest summer camp, Artek, received this pin. Many foreign boys and girls also vacation there.

29. Every "Sports Angler" of the Moscow Fishing Society wears this pin.

30. The new Novosti Press Agency (APN) has this badge. The organization's function is to disseminate information about the USSR around the world.

31. Under the cultural exchange agreement Benny Goodman and his orchestra visited the USSR. Many who attended the concerts treasure this souvenir.

32. Another exchange is commemorated by this badge issued for the U.S. Technical Book Exhibition held in Moscow's Polytechnic Museum in 1963.

33. The pin of the still active Warsaw Cycling Society founded in 1910.

34. All participants in the 1936 Olympic Games, held in Berlin, got one.

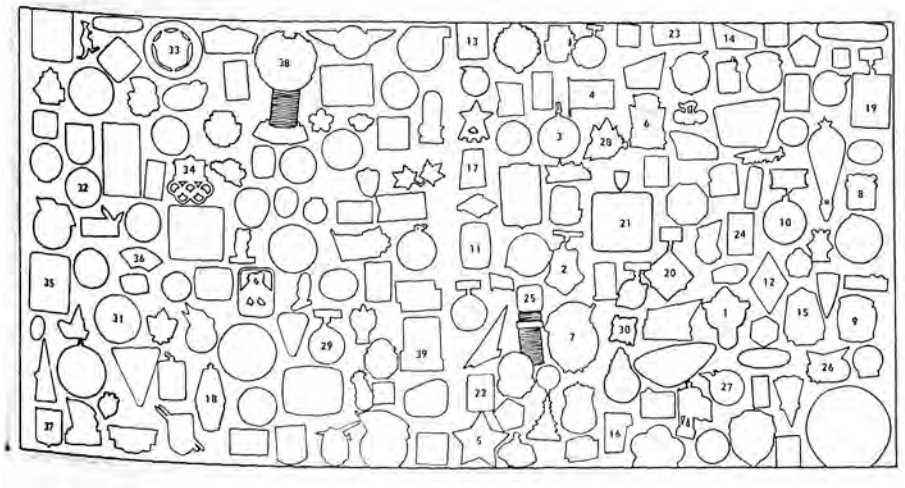
35. Another historic pin, commemorating the 1931 Workers' Athletic Competition in Berlin. Soviet sportsmen were among the many participants.

36. In Japan those who are advocates of peace can be found wearing this.

37. This badge commemorates the joyous time in 1944 when Paris was liberated from the Nazis. It was issued in the celebrating French capital.

38. This was the souvenir pin given in Czechoslovakia to participants in the Tenth Peace Cycle Tour. The course ran from Prague to Berlin to Warsaw.

39. Bulgarian tourists like to wear "Tourist of the People's Republic of Bulgaria" badges when visiting the Union of Soviet Socialist Republics.



ALEXANDER GREEN

BY KONSTANTIN PAUSTOVSKY

Alexander Green (Grinevsky) died in July 1932 in Old Crimea, a small town with ancient nut trees. His life was one long hardship. Everything conspired to make him a criminal or a spiteful philistine.

But the man was graced throughout his tormented life with a mighty imagination, untainted feelings and a diffident smile. His biography is a savage indictment of the prerevolutionary system of human relations. His surroundings were appalling, his existence unbearable. He survived, but he distrusted life to the end. In his writings he tried to divorce himself from reality, to believe that it was better to live in fleeting dreams than in the "rotten garbage" of every day.

His life was fenced in by the provincial town of Vyatka, a rundown trade school, cheap lodgings, backbreaking work, prison and unabating hunger. But somewhere beyond the line of the gray horizon shone countries built of light, sea breezes and green grass. There were people there—swarthy from the sun—gold-seekers, hunters, artists, cheerful tramps, big-hearted women as gay and gentle as children, and, above all, sailors. And Green wrote about them.

Then the Revolution came and shook loose much of what had oppressed him—the brute system of human relations, the exploitation, the need to take refuge in fantasy. Green welcomed its coming, but the beautiful horizons of the new future born of the Revolution were still vague, and Green was one of those who suffered from eternal impatience. If the socialist system had blossomed, as in a fairy tale, in a single night, Green would have been galvanized. But he could not nor did he want to wait. The waiting bored him, wore down the poetic mind-set he had built up. And so he never came back to the real world from the one of his fancy.

Dreams of "dazzling adventures" and joy fill his stories, and *Crimson Sails* first of all. Characteristically enough, this enchanting fairy tale was conceived and begun in Petrograd in 1920 when, convalescing from typhus fever, he trudged across the frozen city in search of temporary lodgings. *Crimson Sails* is a prose poem extolling the strength of the human spirit. It is imbued throughout with a wonderful optimism, youth and faith in man, who, in his search for happiness, is able to work miracles.

Green peopled his books with brave, simplehearted, proud, generous and friendly men and women. Beautifully whole people, they are surrounded by the fragrant fresh air of Green's nature—fascinating and completely real. The world his heroes live in will be unreal only to a man poor in imagination. He who has grown dizzy from the first breath of the salty warm air of the seaside will immediately credit the authenticity of Green's landscapes, the broad sweep of his lands of promise.

His stories arouse a longing for a life full of the hazardous and high adventure of the explorer, the seaman, the traveler to far places.

Green was not only a very gifted descriptive writer and past master of plot structure but a very fine psychologist. He wrote of self-sacrifice and courage, of the heroism that the most ordinary people are capable of. He wrote of the joy of work, of nature still unknown and mighty. And finally, there are few writers who have written about women so gently and with so much feeling. Green is the kind of writer our time needs.

The Crimson Secret

(Excerpt from the novel *Crimson Sails*)

DRAWING BY IGOR PCHELKO

In this chapter Alexander Green tells of the fulfillment of a wonder planted in the imagination of Assol, an unusual little girl, by a roaming poet and storyteller. Young Captain Gray turns that miracle into a reality. He fits his ship with the crimson sails Assol has been dreaming about and invites the street musicians aboard "for there are fairies hidden in their violins and cellos." With its wide sails of the color as pure "as the first breath of day, filled with happiness radiating like a smile unclouded and innocent of doubt, the tall ship dips majestically toward the little village where Assol lives beside the sea."

THE MORNING HOUR was still white with mist, and the steaming forest all around was alive with dancing apparitions. An unknown hunter left his campfire and strolled away down the river. Light quivered through the branches from the clearings, but the watchful hunter cared for none of these, keeping his eyes on the fresh tracks of a bear heading for the mountains.

A clarinet spoke suddenly beyond the forest, its solitary note fluttering in pursuit of itself round and round the tree trunks. It was one of the musicians aboard the ship who played that note and then went on to play a melody that was sorrowful, plaintive in its repetitions. His clarinet sang for a while in a voice aching to hide its sorrow. It finally prevailed, rising on a smiling progression, and then broke off. A remote echo repeated the melody all over again.

Carefully noting the way a twig had been broken in the underbrush, the hunter moved on toward the water's edge. The mists had not yet parted and almost hid the outlines of a great ship turning slowly toward the mouth of the river. Her reefed sails unfurled swiftly, spreading their great awkward folds against the tall masts; there were shouts and running steps. The wind from the shore ventured a tentative gust, lazily stirring the yards of fabric; finally came the right effect with the first warmth of the sun. The wind stiffened, scattering the mist, and the great sails broke into a crimson bouquet straining from the tracery of yardarms. Rosy shadows slid over the white masts and riggings. Everything was white except the broad-bellied sails flushing in the color of deepest joy.

The hunter rubbed his eyes. Was this another apparition? What he saw was too incredible! The ship vanished around a bend, but he still stood and stared. Finally, with a shrug he slouched on to look for his bear.

While the *Secret* was still in the river, Gray stood at the helm himself.

This was no place to trust anyone, he was afraid of the shallows. Panten sat alongside, resplendent in new boots with elegant cloth tops. He wore a handsome new cap too, and was shaven, trim and slightly overawed by his own finery. He was still unable to see what all this red splendor had to do with Gray's direct aims.

"Now that our sails are really red and the wind is good, and I'm like a hungry elephant at the sight of a crisp brown bun, I'll try to tell you what I'm after, as I promised in Lissa.

"It's not that I think you're a fool or a stubborn ass! No, you're a good seaman, and that's saying a lot. But the trouble with you, as with most people, is that you can hear the simple truths only through the heavy glass of life. They keep shouting for all to hear but can't reach your ears! What I'm doing is making the impossible come to be, the things one has always thought can be only dreamed about as beautiful, everlasting and unattainable but which are really attainable and as possible as a walk in the country. Soon you'll see a girl who cannot and must not marry in any other way but the one I'm spinning out right here, before your eyes."

Having told the seaman all we had already learned, he concluded:

"So you see how united are our destinies, our wills and natures! I'm going to meet the girl who is waiting for me because she can wait for no other. And there's no one I'd want but her! Perhaps it's because she's made me understand a simple truth, namely, that a man's got to work miracles with his own hands. When a person wants only a coin, it's easy to give it to him; and when a soul has hidden the seed of a flaming flower, a wonder, you've got to make that wonder come true if you can.

"Do this, and that person will have a new soul—and so will you! When the turnkey frees his prisoner, when the millionaire presents a villa to the writer, his safe to a singer, or when a jockey reins his horse a little to give another less fortunate animal a chance, they'll all understand how pleasant that can be, how really wonderful! But there are smaller wonders, too: the smile, good spirits, forgiveness, and the proper word spoken at the proper time. Grasp these things well, and you'll command everything.

"As for me, for our beginning—Assol's and mine—it'll always radiate in the rosy reflection of our sails, the sails that sprang from a heart that knew what love really was. Do you understand?"

"Aye, aye, Captain," grunted Panten, wiping his moustache with a clean folded handkerchief. "I've got it all, I think. And it's done things to me, it has! I'd better go below now and talk to Nix. He must be feeling bad because he lost the head pail overboard yesterday and I bawled the devil out of him. I'll give him some tobacco. He lost his at cards."

Gray looked about and up. The red sails were spread silently above him, the sun tracing their seams in purple. The *Secret* was well out now, pulling away from the shore. No doubts crept in to dampen his ringing soul—neither the toll of anxiety nor the whisper of petty worries. As serenely as the sails above him, he strained ahead toward his delightful goal, filled with thoughts lighter and swifter than any words.

There was nothing on the horizon for a while, but land was sighted again by noon. Reaching for his spyglass, Gray turned it upon Caperna. Were it not for the rooftops, he would have found the window where Assol sat with a book. She was trying to read, but there was a little green beetle on the page—walking on a word or two, rising on its hind legs, then walking on to another word, quite at home, as if it belonged there and nowhere else. She had blown him off to the window sill twice already, but each time he came back, confidently, freely, as if he had something very special to tell her.

This time he nearly reached Assol's thumb in the upper corner of the page, and then paused on the word "look." He hesitated there as if afraid of another squall. And he narrowly missed it, too, for Assol cried out: "That beetle is back again! What a little fool!" She was about to blow him into the grass this time when her eyes swept over the roofs, down the street, out to the blue sea and a soaring white brig fully rigged in red.

Assol fell back in her chair, trembling, suddenly too weak to stir. Her eyes were brimming and she could hardly see. And her heart! How madly it was beating!

The *Secret* meanwhile had rounded the small cape and was approaching the shore with its portside. Quiet music flowed into the blue day from its top deck glowing in red beneath the half-acre of crimson silk. The music quavered not altogether harmoniously, but everyone knew the words: "Fill the glasses, friends, and let us drink to love!" The very simplicity of the tune was as a spark to the powder barrel of exultation, irrepressible happiness.

Assol never knew how she flew from her home to the sea, borne on the winds of this incredible event. She paused at the first corner because her legs were trembling and her strength was almost gone. She could hardly breathe and clung to consciousness only by a hair for an instant. Terrified that she might lose her self-control, she stamped her slender foot and made her spinning head stand still. She ran on, almost sobbing when a fence or a house concealed the white ship for a second. How afraid she was each time it happened that the vision would be gone. She ran even faster, therefore, to pass the obstructions, to see the ship again and sigh with delicious relief.

Meanwhile in Caperna there was such an uproar, such mad excitement and utter confusion that no earthquake could have wrought a more shattering effect. Never had so big a ship approached its shores! And most amazing, her sails were of the very color that had come to be an ugly byword here. But there they were, clearly and implacably burning to refute all the laws of a humdrum life, all common sense! Men, women, and children swarmed to the shore to see who it was. People scurried everywhere, from courtyard to backyard, bumping into one another, falling and howling. Soon there was a great crowd by the waterside, and Assol plunged into the thick of it with all her lithe strength.

Before she had appeared, her name had skipped from lip to lip; some had snarled over it, and others had stammered it out in fright. The men did most of the haranguing; the women were crushed, their hissing remarks frozen on their tongues. But there were some whose voices rattled loudly, for the poison had mounted to their heads. Assol's sudden appearance struck them dumb, and they shrank fearfully from her. She remained, surrounded by emptiness on the hot sand, disheveled, humbled, happy, her face as crimson as that wonder of hers out on the water. Helplessly she raised her arms to the tall ship.

A boat pulled away from it, full of tanned seamen. And the man standing among them looked very familiar. She had seen him before, she was sure. Perhaps when she was a little girl? He was looking at her with a smile that both warmed and urged her forward. But she was assailed now by a thousand funny little fears; she was afraid of mistakes, of misunderstandings, of secret vicious obstructions. She ran blindly into the water up to her waist, into the warm rippling waves, crying: "Here I am! I'm here. I'm Assol!"

Tsimmer waved his bow now and the same melody as before lashed the nerves of the crowd. It was played harmoniously this time, as sweet and exulting as a church organ. Her mixed emotions, the rocking clouds and waves, the gleam of the sea's surface, all these confused Assol until she did not really know what was moving, she, the ship, or the boat? It was all tossing, all rising and falling.

But an oar splashed beside her just then, and she raised her head. Gray stooped and caught her by the hips. Assol half closed her eyes. But she opened them quickly, returned his shining smile and said:

"You're just as I thought."

"You, too, dear child!" answered Gray, lifting his wet but precious burden from the sea. "I've come at last. Did you know me at once?"

She nodded, clinging to his belt, and closed her eyes again. Happiness was purring inside her as in a fuzzy kitten. When she dared to open her eyes again to see the rocking boat, the glittering waves and the rapidly approaching side of the *Secret*, it all seemed a dream in which light and water danced fitfully about like the sun's rays on a wall. Aided by Gray's strong hands, she mounted the gangway. The deck spread before her ornate in rugs colored by the sun shining through the crimson sails. It was like a garden in heaven, Assol thought. Soon she found herself in a cabin, a room lovelier than any she could have dreamed of.

From the deck above came a fresh gust of music, huge music shaking the air, lifting the heart. And Assol closed her eyes again, afraid it would all vanish if she looked too much. Gray took her hands in his, and she, knowing now where there was safety, pressed her face wet with tears to the chest of her friend who had appeared so magically. Tenderly, though laughing, for he was overcome by this awesome moment, Gray lifted her chin and looked into the face he had dreamed of so long. She opened her eyes. They shone with love and all that was best in humankind.

"Will you take dear Longren along so he can be with us always?" she asked.

"Yes!" and he kissed her so hard that she had to laugh at that ironlike "Yes!"

Now we had better step aside for a while, for we know that these two should be alone. There are many words in this world in many languages and dialects, but all of them would hardly suffice to tell everything that this pair had to tell each other.

Meanwhile the whole crew stood waiting around a little wormy barrel with its lid wrenched off to reveal the dark aged wine inside. Gray mounted the poop, signaled to the orchestra, removed his cap, and was the first to raise his glass, the first to join in a song about golden wine and love.

Downing his drink, he threw the glass aside, saying: "Drink on, all of you! The man who doesn't is my enemy!"

He had no need to repeat those words.

When day broke again, the good ship *Secret* was far from Caperna. Some of the crew still lay where they had fallen, overcome by Gray's wine. Only the helmsman was on his feet, more or less. The man on watch felt it was safer to sit down. Back at the stern sat a dreaming Tsimmer, his chin on the head of his cello. He was not feeling too well, either. With his bow, however, he made the strings talk in a stirring, unearthly language while he mused of happiness. ★

SATIRE IS MY PROFESSION

BY ARKADI RAIKIN

PEOPLE'S ARTIST OF THE RUSSIAN FEDERATION

"I expect presents on my birthday, May Day and Women's Day. As for the Feast of the Intercession of the Holy Virgin, I'll leave it to you."

I LEFT the drama theater for the variety theater 24 years ago because I wanted to work in a field that could stage the topics of our day more directly. I founded a small theater for satirical revues known as the Leningrad Theater of Miniatures in which I am both producer and actor.

The shows we do are made up of separate satirical sketches, often united by a general idea stated or implied in the titles we give them.

Acting in our theater takes great skill. Our actors must be able to sketch a character vividly in a very brief scene. When the audience reacts immediately, we know our satire has hit the mark. That is our greatest reward.

One of our sketches, for example, is called "The Domestic Worker." Soviet families where husband and wife both work most often need somebody to do the housework or baby sitting. But despite the great demand, domestic work is a dying vocation in our country. The few people who are willing to take on the job know how badly they are needed and sometimes become virtual tyrants. However, it is not the domestic worker we ridicule but those who let themselves and their children be bullied and intimidated by such people. ★

"You the people who need a nursemaid? My name is Agafya Tikhonova. What's yours? Nikolai Ivanovich? Let's not be formal, Nick."

"Apartment's not bad. This old TV with a small screen yours? But you can't expect me to strain my eyes. You'll just have to get a bigger one."

"This double bed will be fine for me. You say that's where you and your wife sleep? I hope you don't think I'm going to sleep on a cot!"

"Let's get things straight before I start. No cooking, washing, shopping or cleaning. I like tea with cream and I'm used to silk uniforms."

"Terms acceptable? Fine, I'll stay—for a while anyway, till I see how you work out. Now, take the baby for a walk so I can phone my friends."

"Nurka? I got a job. At a factory? Are you mad? You have to work there. I'm a nursemaid. Come on over and have a cup of tea with me."

SWIMMING IN THE USSR

One of our readers, Les Finnegan of Washington, D.C., has asked about swimming in the Soviet Union. How this sport is promoted in the USSR is described below by Master of Sports Victor Pireiko.

SWIMMING is widespread in the Soviet Union, and interest in this sport continues to grow all the time. Many indoor and outdoor pools, totaling about 1,000 in number, have been or are being built. Swimming schools are mushrooming all over the country.

Whereas previously a number of gifted mermaids and their male counterparts had been taking all the national honors and prizes for several years running, each new season now produces new champions and new records.

And speaking of records, a bumper crop was harvested in the past year, highlighted in the USSR Peoples' Games. For instance, Ivan Karetnikov did 2 minutes 31.9 seconds in the 200-meter breast stroke, Galina Prozumenschikova clocked 2:51.5 in the same event for women; Semyon Belits-Geiman was timed 4:26.5 in the 400-meter free style, and Pyotr Pikalov registered 17:44.8 in the 1,500-meter free style. Dozens of other records were set.

The number of swimming meets has increased noticeably in recent years: the national individual and team championships; the traditional contests of the nation's leading water athletes at the opening of the season, the most popular among these being the Soviet youth paper *Komsomolskaya Pravda's* prize races; the championships in the different republics; junior title meets; contests sponsored by sports clubs, etc.

Take the races held by the Burevestnik (Stormy Petrel) Sports Club for the teachers and undergraduates of institutes and other schools of higher learning. Its schedule starts off with individual races, open to all freshmen, at the beginning of the school year. Novices showing promise are later included in the faculty and institute teams. Incidentally, faculty and institute championships are conducted regularly and make up the greater part of the Burevestnik's competition schedule. The winners are entered in city and republican student championships and ultimately in the USSR Student Games.

Like all the other 35 large sports clubs in the USSR, Burevestnik is entitled to enter its best challengers in the national individual and team championships and other major competitions.

Returning to the progress made in swimming, our top-notch athletes, both men and women, have achieved quite impressive results in Europe, and continue to strengthen their international ties from year to year. Competitions with the swimming champions of Britain, Hungary and the German Democratic Republic have become traditional. The Soviet team took on some Australian swimmers last spring and plan to compete this year in Yugoslavia, the Federal Republic of Germany and Japan.

The main purpose of the meet with the Australians and the coming foreign tours is to check our chances in the Tokyo Olympic Games. The team has been selected, in the main, its members chosen over a period of two seasons. Special Olympic standards were set and were published in the press: 100-meter free style—56.5 seconds for men, 1:4.5 for women; 200-meter breast stroke—2:36 for men, 2:53 for women.

Whoever met any one of these standards in any competition became an Olympic team possibility.

Each of these keeps a daily diary of his practice and competition results and general state of health. All this is systematized, supplemented, and turned over at the end of the year to the staff of the Central Physical Culture Research Institute for analysis and elaboration of the most expedient and effective system of training.

Leonid Meshkov, former world-record holder and coach, had this to say about the principles of such a system:

"Our practice schedule was evolved over a period of years. It consists of two swimming periods, spring and autumn, in accordance with the climatic conditions of the country. The swimmers approach their best form toward the end of each cycle, though best records are made in the fall.

"During the winter months' practice indoors, much attention is paid to general physical conditioning as well as swimming. In addition to 'dry swimming' in special gyms, our pupils do gymnastics, ski and skate.

"The swimmers build up stamina or strength, depending on their special-

A women's swimming event has just started in the USSR Peoples' Games.

ties. A sizable part of the winter timetable is set aside for imitation exercises, in which trainees blend their favorite style with other styles. The workout usually ends with a short swimming period.

"Practice grows more intensive in the early spring, and a swimmer can only show real speed by the beginning of summer.

"Next comes the summer and fall practice and competition cycle, leading the swimmer up to his highest achievements. The latter results are not only accomplished through technique and endurance; a good swimmer has in reserve several tactical schemes perfected beforehand. In my swimming days I frequently used psychology on my rivals. I continuously kept changing my tactics. But this was in my time, whereas present-day tactics can best be explained by our leading swimmers."

Ivan Karetnikov, holder of the European 200-meter breast stroke record, says:

"I keep to an uneven pace in a race. I start out at top; speed for the first 20-25 meters to put the greatest possible distance between the nearest challengers and myself. After that I swing into my usual rhythm, and after the last turn I give my finishing spurt."

Victor Konoplyov, victor in the Third USSR Peoples' Games, comments:

"I base my tactics on those of my adversaries. That's why I always find it easy swimming against familiar rivals."

Science is playing an ever bigger role in the training of Soviet swimmers. Researchers are helping the athletes improve their practice methods, determine the most effective arm and leg movements, draw up a proper training schedule, diet, etc.

The scientists are now paying special attention to research in the field of the hydrodynamics of swimming.

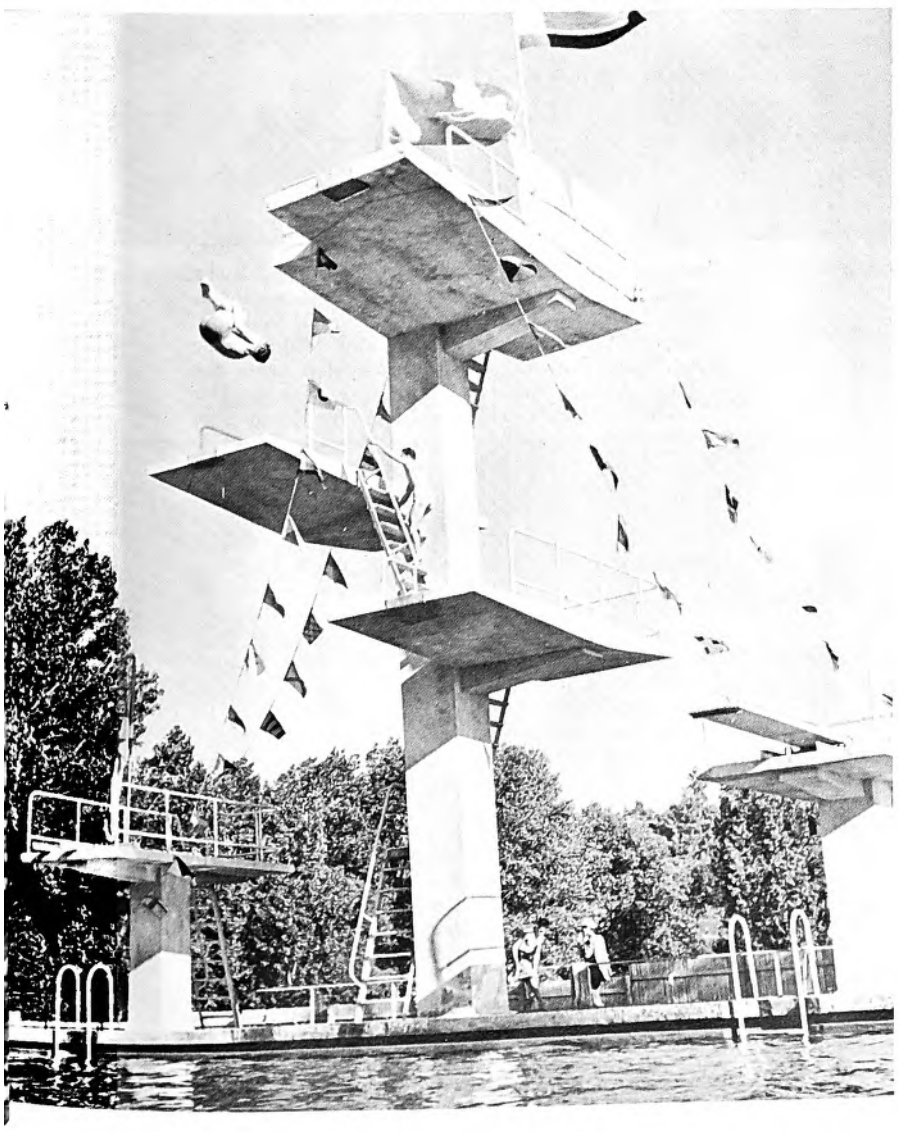
"Knowledge of the general laws of hydrodynamics is necessary for every swimmer," says Honored Master of Sports Nikolai Butovich, Doctor of Science (Education). "But this is only the first step in acquiring top skill. We are conducting special research to help the athletes. In particular, we are making a cyclographic analysis of swimming styles. Part of this research has already appeared in instructional aids for students at institutes of physical education."

Sergei Gardon, Master of Science (Education), used a gravitational method in hydrodynamic experiments. His research helped remedy weaknesses in this field.

Soviet experts are naturally well informed about the work of their noted foreign coaching colleagues, including Robert J. H. Kiphuth, Sr., of the United States. This is not surprising, since the Americans have achieved amazing results in swimming contests in recent times.

The accomplishments of Soviet swimmers are not as yet too impressive, but the sport is making increasing progress in our country. It is quite possible that both the challengers of the United States and the Soviet Union will be lined up next to one another in the Tokyo Olympic swimming finals. ★

The new Spartak swimming pool in Vilnius, capital of the Lithuanian SSR.



DEGREE OF ANXIETY

BY IRANA KAZAKOVA

IT is November outside, and raining. The year is drawing to a close. I have answered most of your questions in my letters and articles. There is only the last—the question regarding the degree of anxiety felt by Soviet women regarding the world situation. This deserves our attention.

The word "degree" belongs to mathematics, but the thing that concerns us here is something more akin to psychology.

I stood in line, waiting to buy an evening newspaper. There was a woman ahead of me and another behind me. The one in front got her newspaper, opened it, and began to read it at once. No one paid the least attention to her, it was nothing unusual.

Our women have often surprised foreigners by their awareness of all that is going on in the world. I will not go so far as to say that each and any of us could be useful in a session of the Security Council, but it is true that most of our women keep abreast of world events. I recall how embarrassed I was one day when I was unable to tell our woman elevator operator just where Leichtenstein is.

Ask any woman—a factory worker, a kindergarten nurse, a salesgirl—if she has read some specific event in the newspaper. If she has not, you'll find her mighty embarrassed about having to admit it. To know nothing about an event is not a terrible thing exactly. It's simply regarded as a slight loss in prestige. A critical remark about her appearance, moreover, will be less embarrassing to our average woman than one about her being behind in her reading.

The reason for this, I think, is that our equality with the men is not only a right but an obligation. "*Noblesse oblige*," say the French. Speaking of our women, I would say "Equality obliges." When a woman is a poor housekeeper, no one is likely to defend her by saying that hers is a frail sex in general. Nor is any similar defense allowed our women engineers, scientists, students or just plain workers.

If a woman is an engineer, she will quite naturally leaf through the technical magazines in her leisure time. The woman scientist subscribes to foreign publications. The girl student of a foreign language is likely to spend as much time in studying as in setting her hair. The working woman constantly thinks of improving her education because her rating depends on it, as do her earnings and her position in the group.

Another recent event may help explain the Soviet woman's interest in world events—when Valentina Tereshkova became the first space woman. At the time Moscow was welcoming her and her space partner, I couldn't take my eyes off the red carpet, spread before them to their plane, as it was trod by the light foot of a woman. Tereshkova's flight was no gesture to us but an argument, another proof of our potentialities.

I think our women's natural interest in all aspects of life and their certainty that they can do a great deal in that life will probably convey an idea of the degree of their anxiety over the world situation.

That degree is growing, moreover. I recall how one of our neighbors wrapped her daily bread ration in a cloth during the war and took it to the Defense Fund headquarters. She had no savings. Those who had some offered them to the state. Many of the tanks and planes that went into battle those days bore inscriptions on their side that they were built with funds contributed by the population.

I recall how worried my grandmother was after the war. Though paralyzed and bedridden, she was afraid that the people collecting signatures for the Appeal of the World Peace Council would pass her up and forget all about her. She had lost her son at the front. Those who lost near and dear ones in the war will understand why our women regard the Appeal for the Defense of Peace as a sacred pledge, never to be broken.

I also remember how my mother worked long hours, performing various tasks for the Soviet Women's Committee. I used to quarrel with her about it, but now I understand. The efforts of millions of our women are needed to maintain wide international ties.

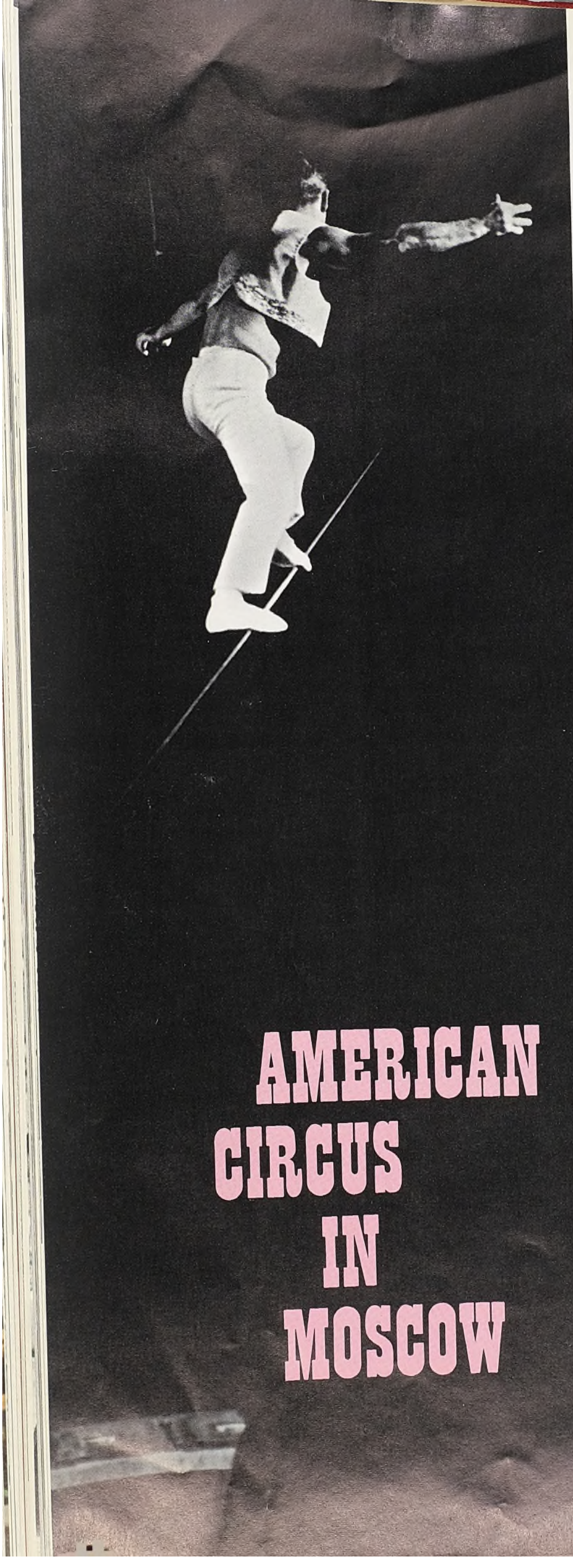
This year I attended the World Congress of Women in Moscow. I saw Nina Khrushcheva there, talking to the delegates surrounding her during an intermission. At the other end of the hall women were singing. Their dress was that of Ukrainian peasants. There was nothing extraordinary about it all, nothing strange in the fact that the delegates of the same group included peasants and the wife of the Soviet Chairman, herself an outstanding public figure.

The congress was attended by nearly 1,500 women from 113 countries who found they all had common views on disarmament, national independence, the rights of women and the rearing of children.

One of the delegates asked skeptically whether the congress intended to reach agreement with Mrs. Kennedy too, to which Dolores Ibarruri replied from the platform: "Yes, that's just what we intend to do. Mrs. Kennedy is a mother and ought to understand us." Everybody applauded. For the Soviet women the visions of the last war keep returning to them all too often. They remember their own experiences. The world democratic women's movement has never known an event in which the Soviet women did not take part.

"Your women," said a French tourist to me, "lack elegance. But do you know what surprised me about them? I saw them reading newspapers in the streets on the day the nuclear test ban treaty was signed in Moscow."

If not for that Frenchman, I would perhaps never have noticed the woman reading the newspaper beside the newsstand. ★



AMERICAN CIRCUS IN MOSCOW

Galla Schon did this completely incredible one-finger balance.

BY STANISLAV PSHENNIKOV

BRIGHT posters all over Moscow last hot sunny July advertised an American circus playing the Soviet Union for the first time.

Top Soviet circus artists applauded the visiting company in the pages of the most widely circulated newspapers.

"The whole show strikes and maintains a high level," wrote People's Artist of the Russian Federation Emil Kio. Emil Kio is as popular in the Soviet Union as Oleg Popov. "The performance of the American circus artists is very professional and highly entertaining," echoed *Sovetskaya Kultura (Soviet Culture)*.

"You haven't seen the American circus?" all my friends exclaimed. "Don't miss it."

Tickets, as I expected, were at a premium. I managed to get one with my press card, but even then it was not without the kind assistance of Harry Hirsch, the managing director.

"Our actors," he told me, "are from different parts of the United States so you can call us a typical American company. We are very happy here and very well taken care of. We've had no trouble whatsoever. People are very friendly. My work couldn't be made any easier. All the people who are helping us know their business. They are all efficient and very helpful. We are grateful to Soviet management."

I watched the fine program of 29 nicely arranged numbers, performed with a confident ease to a jam-packed house. People were sitting on extra chairs and crowding the aisles. All the acts, except, perhaps, for some of the clowns who did not somehow fetch much laughter, were punctuated by long and enthusiastic applause. But there were three that stole the show—Gerard Soule on the high trapeze, juggler Cesar with his terrific tricks on the loose high wire, and ropewalker Harold Alzana. They do really dangerous stunts without any sort of safety precautions.

"In America," Gerard Soule said, "danger is part of the act. I was told, and I feel it myself, that Soviet audiences are not used to it. They are very nice and very quiet when I'm up. The lights are excellent. Not too many circuses in the world have such good lighting. I like your one ring system, it makes it easier for people to concentrate. In Moscow the audience is right there and you feel it. I will be happy if we have the same thing in Leningrad and Kiev, and then I hope to meet Oleg Popov."

I assured Gerard that he would find Leningrad and Kiev much the same. Later I heard that Oleg Popov had visited the show and had had a cordial shop talk with many of the actors—with Gerard too, I hope.

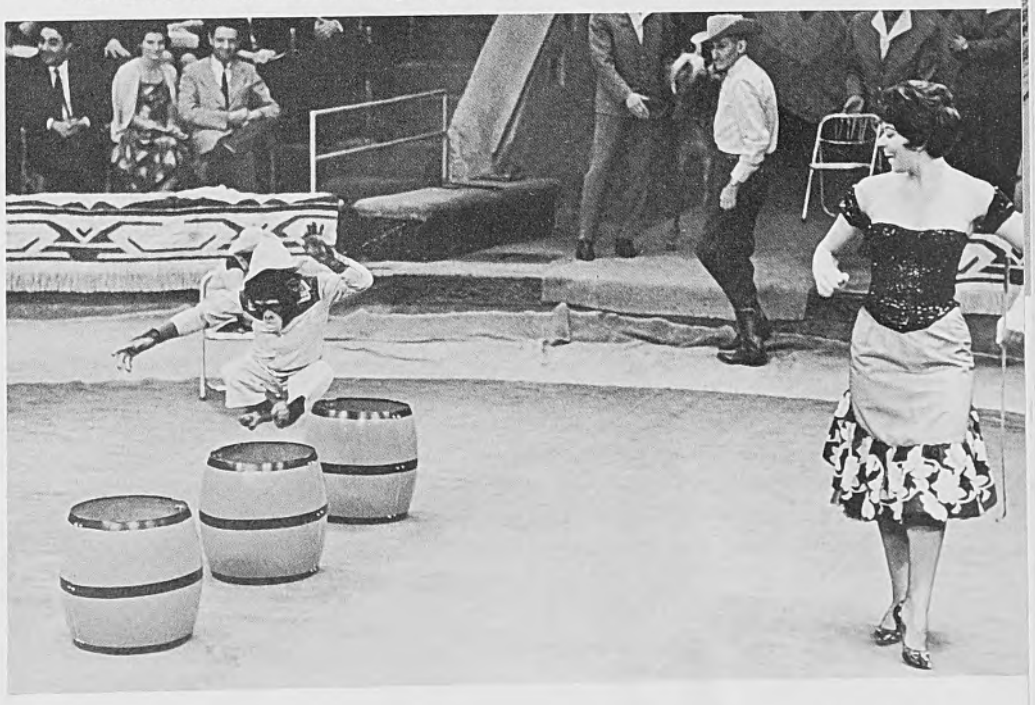
Only once during the show was the applause louder and longer than after the three numbers I mentioned and that was when the whole company came out for the grand finale and Mr. Wells, an acrobat, said:

"We are happy to visit your great country and we shall be really glad if our performances serve to strengthen the friendship between our peoples." ★

Moscow audiences had a grand time. Extra seats were placed in the aisles to make room for the overflow crowd, and still every performance was sold out.

"Wild Mule," one of the 29 varied acts in a program of laughs and thrills.

The whole show, Soviet circus people said, was on a high professional level.



Women and Children in the USSR

THERE ARE more women than men in the Soviet Union, says the booklet "Women and Children in the USSR," issued early this year by the Central Statistical Board—120 million, or 54.6 per cent of the population. And they live longer. Out of every 100,000, there are 87,587 women and only 80,604 men who live to see their fiftieth birthday; and at the age of 60 there are 81,800 women still around as compared with 69,400 men. The Soviet Union has three times as many women as men aged 100 or more and 15-17 times more centenarians per 100,000 women than other major European countries.

According to the 1959 census, 47,600,000 women are gainfully employed. This is 48 per cent of the country's working force. No matter what field she works in, a woman gets paid as much as a man in the same job category. A woman who supervises men gets the same pay as would a man in the same capacity.

Fifty-nine per cent of employed people with a specialized secondary or college education are women. Some 31,000 women—they make up 27 per cent of the total number of scientists—hold advanced degrees, Masters or Doctors of Science. Almost 800 women are professors or academicians. Vocationally they range the gamut from artists to zoologists. Women are well represented in the legal profession as judges, public prosecutors and defense attorneys.

As many as 38,342,000 of the women gainfully employed are direct producers of goods and services—14,152,000 are in industry, construction, transport and communications; 20,764,000 in agriculture; and 3,178,000 in trade and restaurant work.

The country is highly appreciative of the contributions women make. It awarded the title Hero of Socialist Labor to 2,879 of them, and orders and medals to 1,150,000. Lenin and State Prizes in science, engineering, literature and art were conferred on 755 women.

Soviet woman has right to elect and run for election to all organs of state power. There are 390 women legislators in the Supreme Soviet of the USSR. This is 27 per cent of the total number of deputies and much more than the combined number of women in the parliaments of all the other countries in the world. More than 741,000 women—41 per cent of the total number of deputies—serve in the Supreme Soviets of the union and autonomous republics and in the local Soviets.

Women constitute about half the country's trade union membership. Fifty per cent are members of local committees at factories and offices. Thirty-one per cent of the members of the USSR Central Council of Trade Unions are women.

Mothers of large families enjoy public esteem in the Soviet Union—690,000 women bear the honored title Mother Heroine. Millions have received the Order of Motherhood Glory and Motherhood medals.

In addition to annual paid vacations women factory and office workers are entitled to 112 days of maternity leave. Medical services at maternity hospitals and women's and children's consultation centers are free. In 1961 there were more than 219,000 beds in Soviet maternity hospitals.

The government assists mothers of large families and unmarried mothers with grants. The total paid out in such grants in 1961 alone was 436 million rubles.

On the birth of her third child and for each thereafter the mother receives a grant in a lump sum. On the birth of each subsequent child the mother gets a monthly allowance in addition. More than a billion rubles were paid out in 1961 for these various grants—to mothers of large families and unmarried mothers, in maternity grants and in grants for layettes and baby food.

In 1961 there were more than 48,500 kindergartens and nurseries in the country, with a combined enrollment of 3,622,500 children. Many more preschool facilities are presently being constructed to accommodate almost double that number. In addition seasonal kindergartens and nurseries last year took care of some three million youngsters. These are permanent, well-equipped facilities located in winter and summer resort areas.

Eight years of schooling are compulsory in the Soviet Union. After that the boy or girl either gets a job or goes on to complete the 11-year school or a specialized secondary school, then to a college or university. Tuition is free throughout.

There were 198,000 schools in 1961. Four billion rubles, 50 per cent more than in 1958, will be spent for running the 11-year schools in 1963. Boarding schools accommodate more than 2,000,000 children. The 1963 budget allocates 685,000,000 rubles, 12 per cent more than in 1962, for the construction of boarding schools and for day-boarding school groups. Some 2.5 million seniors at 25,000 secondary labor polytechnic schools last year took the industrial training required by the revised education law to strengthen the school's ties with life.

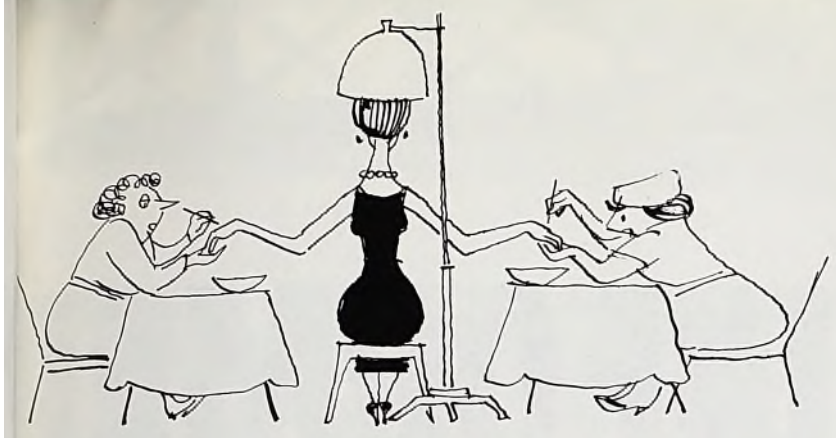
Children of different nationalities may be taught in their native language. Instruction was given in 61 languages in 1962.

Physical culture is required at all schools. The number of sports schools for children is growing. Physical culture teachers are trained at colleges.

Children below 16 are not permitted to hold jobs. Under exceptional circumstances a fifteen-year-old may be hired. The maximum work day for 16-to 18-year-olds is six hours and for 15-year-olds, four hours. They get the same pay as adults in the same skill category who put in a full six- or seven-hour day. They also get longer paid vacations than adult workers.

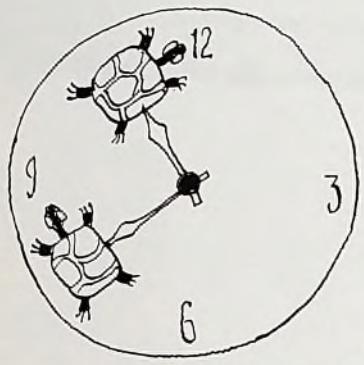
Besides the schools, the youth organizations—the Young Pioneers and the Young Communist League (YCL)—help to build character. 20 million young people are YCL members, 44 per cent of them girls. 18.5 million children are Young Pioneers. There are a great many after-school facilities in the Soviet Union: 3,229 Young Pioneer Palaces and Houses, 803 young technicians' and nature lovers' centers, 1,965 children's sports schools and 174 children's parks. All these help to develop the child's creative potentialities.

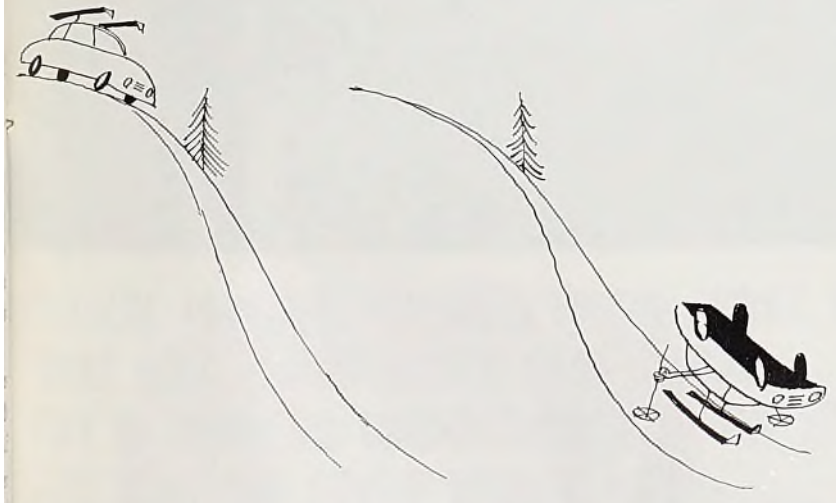
Publishing houses for children are an important adjunct to education. The Children's Book House in Moscow, the only one of its kind as yet—serves as a creative laboratory for the publishing houses that issue millions of books annually in all the national languages. The 185,000 school libraries have a total of 275,000,000 books on their shelves. Films are made especially for children, and there are 106 professional young spectators' theaters in the USSR. ★



NEW YEAR HUMOR

DRAWINGS BY YURI CHEREPANOV





IN THE NEXT ISSUE

The number on the January cover tells its own exciting story of the full employment of every able-bodied citizen in the Soviet Union made possible by the tempo and scope of construction now going on in the country. The 20-year program needs 40 million more workers for its successful fulfillment. How does planning guarantee they will be available, that the right worker will be in the right place at the right time? How are the problems of home and family solved so that women can utilize their training and education in socially gainful labor? How are teen-agers prepared for work? Articles in this issue will deal with answers to these questions, so pertinent in our times.

Is there life on other planets? Science fiction writers have for a long time been populating the universe with creatures that range from grotesque monsters at one extreme to idealized versions of man at the other. An astronomer who is a member of the USSR Academy of Sciences, a professor of physical mathematics, a biologist and a writer examine the evidence and tell what they think the answer to this question is.

A factory worker, who is now a Leningrad Soviet deputy, and a war correspondent tell about their experiences during the siege of Leningrad in World War II. For almost 900 days the German fascists tried in vain to capture the city, instructed "to blockade and raze it to the ground by an artillery barrage . . . and steady bombing from the air." The food warehouses had been burned down, and no train or ship could get through; the winters were especially cold, and there was no fuel. The only link with "the mainland" was Lake Ladoga when it froze over and the planes that most often did not make it. Read in the January issue how the courageous Leningraders withstood the invaders.

Among the other articles in the January issue are:
Literature for Children, by the famous children's writer Kornei Chukovsky; **Forty Plus,** about workers who have reached the prime of life; **Social Struggle and Revolution,** continuing the series on Soviet democracy.

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Architecture Soviet architects explain their ideas on the new trends in city planning and what they are most concerned with in designing functional, attractive houses.

Party Secretary and Art Party Secretary Georgi Ivanov takes part in a discussion on the theater, telling how and why the Communists influence the country's cultural life.

Behind the Silence Barrier Soviet medical science continues its fight against deafness and blindness, but, meanwhile, what happens to those deprived of these two precious senses?

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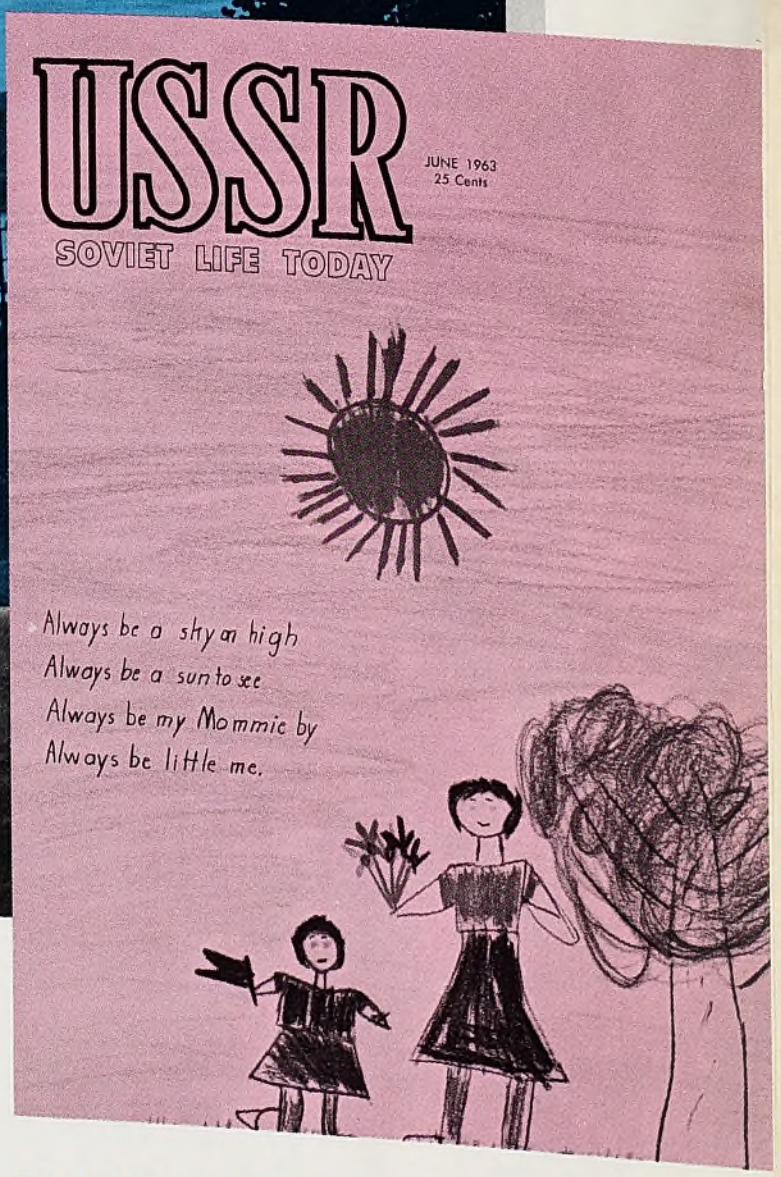

IS THERE PERSONAL FREEDOM IN THE SOVIET UNION
WHAT DOES SOVIET YOUTH THINK ABOUT
WHY IS THERE NO UNEMPLOYMENT IN THE SOVIET UNION
HOW DOES THE SOVIET WORKER LIVE
IS MARXISM BECOMING OBSOLETE
WHO'S WHO IN THE SOVIET UNION
HOW IS THE MAN OF THE FUTURE BROUGHT UP
HOW DOES A SOVIET FAMILY LIVE
IS IT WORTHWHILE TO EXPLORE THE COSMOS
WHAT'S NEW IN SOVIET LITERATURE
AND MANY OTHER QUESTIONS

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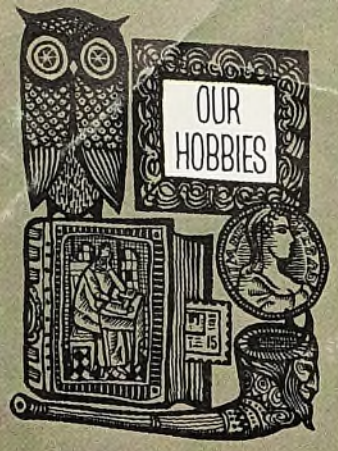

If you drop in of an evening at the Moscow home of Valerian Artsimovich, editor of *Soviet Literature* magazine, you are more likely to talk badges, or souvenir pins, than books. He is a confirmed and indefatigable collector. Draped across his bookshelves is a carpet, a magic carpet—because the pins that completely cover it carry you back to the beginning of our amazing century of speed, sputniks and social changes.

See story on page 52

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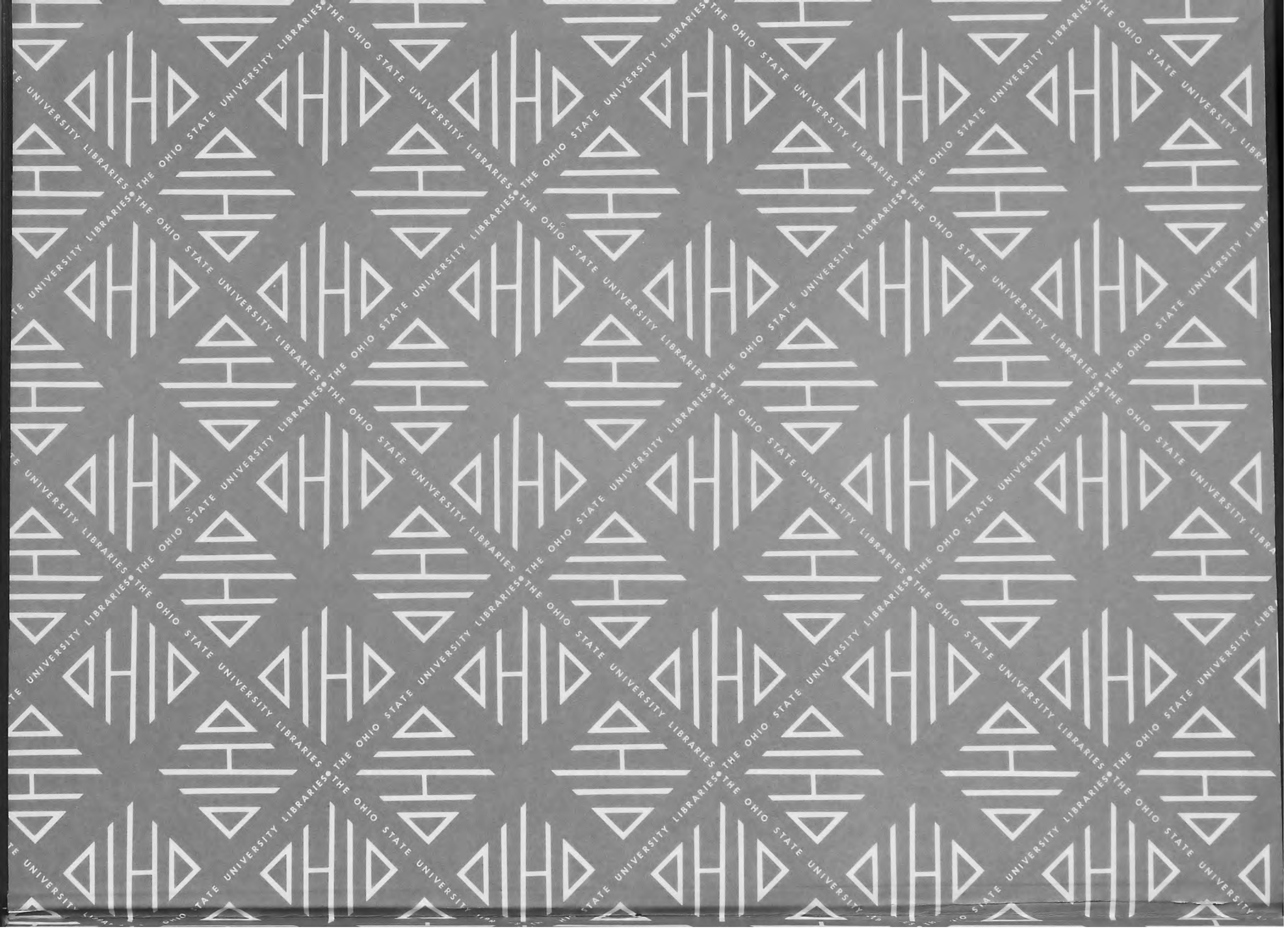
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