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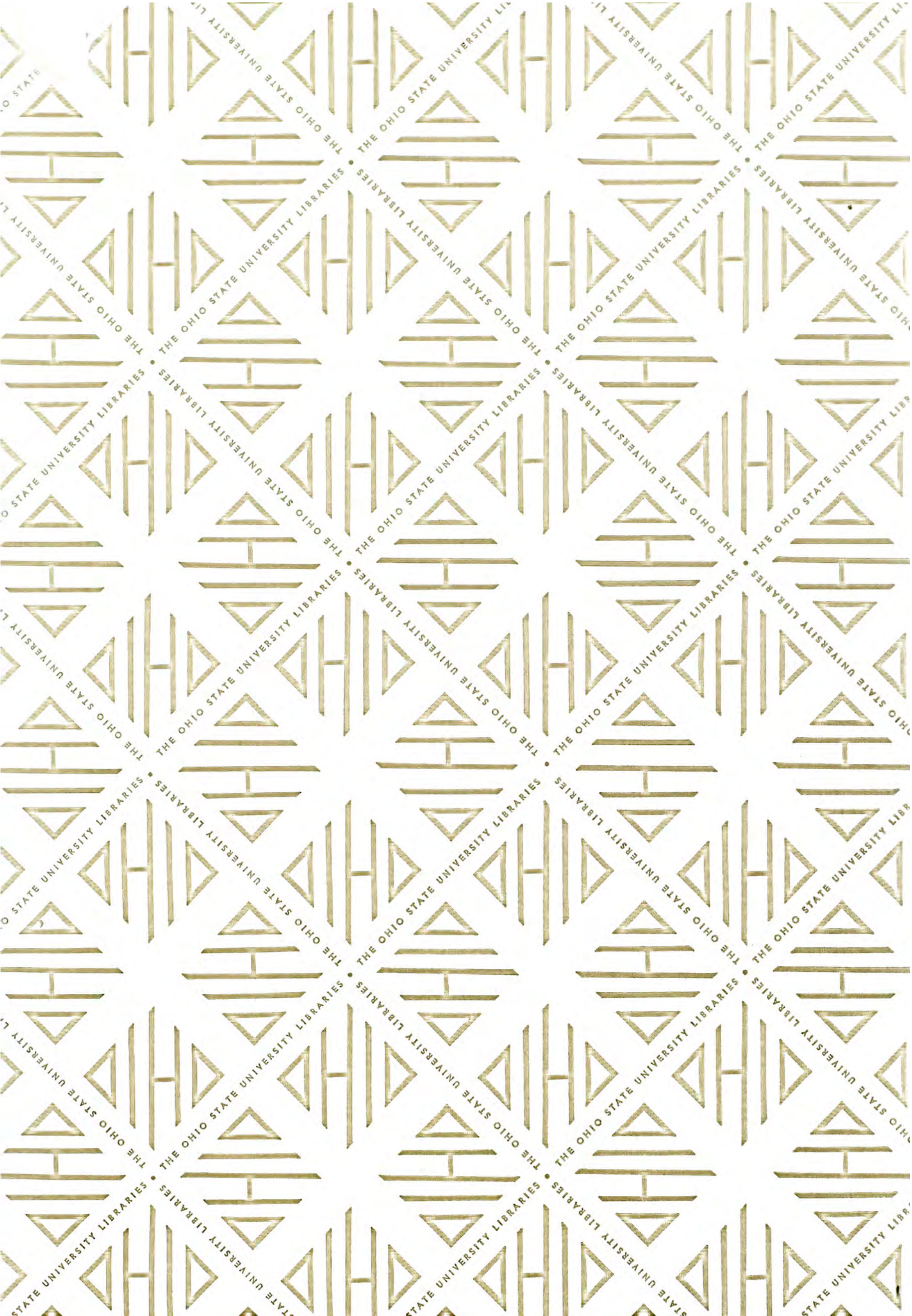
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SOVIET LIFE

July 1981 • $1.25

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SOVIET LIFE

The magazine SOVIET LIFE is published by reciprocal agreement between the governments of the United States and the Soviet Union. The agreement provides for the publication and circulation of the magazine SOVIET LIFE in the United States and the magazine AMERICA in the Soviet Union.

Front Cover: Lyudmila Ivanova, a 20-year-old salesclerk in Moscow, was the winner of a TV quiz show called "Come on, Girls!" The quiz was a test of brains and humor.

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LETTERS TO THE EDITOR

Your April 1981 issue was the best SOVIET LIFE I have received. Particularly interesting was the discussion by prominent Soviet scientists of possible communication with extraterrestrial intelligence. And the article by Alexander Tropkin on Alexander Kazantsev was fascinating as well as mysterious!

I also wish to thank you for the article, in an earlier issue, on the undersea photography done by the Soviet diving team in the Atlantic near the Strait of Gibraltar. I am a great fan of the search for Atlantis.

Oh, the things we could learn if we as nations did not waste so much of our money and energies on the amassment of nuclear capabilities. I pray to God, and I do believe in God, that we will not commit planetary suicide. I support every attempt at negotiation and scientific and cultural exchange.

J. P. Morgan
Nashville, Tennessee

I should like to take this occasion to tell you how much I appreciate your magazine SOVIET LIFE. Here in the United States, we get a somewhat limited vie of what takes place in the Soviet Unio To learn of the wide variety of activiti —that any Chamber of Commerce wou be happy to boast of—comes as quite surprise.

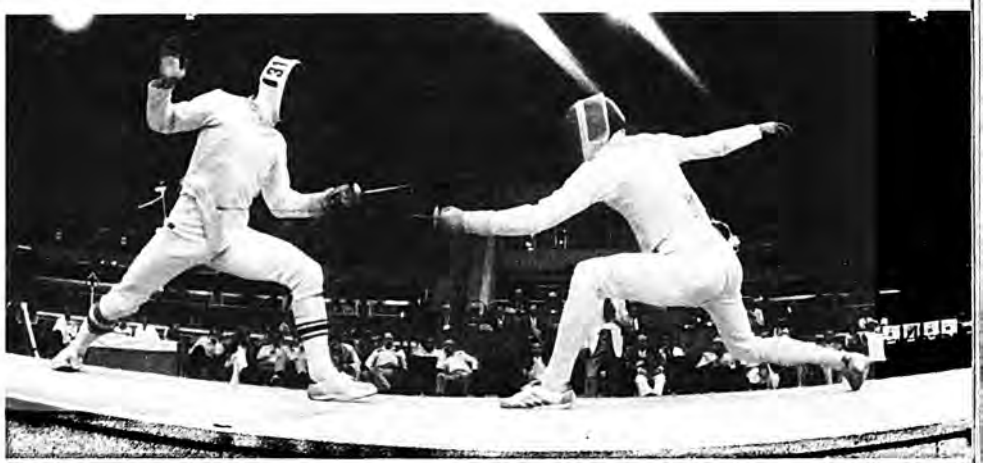
I have a feeling that your country going through an exploratory perio very similar to the U.S. after the Civ War, in which new technology opene up vast new areas in the West. Ther is always an initial excitement when on begins to discover such virgin lands. An as was then, many young people ar probably fascinated to be the first int such regions.

In this country, Alaska is looked upo as America's "last frontier." And I hav heard of many reports of them actuall discouraging any further immigration because the state cannot support thos flocking to it now. So that what the Wes was to America in the last century, th East is probably to Russia in this one.

In any event, many thanks for a ver informative publication.

Ephraim Nelson
Aspen, Colorad

2 Alexander Grigoriev and Oleg Shibko cover the ninth meeting of Soviet and American young people.



60 Mikhail Dmitriev interviews several Moscow Olympic winners who are already fixing their sights on the 1984 Games in Los Angeles.

12 Dmitri Shparo recounts his 76-day journey on skis to the North Pole with six other young scientists.

EDITOR'S NOTES

A tourist group of American newspaper editors and publishers came to the Soviet Union about a year and a half ago. During a meeting at the headquarters of the USSR Journalists Union, many questions of mutual interest were raised. One of the most thought-provoking of all was the problem of fathers and sons.

You often hear about young people today not being "like we were in our day," that their convictions are hazier and will power weaker. This judgment is usually passed on minor, and not major, things. For instance, someone has had a bit too much at a party or has acted with undue familiarity or has disobeyed his or her parents.

I remember remarking to my American colleagues at the meeting that I have trouble with my own son as well. "No matter how hard you try to bring them up and educate them," I said, "they still have no sense or discretion at the age of 20."

"But what about when it comes to something serious?" one of the visitors asked.

Pondering this question, I recalled young people always working in the forefront alongside adults in every nationwide social, economic and political undertaking. I thought of the many top-priority projects in the country built by young people, the substantial contribution they make in working for peace, friendship and cooperation. I thought of them coming forth in sports arenas and at international forums as trailblazers in achieving better understanding among nations and striving for a better future.

Remembering this, I answered the guest from overseas: "When it comes to something serious, I suppose they're A-Okay."

I hope you will read this issue about today's young people and then let me know whether you share my point of view.

A PRODU

The ninth forum was held in the Soviet U
last January. American young people w
represented by 33 delegates. After two da
Moscow, they went to Tallinn, capital of Esto
There they met the Soviet delegation. Followi
plenary session, the participants split up
five commissions and for a few days discussed
following issues as they relate to young peo
Soviet-American relations; détente and disarma
the role of youth in society; scientific and techn
development; trade, cultural and informa
exchanges. The delegates lived and worked in
sports complex built for the sailing regatta of
1980 Olympics. The meetings were sponsored by
USSR Committee of Youth Organizations
the Forum for U.S.-Soviet Dia

The musicians in the two delegations were the first to find a common language and understand one another. The rest of the delegates soon joined in.

TIVE FORUM
SOVIET AND AMERICAN YOUNG PEOPLE HOLD NINTH MEETING

Alexander Grigoriev and Oleg Shibko
Photographs by Yuri Abramochkin

AFTER the official opening ceremony of the ninth meeting of Soviet-American young people, which was aired on prime time Central Television, the guests and hosts broke up into five commissions and began working.

We would like to report on Commission Three, which discussed the status and role of young people in Soviet and American society. First we got acquainted with one another. Each delegate gave his or her name and age and said a few words about work, family, professional and social interests. Then we selected two chairpeople—Bonnie Marie Orkow, director of the Department of Social Work at the Tri-County District Health Department in Englewood, Colorado, for the American side, and Vsevolod Okpysh, a department head at the Central Committee of the Leninist Young Communist League of the USSR, for the Soviet side.

Frank Carrasco from Antioch College was the first speaker. Based on his own experience, he described how political consciousness is formed in American youth.

Then it was Anneta Laht's turn. Anneta is secretary of the Central Committee of Estonia's Young Communist League. She explained how Soviet youth get their political education. It begins at the most elementary level with fourth graders. Political organizations draw young people into social activities, so by the time they are 18—when Soviet citizens are old enough to vote and be elected to office—they can consciously participate in the country's political affairs. At the age of 22, Anneta was elected to a District Soviet in her native city of Tallinn and worked on the Soviet's Commission for Youth Affairs for a number of years.

Frank Carrasco said that in the United States an 18-year-old has to be registered in order to vote in elections. "What happens," he asked, "if Soviet young people refuse to register so as not to take part in elections?"

Alexander Potekhin, a scholar from Kiev, which is the capital of the Ukraine, answered that one quickly. "Participation or nonparticipation at the polls is voluntary. I myself have missed some elections and nothing has happened to me."

Occasional misunderstandings emerged during the meetings. On the subject of the status of ethnic minorities, Joseph Kinard, an Afro-American from New Jersey, said that he had read a lot about the absence of racism in the Soviet Union, but he saw a doll in a nearby souvenir shop that, in his opinion, was a caricature of one of the Soviet ethnic minorities. Was this not a sign of racism?

The Soviet delegates were stunned. They couldn't imagine that a figurine of a potbellied Zaporozhye Cossack could produce such an impression. As a matter of fact, these knicknacks are made by Ukrainians, like the funny figures of horsemen that are manufactured by factories in the Caucasus. From his own experience, however, Joseph was not able to understand this. Suddenly Tedo Dzhaparidze, a Georgian by nationality and a research associate at the Institute for U.S. and Canadian Studies of the USSR Academy of Sciences, jumped up from his seat and left the room. He returned in a few minutes with a comical doll with a bulbous red nose.

"Look here, Joe," he said, "this is supposed to be a Georgian. Although it's not as handsome as I am, I'm not offended. Take it and think of it as just a funny souvenir, a reminder of our meeting."

Before we began discussing the status and role of women in society, Vsevolod Okpysh said to his counterpart from the American side: "Bonnie, we have just been witnesses to a misunderstanding because we sometimes see things differently. Say, Bonnie, how should I address you? Cochairman? Or cochairperson?" The outburst of laughter that followed showed not only that the quip was appreciated but also—and this is the main thing—that a spirit of mutual understanding finally reigned at the conference table.

The Work of the Commissions: The Americans' View

We asked several American delegates for their impressions of the work of the commissions.

George Bower, Keene State College, Keene, New Hampshire, cochairman of Commission Four: In our commission on science and technology we tried to narrow the scope of our discussions to two primary areas—energy and the environment.

One of the things that was most encouraging for me was the manner in which the members of the commission understood each other. We had a productive exchange of views and opinions.

And, what I would even consider more important, we developed recommendations for additional meetings between young Soviet and American scientists in order to begin work on problems that confront both our countries, problems like the burning of coal as a source of energy for generating electricity.

We're not looking for solutions to enormous problems, we're looking for ways to make real contributions to unraveling some of the problems that face our nations today. And there are many. We can choose one from the energy area, another from the environmental area. But the purpose of the think tank will be to bring together specialists from both countries and give them an opportunity to work on a specific problem that both nations would profit from.

What we would like to do is gather a group of scientists from major scientific centers in the Soviet Union and the United States and develop a kind of advisory group that would say, "This is the problem we think you should address." Certainly in the National Academy of Sciences and the USSR Academy of Sciences we can get people who would formulate that type of a positio

Another proposal is that we exchange infor mation between young scientists through our t organizations—the Committee of Youth Orga izations in the USSR and the Forum for U.S Soviet Dialog in the United States—and devel a kind of channel so that we can have dire communication and get a rather quick exchan of ideas before implementing them.

The cooperation between our two nations the area of science and technology is one thi that is now, and is going to be in the futu absolutely essential.

Gregory Page, Administrative Manager, Inte national Feed Division, Cargill, Inc., Minneapoli Minnesota, Commission Five: I personally wou have preferred to spend a lot more time talki about trade and economics in general. So mu of our discussion time, though, was spent culture, journalism and the arts—things that I not so closely interested in.

Furthermore, there was nothing to disag about. Who's going to be against cultural e change? That's like being opposed to medicin

We were in the city of Minsk, which has t largest tractor-manufacturing plant in the wor That was really frustrating for me—to be probab one mile away from something that people my country are aware of and not get to see I am going to go back and say that I've been Minsk, and someone is probably going to say me, "Oh, I have a Byelorus tractor. Did you go the plant?" My answer will be No. And then they ask, "Then why did you go all that way?"

I think the programs of future conferenc should be five days of general discussion an then seven or eight days for industrial and agr cultural people to break off and really get chance to talk to the people in industry or ag culture. I'm pretty optimistic about the foru and I plan to return to the Soviet Union.

Bonnie Marie Orkow, Commission Three: The w in which the commission proceeded was a su prise to me. I expected that there would be ma disagreements and that there would be a lot tension during the session. I was very pleas to see that this did not occur. The interacti between the two groups was excellent. The was a great deal of humor and friendliness amo the delegates. The Soviet people's sense of hum is much the same as ours.

I definitely feel very positive about the foru and believe that it should continue at all cos One thing that I think might make the work the commissions more productive would be to a little more touring before they meet.

The other thing that I would recommend for of us, Soviets and Americans, is that we shou do a great deal more of what I call public rel tions, using the mass media to share our expe ences with other people.

Despite differences in views, the Soviet and American participants of the meeting unanimously agreed on the need for action to curb the arms race, lessen the danger of nuclear war and reduce the world's arsenals of destructive weapons. They acknowledged that efforts to gain military superiority will not bring security to either side and that adherence to the principles of noninterference in each other's domestic affairs and mutual understanding are the best guarantees of a lasting peace and improved Soviet-American relations.

James O'Rourke from New Hampshi cochairman of Commission One (Soviet-American relations), reports on his group's work.

seeing the country

In Tallinn the American delegates took time out from their meetings to wander through the streets of the walled Old Town.

The American delegates spent two days sightseeing in Moscow before going on to Tallinn for the meetings. Here they are outside the walls of the Kremlin. Above: The delegates also visited the memorial complex at Khatyn, a little village in Byelorussia that was totally destroyed by the Nazis during World War II. Top: The leaders of the delegations: Boris Petrov (left), first vice chairman of the USSR Committee of Youth Organizations, and Gregory Fess, chairman of the Forum for U.S.-Soviet Dialog.

having a good time

Cheers! Intimate talk, songs and toasts continued well into the night in Minsk. Below: After a formal meeting and a performance by the Khoroshki Ensemble at Yunost, a center for young people in the capital of Byelorussia, the delegates were invited to a dance. Despite the crowded floor, Gregory Fess managed a few steps with a travel bureau guide.

David Ames, Communications Committee Chairman for the Forum, New York, New York: More has been accomplished in the commission this year than has ever been accomplished before because very concrete and specific things were said and the areas of agreement and disagreement were well defined. I think we have emerged with a real picture of hope. In the American delegation we had people who were liberal and people who were conservative, but all of them found areas of agreement and potential cooperation with their Soviet counterparts.

At our first conferences there was much more information exchanged about the two countries and not so much talk about the issues. Of course in those years the conferences were held under the umbrella of the policy of détente. This year the commission faced a near-crisis situation and a lot of difficult problems, but it dealt with them very successfully, I think. The meeting has demonstrated once again how impressive the results can be when American and Soviet people sit down to talk even for a brief period of time.

An Evening with Estonians

In Joseph Kinard's opinion, the main benefit of such forums lies more in the opportunity for informal encounters than in the sessions of the commissions.

This year the Americans had plenty of opportunities for such encounters. While they were in Tallinn, they went in groups of threes and fours to spend an evening with Estonian families.

Along with James O'Rourke, an associate professor from Manchester, New Hampshire, his wife Carol and Donna Winkler, a biochemist from Charlottesville, Virginia, we visited Ivo Viidenbaum, a surgeon who specializes in the treatment of cancer patients. We were greeted by Ivo, his wife Laine, who is a gynecologist, and their dachshund. They showed us to a room on the first floor with a fire in the grate and wild boar skins on the floor (a gift from an old friend who is an ardent hunter) and got acquainted over appetizers. The Viidenbaums had also invited a neighbor, Endel Kullik, a chemist.

During dinner the small talk revolved around children. The O'Rourkes told us all about themselves. They have five children who live with them on their farm. The youngsters help take care of the animals and raise vegetables and fruit. It seems the O'Rourkes are very good at growing vegetables. At the county fair in Hills

After the formal part of the Soviet-American meeting of young people was over, the delegations challenged each other to a basketball game at Tallinn's Olympic Sports Complex. The Americans won by a three-point margin—33-30. Gregory Page from Minneapolis, Minnesota, was by far one of the best players. He's outjumping Tedo Dzhaparidze, No. 6.

An evening with an Estonian family. Left to right: Donna Winkler from Charlottesville, VA; James and Carol O'Rourke from Manchester, NH; Ivo Viidenbaum, the host; and Zinaida Sass, his mother-in-law. Below: Everyone agreed that Richard Grando from New York was the most colorful and likable delegate.

ro they won the Grand Prize, 50 blue and five d ribbons in the vegetable categories. The ests and their hosts toasted each other, saying w wonderful it was to meet and discuss things at concerned everyone. It was late and time r us to go, but we didn't want to leave the denbaums and they were unwilling to let us go. we were finally leaving, we exchanged addresses, promising to write and to continue our endship.

We asked Adrienne Critchlow, who chaired ommission Five on the American side, to share er impressions.

"I went to a working-class family. Yes, they ere truly working-class people and very much e the working people in the United States. felt very comfortable in their home. They were ery warm people. I was also impressed greatly by and appreciated their sense of independence," she remarked.

A Visit to a Collective Fishery

One evening in Estonia was spent at the Kirov Collective Fishery, which spreads for kilometers along the Gulf of Finland and employs more than 6,000 people.

The guests were given a tour by Kaljo Alakula, deputy chairman of the fishery. We walked through the production areas and rode in a bus around the main buildings, the sports complex and apartment houses. Then we visited a nursery school, a boarding house for single fishermen, a club, the library, the health center and the local museum.

Alakula told us about the farm's turnover (which is 80 million rubles a year), profits (15 million rubles a year) and how they are spent.

"Everything you have seen has been built here at the fishery," he explained. "We have a special team of builders, engineers, designers and architects. On top of that, we have facilities to repair our boats and fishing equipment.

"We have a lot of young people working at the fishery and we try to do a lot for them. You have seen only one of our nursery schools. All the members of the teaching staff have a degree. Parents who have worked at the fishery for more than three years don't have to pay tuition for their children. Newcomers pay only 12 rubles a month. The youngsters are served meals and are taught to sing, dance, draw and play musical instruments.

"The children of our workers who go on to college receive scholarships from the fishery ▶

Even during a break members of Commission Five, which dealt with trade, cultural and information exchanges, continued to discuss points that weren't clear to them.

Raun Burnham
a musician and com
from New York,
a big contri
to the discuss
Commission Five
and her husband
also contributed musi

promoting exchanges

In the Soviet capital American delegates met young journalists from Novosti Press Agency (APN). Adrienne Critchlow from New York is in the foreground.

The Soviet and American delegates displayed strong interest in a reciprocal study of the history, culture and political activity of young people in both countries and declared the need to extend and develop cooperation in these areas. They also pointed out the importance of mutually beneficial trade and economic ties, broader scientific and technical cooperation, wide-ranging cultural, educational, sports and youth exchanges. The participants expressed their determination to actively promote these exchanges.

at are higher than the state grants given to her students. And anyone taking a correspondce course automatically gets a 10 per cent ise.

"We allow four months paid maternity leave. others can stay home until their babies are e year of age, and the fishery will continue pay their average monthly salary.

"Close to a thousand of our workers take part amateur art activities. That's why we've built veral clubs and hired instructors. Every year e sponsor contests in which the winners get ee tourist vouchers for travel around the country d abroad.

"We also have a sanatorium for children, an ernight sanatorium for fishers and a rest and creational center on the Gulf of Finland. Our rkers and their families and friends can spend eekends or holidays there.

"We build a great deal of housing. Three- or e-room apartments in urban-type houses are signed free of charge. We give those who are illing to build single-family homes interest-free ans, building materials and transport. Anyone ho is willing to work on construction in free time -we have a shortage of construction workers on e farm—doesn't have to repay a third of the an."

The American guests literally bombarded Alala with questions.

: When can a fisher retire?

: Like everywhere else in this country, men are igible for an old-age pension at 60, and women 55.

: Can pensioners work?

: Yes, they can. They receive wages and their ensions. In such cases some receive more than e leaders of the collective fishery.

: At what age do people begin to work?

: At the age of 18. Some teenagers help raise owers when they are 15, but they are not allowed work more than four hours a day and then nly during vacations.

: What jobs are done by men and what jobs e done by women?

: Men catch the fish, and women process them. his has been the traditional division of labor for undreds of years. By law women cannot be mployed in jobs that involve heavy lifting or ork at night. The women have a wide choice f jobs other than those dealing with fish. The ulk of our workers in the schools, clinics, nurseries, libraries and food services are women.

Says Maureen Riley, a Russian Area Studies ajor at Boston College in Boston, Massachusetts: The conference was much more relaxed than thought it would be. The best part was meeting eople and talking to them, even outside of the eeting. The worst part was just not having nough time."

At the Estonian Parliament

The American delegation was received at the Supreme Soviet of Estonia by the Secretary of the Presidium, Victor Vaht.

The young Americans got a good picture of how Estonia's parliament works. It has 285 deputies (eight out of ten are Estonians), of which 101 deputies are women and 56 are young people under 30. The work of the standing commissions and the powers of the Supreme Soviet and its deputies were carefully explained. Deputies report to their constituents about their work, but unlike the practice in Western parliaments, they can be recalled before the expiration of their term if the voters are not satisfied with them.

The Cultural Program

"We've had a great time in Tallinn," Bonnie Orkow declared. "One of the nicest things for me in visiting Tallinn was going to the opera. The performance was outstanding. We saw *La Traviata*. It's the second time I've seen it. I first saw it in Rome in the Baths of Caracalla two years ago. And the performance in Tallinn was just as good as if not better than the one in Rome. And that's saying a lot."

The Americans attended several concerts of Estonian and Byelorussian folk songs and dances; they saw variety shows and *Ivan the Terrible* at the Bolshoi.

"The cultural program was quite good this time," David Ames noted. "The people in our delegation were extremely impressed with what they saw in such a brief period of time. We were exposed to a culture that Americans know very little about. Even today some people in our country think that the Soviet Union has no pop music, rock 'n' roll or bands with electric instruments. This kind of exposure is tremendously important for Americans."

The American delegation included a professional trio from New York: Raun Burnham, a singer and pianist; her husband Jerry, who plays the flute and the double bass; and Richard Grando, a saxophonist. They were a hit at many meetings. Frequently they performed with Alexander Morozov, a young composer from Leningrad who was on the Soviet delegation.

This wasn't the first trip to the Soviet Union for Rick Grando. "This is my second time, and I've never had anything but the greatest response and warmth from the Soviet people in all the republics that I have had the privilege to perform in.

"We all know what that means. This can only lead to increased understanding eventually. I think most of the performances we've seen here would be extremely interesting for Americans, especially the elaborate ethnic productions. The ethnic art of a country is one of the easiest things to communicate because, after all, everyone has traditions. The more you come in contact with customs, the closer you get to the people as they really are. It's marvelous to have intellectually advanced and sophisticated endeavors, but there's no substitute for roots. You learn more from roots than from anything else.

"My personal wish, and I believe it is the wish of the whole American delegation too, is to develop cultural exchanges between our countries again."

The Echo of the War

The American delegation also visited the memorial at Khatyn, a little village in Byelorussia that was wiped off the face of the Earth by German occupation troops. The Nazis drove all the villagers out of their homes and into a barn and set it on fire. The only person to escape the massacre was a blacksmith named Iosif Kaminsky. He returned to find his son who lay dying riddled with bullets. In the center of the Khatyn Memorial Complex stands the giant figure of a man. In his arms the man holds his son's dead body. His grief-stricken gaze is directed far into the distance. Iosif Kaminsky was the model for the statue. Dozens of villages in Byelorussia had the same tragic fate as Khatyn. The republic lost one out of four citizens in World War II.

On behalf of the American delegation, Bonnie Orkow and Gregory Fess laid a wreath at the memorial.

Later Fess, the head of the delegation, told us: "Our visit to Khatyn was one of the most memorable experiences of my life. It's difficult to express how you feel after visiting Khatyn. The architecture really conveys the agony and the horror of what took place in that village. The statue of Kaminsky holding his son is something that anybody would be moved by. At the memorial I pledged to myself and for all peace-loving Americans that we would not forget the struggle and the strength of the people of Khatyn. I promised myself that I would work to make sure that kind of horror never happens again. It is something each of us needs to remember. I only wish that I could bring every person in the world to Khatyn to experience this firsthand.

"The most important thing now is to avoid a confrontation that might cause a nuclear war. So the theme of the Tallinn forum, 'Youth of the Eighties Against the Danger of Nuclear War,' will set the tone for what we hope will be a series of conferences. I expect that this theme will continue until there is a change in the political situation.

"The ninth Soviet-American meeting of young people was, in my opinion, the most successful forum that has taken place to date. We are looking forward to the tenth forum, which will be held at Lock Haven State College in Lock Haven, Pennsylvania, in mid-August of this year. This will be an anniversary conference, and we are expecting a successful one. The young people at Lock Haven are excited about the prospect of hosting a Soviet delegation. Even though the ninth forum was the best to date, I hope the tenth one will even top this." ■

THE 26th PARTY CONGRESS: WHAT ROLE DID IT ASSIGN TO YOUNG PEOPLE?

"There are more than 40 million young men and women in the Leninist Young Communist League. We often say that the YCL is our replacement. . . . Young people who are between the ages of 18 and 25 today will tomorrow form the backbone of our society. The most important, the central task of the YCL is to help form the rising generation into politically active, knowledgeable people, who like and know how to work and are always prepared to defend their country."

From Leonid Brezhnev's report to the Twenty-sixth Congress of the CPSU

THE OUTLOOK of Soviet young people is determined by their desire to contribute to the implementation of the plans for the country's economic and social development. Young Communist League (YCL) organizations take part in the campaign for increased production efficiency and quality of work in the leading areas of the economy and in the further development of agriculture. There are 500,000 YCL and youth teams, workshops, departments and farms working to carry out these goals.

The key targets of construction, proposed at the Twenty-sixth Congress of the Communist Party of the Soviet Union, will soon have definite addresses, and young men and women will be on their way to work there shortly. More than 130 national economic projects have been declared top-priority construction sites.

A 7,000-member national Komsomol team has already been formed and is preparing to leave for the major construction sites of the new five-year plan period. Thousands of young volunteers will follow it.

The idea of organizing advanced work teams made up of highly qualified specialists has proved to be effective. The young people master vast new lands and huge mineral deposits not by sheer numbers, but by skills.

However, not enough young people are settling down in newly developing areas. Some of the major reasons for this are often the lack of opportunities to continue one's education, the shortages of housing space, nurseries and kindergartens, cultural and municipal institutions.

Because of the great importance of developing new areas, especially Siberia and the Far East, it is essential to accelerate the building of new towns and cities and to take into account their social infrastructure based on their particular demographic needs. The average age of residents of developing areas is 22 to 26; and the birth rate is 1.5 to 2 times higher than the average birth rate for the country. The most popular way to get around in new cities seems to be by baby carriage. The need for housing, nurseries and kindergartens is rapidly increasing. Young people are eager to take an active part in construction, often working without pay in time off.

Reduced labor resources mean young people have to take a more active role in social production. The state not only offers them good professional training, but also opportunities to upgrade their knowledge and skills.

Experience has proved how essential it is for young people to be supervised by efficient workers who can teach professional skills.

One major goal of education is to develop in young people a healthy respect for work. And YCL organizations are set on fulfilling it.

Over the last five years close to 25 million people joined the YCL. Its initiative and self-reliance are increasing, and its discipline is growing.

YCL committees will try hard to get rid of the passive attitudes and the formality in their work and inspire a high-spirited creative atmosphere in every YCL organization.

The concern for the new generation has become the concern of the party and the whole nation. The rights and duties of today's young people have been codified by the new Constitution.

Excerpts from a speech by Boris Pastukhov, First Secretary of the Central Committee of the Leninist Young Communist League

THE GUIDELINES AS YOUNG PEOPLE SEE THEM

By Vitali Tretyakov

LET'S EXAMINE the Guidelines for the Economic and Social Development of the USSR for 1981-1985 and for the Period Ending in 1990 through the eyes of our young people.

Of course the interests of the younger generation do not differ sharply from the interests of other segments of the population. However, when reading the document, Soviet young people, like everyone else, look for points that promote their personal hopes and plans.

On the one hand, implementation of the Guidelines will enable Soviet youth of the eighties to preserve what preceding generations of young people attained and, on the other hand, to find the answers to problems left unsolved.

In the first place, the stable economic growth of the country determines stable employment for all segments of the population, including young people, and guarantees material well-being. Moreover, compulsory 10-year education, which was introduced throughout the country during the seventies, allows young people greater freedom in choosing a trade or profession and, in the final count, their place in life.

As I see it, the prospects for further construction of large industrial complexes in new areas mainly concern the younger generation. After all, they are the ones who are most eager to go to new construction sites. They go because it's the kind of work that offers the best opportunity for them to use their abilities to good advantage.

The different aspects of education dealt with in the Guidelines also involve young people. For example, vocational schools throughout the country plan to graduate 13 million people within the current five-year period, 500,000 more than in the last period. It's natural to assume that we're talking about young workers here. A diploma from a vocational school is a guarantee of a good income and satisfying work.

There are also plans to train close to 10 million specialists with a higher and specialized secondary education and to improve the way they are used in the national economy. It is clear that these 10 million will also be mostly young people.

A new and important aspect of the Guidelines is to increase state-funded aid to families with children and young couples; to allow more benefits to families; to contribute to improving their living conditions and amenities of daily life; to perfect the system of state-financed allowances for children; and to increase the number of nurseries and kindergartens. Polls have shown that the population in general and young couples in particular want to have more children. One of the main reasons young women don't have more children is their reluctance to give up work, friends and entertainment. In an attempt to help solve this problem, the Guidelines state that opportunities should be made available for women with young children to work part-time, be it a short workday or a short workweek, on a sliding schedule or at home.

Another innovation is the distribution of state-owned living space according to the principle of one apartment one family. This will have a beneficial effect, particularly on young families, many of which have had to share their parents' apartments till now.

A number of points in the Guidelines call for substantially improved living and working conditions, better education and more recreation in the rural areas. This will encourage young people who are now often obliged to sacrifice their love of country living and their native villages for urban comfort and culture, to stay on the land. The Guidelines also propose to develop and improve recreational facilities, especially for the young. The document also points out the need to step up physical training and sports activities for children and youth.

The Guidelines also mention the further development of art and culture, which are already flourishing among Soviet youth today. And there is a special line about books. Although books are published in huge editions, there is still a shortage. This is due in large measure to their popularity among young people.

There is a whole section devoted to environmental protection. This subject was omitted in the Guidelines of five years ago. It seems to me that this too concerns the younger generation more than anyone else because the future of our environment depends upon them.

Soviet young people are well aware that they will have to work to carry out the tasks set forth in the Guidelines for the Economic and Social Development of the USSR.

THE NEED TO PRESERVE DÉTENTE

On May 22 Leonid Brezhnev, General Secretary of the Central Committee of the Communist Party of the Soviet Union and President of the Presidium of the USSR Supreme Soviet, delivered a speech in Tbilisi, capital of the Georgian Soviet Socialist Republic, on the sixtieth anniversary of the republic and the Communist Party of Georgia. Excerpts of the speech follow.

)CIALISM has brought genuine freedom to the Georgian Soviet Socialist Republic, ‹ening the deeply ingrained creative strength ȝ people," Leonid Brezhnev said.

t is gratifying to note that an atmosphere of ıine internationalist friendship prevails in et Georgia," he stated. "Georgians, Russians, hazians, Ukrainians, Ossetians, Armenians, ʻbaijanians, Greeks and Kurds—representa- ȝ of more than 70 nationalities—work hand in d for the benefit of the republic and the entire et people. The experience of your republic is ed proof of the correctness of our party's inist nationalities policy."

ɔuching on the international situation, Brezh- said: "The foreign policy objectives of the ınty-sixth Congress of the CPSU are doing r job, clearing the way for a serious political ogue, for talks on the basic problems of war peace. Had it not been for these major and l initiatives put forth by our congress, the ȝent political landscape would be as flat and ɔrless as the Caucasus without the Caucasus ıntains. Three months have passed since the gress, and none of the topics proposed by us discussion has become less important. On the trary, their significance has grown.

Take, for example, the Middle East, which is r to Soviet Georgia as well as to all of our ıntry. What is happening there is brutal, tragic l dangerous. Is it possible to close one's eyes he lack of rights and the suffering of millions ʾalestinians? Can one remain indifferent to the ȝ of Lebanon, which is literally being bled te, torn by the Israeli military? One ill-consid- d step is enough to engulf the entire Middle ȝt region in the flames of war. And it is not ɔwn how far the sparks of that fire will fly.

'The Soviet Union," Brezhnev continued, "came ward with a proposal that offers a good chance work collectively to stabilize the situation in Middle East. It has suggested that an interna- nal conference on this question be called. Our ɔposal on this score met with a broad positive ponse in the Arab countries and in many other tes.

"We are for active talks to improve interna- nal relations. This refers fully to the situation the Persian Gulf and around Afghanistan. This uation has deteriorated because Washington ed to put gross pressure on Iran and to or- nize an intervention against the Afghan revolution. The situation was aggravated by an unprecedented concentration of U.S. armed forces throughout the region.

"How can the situation be relieved? We see several opportunities for this: to talk separately about ensuring peace and security in the Persian Gulf region and also separately about settling the situation around Afghanistan or to discuss international aspects of both of these questions in connection with each other. In so doing, of course, it is necessary that the sovereignty of all states in the zone be reliably safeguarded. There must be no question of interference in their internal affairs.

"The Soviet Union is ready for negotiations, indeed different kinds of negotiations. The only trouble is that in the NATO camp, where they like to talk of 'Soviet expansion' and 'the Soviet menace,' they have still not replied to our proposals.

"Our position in respect to Afghanistan is absolutely clear. We stand for its full independence. We respect its status as a nonaligned country. The USSR, like Afghanistan, favors a political settlement that would put an end to the undeclared war against Afghanistan and give it dependable guarantees of noninterference.

"An agreement on political settlement would make it possible to establish, in agreement with the Afghan side, time limits and an order of withdrawal of Soviet troops from Afghanistan. Nonresumption of intervention against Afghanistan must be reliable and guaranteed. Troops could be withdrawn step by step as the agreements reached are transformed into reality. Things have been held up, first of all, by the stubborn refusal of the Pakistani leaders to come to terms with Afghanistan and to stop interfering in its affairs," said Brezhnev.

"We have just celebrated Victory Day. It has been 40 years since the beginning of the Great Patriotic War. These dates—May 9 and June 22—make us think over and over again about what is happening in Europe, where world wars have started twice. In the seventies, Europe experienced a taste of détente. But now the situation is changing for the worse. This is due primarily to NATO's decision to deploy new American medium-range missiles in Western Europe.

"The NATO plan, which was reaffirmed at the Rome session of the council of this bloc, is called upon to provide satisfaction for the Pentagon's foundless appetites. They do not meet the interests of the security of the Europeans. The question of limitation and even reduction of nuclear missile armaments in Europe on the basis of the balance of forces and observance of the principle of equality can and must be decided through negotiations. We are ready for them. It is now up to Washington," Brezhnev stressed.

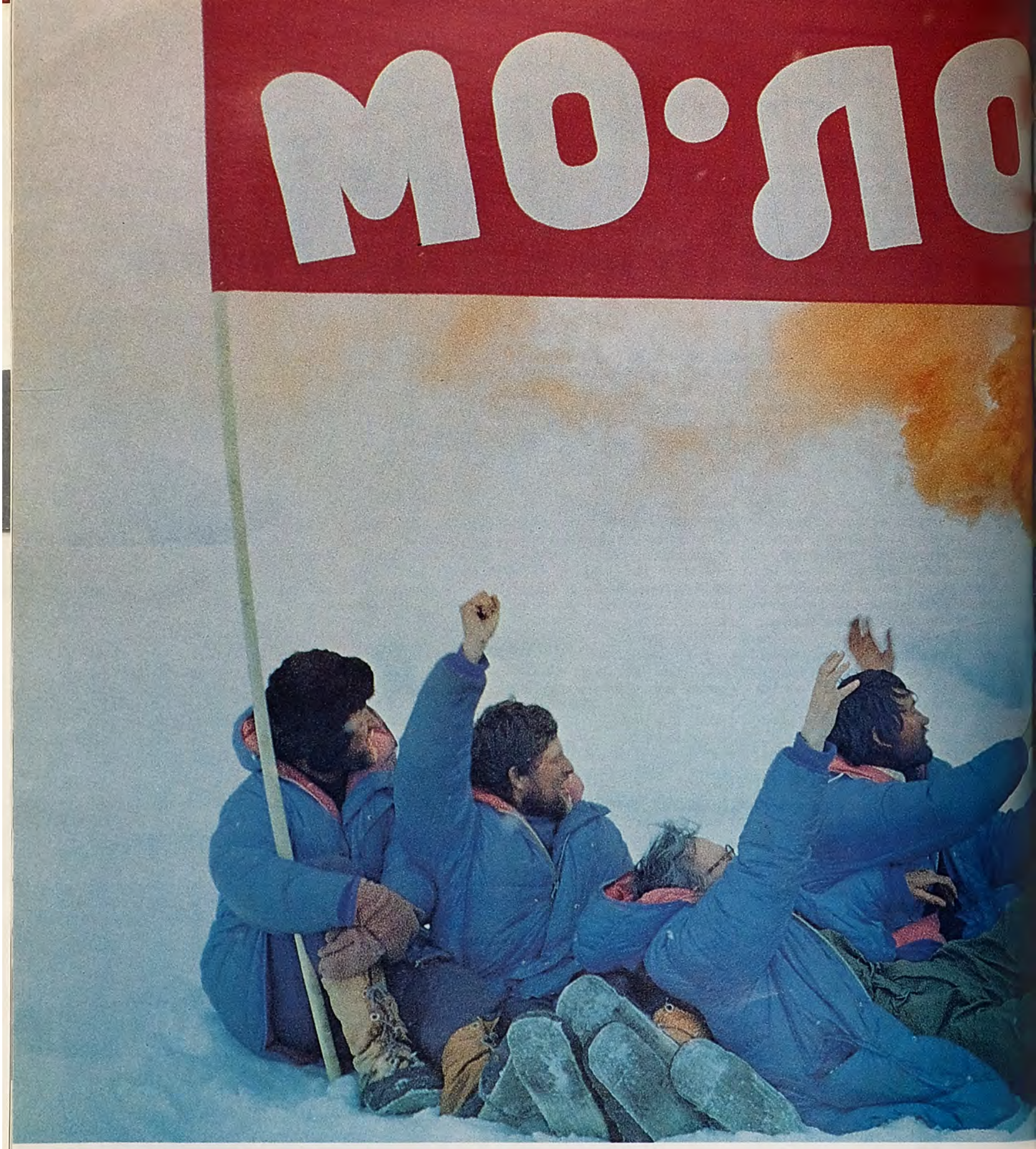
"At the same time I must say with a full sense of responsibility that we cannot leave the deployment on European soil of new American nuclear missiles aimed at the USSR and our allies without consequences. In this case we will have to think about extra defense measures. If necessary, we shall find impressive means to safeguard our vital interests. And then the NATO planners should not complain.

"But, I repeat, this is not our choice," the Soviet leader pointed out. "A peace based on mutual intimidation does not attract us. We prefer a peace under which the levels of armaments become lower and lower, and the scale and quality of cooperation in all fields grow and are improved.

"The Soviet Union is for agreements capable of moderating the sharpness of the military confrontation between NATO and the Warsaw Treaty countries. These aims are served specifically by the proposal calling for a conference on military détente and disarmament in Europe. The question of such a conference is being discussed at a meeting of representatives of 35 states in Madrid. The Soviet statement on its readiness to spread confidence-building measures to the entire European part of our country was a big step designed to clear the obstacles blocking the convocation of such a conference.

"Provided, of course, that the Western states also take a similar step," Brezhnev continued. "But they, for no obvious reason, pretend to keep forgetting about it. If the Western states are not prepared to say now what their reciprocal step to extend the zone of confidence-building measures will be, they could give their reply not in Madrid but directly at the conference.

"A movement against the deployment of new American missiles and for the earliest beginning of talks with the Soviet Union is now growing in the countries of Western Europe. Many statesmen there are aware of the need to preserve détente. More and more people realize that a policy of refusing to have talks and a reliance on military force is a policy renouncing common sense," the Soviet leader concluded. ■



JOURNEY TO THE TOP OF THE WORLD

By Dmitri Shparo

Loosely translated from the Russian, the banner over the lucky seven says, "Way to go!"

In the summer of 1979, seven men completed a remarkable 76-day journey by skis from Henrietta Island off the coast of Yakutia to the North Pole. Dmitri Shparo, the leader of the expedition, describes the group's experience.

CAPE CHELYUSKIN is the far northernmost frontier of Europe and Asia; it's not quite at the North Pole. The cape was named in honor of Semyon Chelyuskin, the navigator of the Great Northern Expedition that Russia fitted out in the early eighteenth century. A huge block of white quartz forms a natural monument on the cape. Next to it stands the monument to Chelyuskin built by the famous Norwegian explorer Roald Amundsen. The monument is made of black shale slabs and commemorates the heroic persistence and unfailing energy of the Russian navigator. Amundsen himself taught us a great deal. [He was the first man to reach the South Pole—on December 14, 1911.—Ed.]

On this historical cape, in May 1970, while we were meditating upon Amundsen and Chelyuskin, it occurred to us that we might be able to ski from the coast of the Soviet Union to the North Pole. Why not set up an expedition that would prepare the passage and then make it? In short, it was on Cape Chelyuskin that we resolved to reach the North Pole.

So let me tell you how we got to the top of the world. There were five of us on skis during our vacation on one of the most complicated cross-country routes in the cold tundra of the Taimyr Peninsula. Filled with wonder and surprise, we cautiously skied on the firm ice of the Laptev Sea. We explored the Komsomolskaya Pravda Islands, where a polar station operated in the thirties. The station, like the archipelago, was named after the largest Soviet newspaper for young people—*Komsomolskaya Pravda.* Then late one sunny, frosty, long polar day, we completed the 500-kilometer passage to Cape Chelyuskin. Spellbound, we watched the wind pick up the snow and carry it north.

At the time *Komsomolskaya Pravda* was celebrating its forty-fifth year. For the occasion we presented to the editors photos and rocks from the far-off archipelago. We had numerous talks, and they boiled down to a simple question: ▶

The arctic regio
took their toll
early polar explore
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along the deserte
shores. Above: Th
Arctic Ocean is perha
the only one that ca
be crossed by foot eve
on warm summer day
Along the coast, howeve
there are numerou
patches of open wate
and the ice floes ar
in constant motion

On the islands of Hercules and Popov-Chukhchin, the *Komsomolskaya Pravda* Expedition discovered traces of the Rusanov Expedition that mysteriously disappeared in 1913. The anchor probably belonged to Alexander Kuchin, captain of the *Hercules*. The owner of the leather case, which has been in permafrost for almost 70 years, is still unknown.

Back in 1900 Russian polar explorer Edward Toll stored food in the permafrost near the Middendorf Strait so that he could travel with dog teams deep into the continent of the Taimyr Peninsula and along the coast. For some unknown reason, he never used the provisions. In any case, Toll unwittingly initiated an experiment that was continued by Shparo's group to determine how long foodstuffs can be preserved in permafrost before they lose their taste and food value.

Would we go farther? And our answer? Yes, of course.

And thus, the paper organized a public polar expedition as we called it. What does the word public mean here? It means that people were working on it during their leisure time. For example, I am a mathematician, a fellow at the Moscow Institute of Steel and Alloys. I give lectures to students. Nobody paid me to be a member of the expedition and lead it, traveling as I did, on my vacation time.

The expedition was also termed a scientific-sporting expedition. I don't think sporting needs an explanation. In scientific terms, though, the purpose of our expedition was to study both the individual (his psyche, nervous system and physical state) and the group as a whole, as a collective (the dynamics of relations within it, the role of the leader, and the like), as well as food rations and equipment in a ski crossing at high altitudes.

Our scientific leader was Academician Oleg Gazenko, director of the Institute of Medical and Biological Problems. (Academician Gazenko is a member of the American Space Medical Association.) As soon as we were accepted as members of the expedition, we were put under the care of doctors and examined before and after our journey.

I'll never forget the day of April 30, 1979. We had another 500 kilometers to traverse (a third of the trip) before we reached the Pole. On that day we saw an airplane above us and an unexpected box dropping from the sky. As hungry and as far away from civilization as we were, we hoped that it contained something nice and homemade for us to eat. The box turned out, however, to be full of psychological tests.

In 1971 we were in Severnaya Zemlya (North Land), and the next year we stepped on the drifting ice fields of the De Long Strait, crisscrossed with black channels and currents, which separates Wrangel Island from the continent. In the early 1900s American Captain Bob Bartlett, master of the *Roosevelt,* crossed the strait to rescue people on the island. He went with an Eskimo named Kataktovik, seven dogs and a sledge. Bartlett wrote that he had to call forth the experience of those great treks with Admiral Robert Peary and numerous other ice journeys to negotiate the open water. Now it was our turn to cross the treacherous strait. And the question of principle—Is it possible to ski on drifting ice?—we answered in the affirmative.

Four years later we made another leg of the long ski trek. Leaving the northern spits of Wrangel Island, we entered the open ocean. In 20 days we reached the drifting Soviet station called North Pole-23. The linkup was difficult for we were being carried by the ice, and the habitable ice floe was also drifting. We sighted the little yellow houses on the floe only at a distance of one kilometer. The Arctic had never seen such a crossing. Some have gone by dog sledge, by dirigible, by plane, parachute, submarine and icebreaker, but no one had ever gone before on skis.

How were the expedition members selected? Amundsen used to say that it was never a waste of time to select the right people. I knew full well that it was difficult to create a collective, but I now believe that a team, a collective, is formed by people working together.

The expedition required perseverance that not everyone was up to. During the dangerous crossing of the De Long Strait in 1972, four of the seven who were to start for the North Pole in 1979 became close friends. In 1976 two more participants joined the group. All of them were young Moscow scientists and experienced cross-country skiers.

After we returned victorious from the Pole, people who met us in Moscow joked about the lucky seven. Where did the seventh man come from, the one who brought us luck?

Well, I'll tell you about it. My story begins with a letter that *Komsomolskaya Pravda* received in 1975. Let me back up for a moment. The newspaper that sponsored the expedition carried many articles about us, about the Arctic, about the romance of the trip, about the great and fearless pioneers of the Russian North and heroes from our history. And of course the paper got numerous letters from readers. One letter came from the little town of Lepsy, which is located in Kazakhstan.

Vasili Shishkaryov, a young worker, wrote that he had been following our expedition for a long time and that he wanted to join us on our journey to the North Pole. I answered him pointblank that there would hardly be room for him. We all had our jobs, and on top of that we trained regularly and prepared for the trip. "How could you join us? And in general, what can you do? We need a radio operator and a navigator," I wrote to him. "We will select those who are prepared, not those who want to take a walk to the North Pole."

He continued to write to us. We learned that he had done some fantastic things. All alone, on skis, he crossed Lake Balkhash in winter, and he slept two entire winters out-of-doors in his backyard!

"Well, all right, we'll take you to the Arctic in the summer," I promised him. But then Vasili became ill. "Come to Moscow, we will cure you," I invited. But he didn't want to come when he was sick. He didn't need any help. Well, then we got angry. "Take it or leave it," we said.

Six months later he called me at home and asked if he could join in the training. I was flabbergasted. "Where are you?"

"In Moscow. I got a job with the city's Roads and Urban Improvement Administration. May I join you?"

"Okay, come on over." I shrugged my shoulders.

Evenings, when he was not busy training, he went to a radio club to study the Morse code. We made him reserve radioman. Then it turned out that we had one too many radio operators for the expedition, but we were short of navigators. So Vasili had to study trigonometry and maritime astronomy to become a reserve navigator. Shishkaryov saw to the clothes, the tents, sleeping bags, stoves and all the other equipment. Thus he became supply chief No. 2.

Six of us were preparing to go to the North Pole, but everyone said, "Let's take Vasili." So a big gusset was sewn into the tent, and the 10-section frame was turned into a 12-section one, and the foodstuffs were rationed for seven. Did Vasili find us? Or did we find him?

On our way to the Pole I learned that he wrote poetry too.

Can People Live on Drifting Ice?

Sometime after we returned from the North Pole, Radio Moscow made the following proposal to its American listeners: "You may ask any questions of the conquerors of the Pole. They will answer them, and, being a competent jury, they will choose the most interesting questions to receive first, second and third prize."

Many of the questions were interesting. For instance, Odonell Rosales, age 11, from Union City, New Jersey, wrote that he had received a short-wave radio for Christmas. He heard about the contest and wanted to know what foodstuffs and drinks the team had taken along.

We were somewhat confused by the question. The only liquid that we carried was alcohol, but it was for the stove and no other purpose. We melted snow to make coffee and tea. Odonell was the youngest participant in the contest—that fact alone won him a prize.

The winner of the contest, Tony Humphill from Salem, Oregon, asked if the members of the expedition succeeded in finding out if it was possible for people to live in the Arctic.

We trust that the scientific value of the expedition substantially outweighed its sporting and record-breaking nature. Both Yuri Khmelevsky and I are scientists. We're concerned about the problems of our planet. Drifting ice, which occupies four per cent of the Earth's surface, is still a blank.

Our means of transport was skis. The weight of our backpacks at the start of our journey varied from 45 to 51 kilograms. Now, to sum up our three crossings on drifting ice, we have concluded that we must classify ice from a pedestrian's point of view, systematizing the obstacles and describing methods of overcoming them. The most important conclusion we arrived at is that people can live and move on skis on ocean ice.

Michael de Vill from Alexandria, Virginia, wrote that he was sure that we saw some incredibly beautiful sights on our journey. He went on to write that today there is a constant nuclear threat from both the Soviet Union and the United States and that there is the potential danger of destroying within several hours what nature took millions of years to create. He asked if as a result of the expedition the team members did not feel that they must personally contribute to the relaxation of tensions between our two countries, averting the danger for nature and, for that matter, for life. Michael de Vill managed to express our ideas with utter accuracy.

Another question came from Doug Wilson in California, who asked if the team members believed that their common socialist world outlook had helped them in their expedition. He wrote that he had read of many instances of discord in Western mountaineering expeditions.

Three hundred and sixty meridians converged under our feet on the North Pole. We were happy to be standing there, under the Red Flag, presenting our victory to our country, to whose frontiers almost half the meridians run. We were well aware that under our feet were the meridians of Scandinavia, Canada and Alaska. I think that our world outlook was expressed in the idea of the necessity of peace on Earth.

The last letter I will cite came from Hans Steinbesser, who lives in Denver, Colorado. He asked if we had found any ▶

remnants of expeditions that had made attempts to reach the Pole before us, such as food or buildings. He also wanted to know what was the most frightening thing that happened during our passage.

Of course it is just about impossible to find anything on drifting ice. During the 76 days of our passage we did not see one object remotely connected with modern civilization. We started from a small island called Henrietta. It has a remarkable history. The island was discovered 100 years ago by an American, Lieutenant George Washington De Long. His steamer, named the *Jeannette,* with 33 explorers on board, left San Francisco Bay on a sunny day in July 1879 and headed for the North Pole. De Long himself died of starvation in the delta of Siberia's Lena River, but his "ice journals" were found and became a most eloquent record of human bravery, dignity and integrity.

De Long and his men sighted land after being trapped in ice for 14 months. They discovered three islands: Jeannette Island, Bennet Island and Henrietta Island. De Long sent a group of six men, with chief engineer Melville in command, to Henrietta Island. According to De Long's diary, they could see the utter impossibility of accomplishing a passage by means of boat, as they were fast drifting by. Melville decided to abandon the boat, along with the gear and most of the provisions, and make a dash for the land across the broken ice, jumping from piece to piece. It was a hazardous experience, their escape from Henrietta Island and the recapture of the drifting boat and provisions. However, they left the latter on a secure and elevated floe. Then with the tent, guns, instruments and one day's provisions mounted on the sledge, they started at a gallop for the island. When they reached the broken ice, the dogs refused to follow the leader, and they had to be dragged across. Melville's passage, a test of endurance, skill and courage, is to be commended.

While we were on Henrietta Island, we very much wanted to find traces of Melville's stay there, but in winter this is impossible. I believe that our start was worthy of De Long's description. A stream of broken ice was doggedly drifting down the island like lava erupting from a volcano. This was the most difficult part of our journey. It proved to be a moral test for each of us individually and for all of us together.

A monument stands on the spot where De Long died. In 1974 Young Communist League members from the arctic port of Tiksi came here on skis. They came to put up a new monument—a stone sail with a small ship on top—in honor of De Long.

Edward Toll's Treasure

Russian geologist Edward Toll (1858-1902) accomplished many feats, but the most important quest for him was "Sannikov Land," west of the archipelago discovered by George De Long. [The mysterious island first reported in 1811 by Yakov Sannikov was later proved not to exist.—Ed.]

The year was 1900. The Russian polar expedition on the schooner *Zarya* (*Dawn*) led by Toll was moving down the Taimyr Peninsula. This was the first time that a Russian ship tacking on the ice found itself on the beam of Cape Chelyuskin. When exploring the end of the continent, Toll supposed there must be land farther north in the sea. And indeed, a vast archipelago lay 60 kilometers away. It was only 12 years later that its dotted line appeared on the maps. Today it is known as Severnaya Zemlya (North Land).

What was it? Luck? Chance? Just imagine, in his haste to reach "Sannikov Land," Toll passed by actual islands that had not been discovered yet! The leader of the expedition made no attempt to look north. The mythical land that many scientists believed in at the time, beckoned him.

We remember that at the risk of his life Melville reached Henrietta Island. Then, probably with equal difficulty, he left it to return to his ship. The passage of Edward Toll and his three companions to Bennet Island, lying nearby, must have been just as dangerous. In 1902 the explorers summered on the island. In November, with the polar night setting in, the four brave souls tried to make their way back. They perished, and numerous rescue expeditions found no trace of them.

We know from Toll's diaries that the *Zarya* passed its first winter on the western coast of the Taimyr Peninsula. Always prepared, Toll stored food in the permafrost so that he could travel with dog teams deep into the continent and along the seacoast. The first storehouse was on the coast of Middendorf Strait.

> Here I ordered them to bury a box with 48 tins of canned cabbage soup, a soldered tin box with 6 kilograms of dried bread, a soldered tin box with 6 kilograms of oatmeal, a soldered box containing about 1.6 kilos of sugar, 4 kilos of chocolate, 7 bars and 1 brick of tea. . . . The spot was marked with a wooden cross.

The *Zarya*'s crew never used this first storehouse.

Now let us return to the polar expedition of *Komsomolskaya Pravda.* The 1972 voyage across the De Long Strait convinced us of the feasibility of our plans, and in the summer of 1973 we continued preparations, dispensing, naturally, with our skis. We tested our transmitters, solar batteries and boats in the inaccessible and uninhabited regions of the Taimyr Peninsula. But while we were preparing to travel to the remote coasts of the Kara Sea, we could not help feeling that in the summertime when the tundra thaws and the rivers swell, there would be almost no one there. So we decided to make a historical and geographical search.

One group went in search of the Toll storehouse. Its leader was Yuri Khmelevsky. I am very happy to say that among the four lucky ones who uncovered the provisions was my wife Tanya.

They found a fallen pole, part of which stuck out of the ground like a stump. The pole bore the inscription Zarya 1900. Nearby was another one, Zveroboy 1929. Was the food store lost?

They began excavations at a depth of 120 centimeters and saw boxes. At supper that evening they tried the dried bread from 1900 and found it delicious. They took the smallest box, which weighed 6.5 kilos, with them as evidence of the existence of the storehouse and left the rest where it was.

They replaced the fallen part of the Zarya pole, and next to it they dug in a stump with a sign that said: "Historical marker. Found and restored by the *Komsomolskaya Pravda* Expedition, 1973." At the foot of the marker they placed a stone. Khmelevsky made a speech. A volley from rockets and guns was fired. It was a new monument to the explorers of the Arctic.

Polar explorers and scientists came to *Komsomolskaya Pravda*'s offices to hear our report on the expedition. Ivan Papanin, the patriarch of Soviet polar explorers, opened the box that contained Hercules oatmeal. Of all the cereals these flakes are the most delicate and should be kept no longer than five months (or so the label on the boxes they are sold in says). And these had been lying in permafrost for 73 years! Experts on food preservation, nutritionists and doctors jumped at the find. They became even more excited when laboratory tests showed that the oatmeal was not only suitable for eating, but had retained its chemical composition, nourishing properties and vitamins as well.

The following year a helicopter was hired by the *Komsomolskaya Pravda* Expedition and food manufacturers to fly to Toll's storehouse and take part of it. Some food was left for 1980, 2000 and 2050, and a whole assortment of modern products was added to keep the tins company in the cold. Toll's chance experiment had turned into a minutely planned scientific test to discover the possibilities of preserving foodstuffs in permafrost.

Antarctica Next?

Do you plan to go to the South Pole? This was the first question many people asked us on our return from the North Pole. At the time we had no such intention. And now? We would like to make another long-distance ski crossing on drifting ice, possibly to the Transarctic. Well, having visited the top of the world, one naturally turns his mind to the bottom. We are gradually getting used to the idea of going to the South Pole, which attracts us like a flower would a butterfly, and we have already begun to read up on Antarctica.

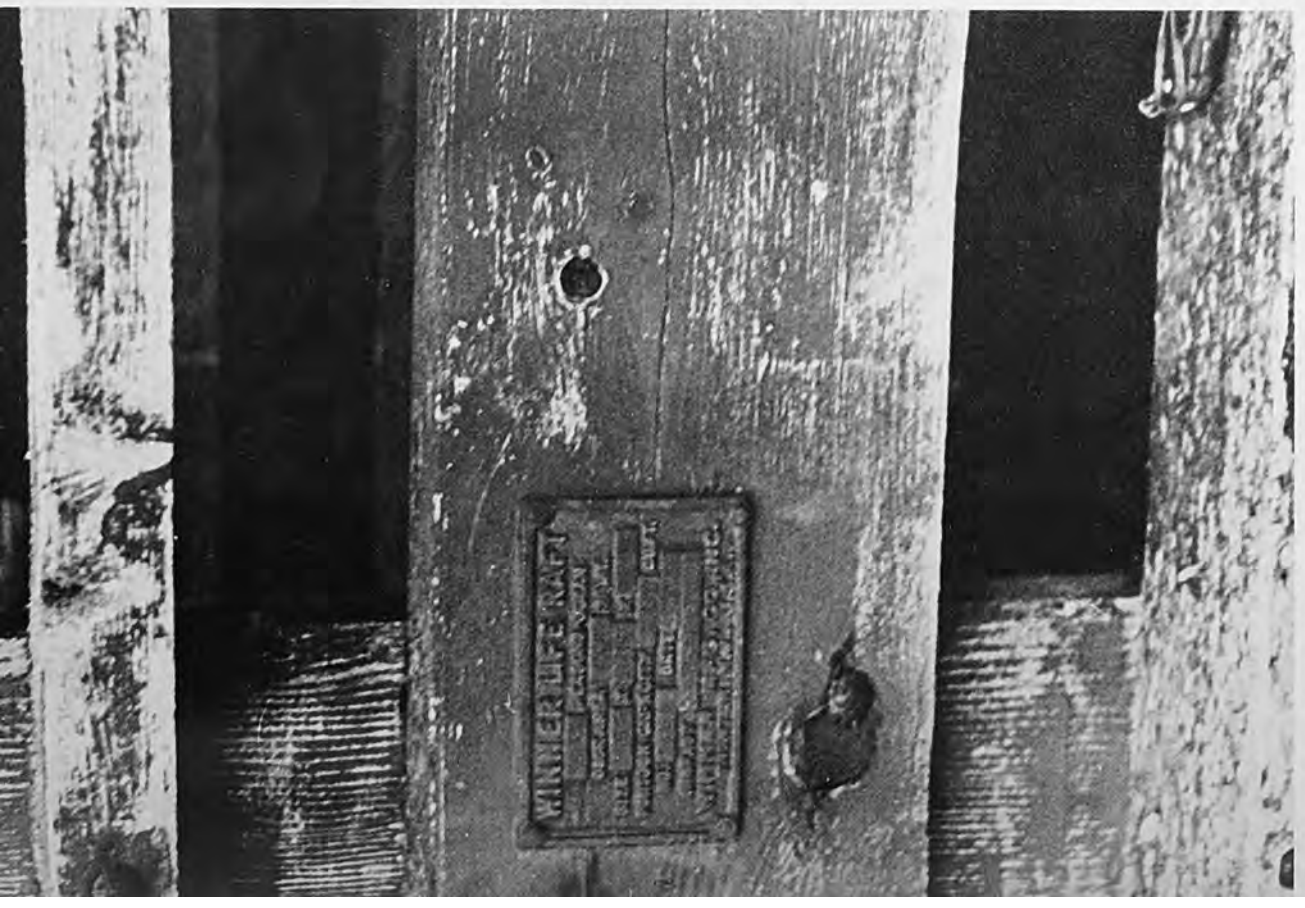
Perhaps we will again travel over the ice. Perhaps not. But one thing is absolutely clear—the historical and geographical work undertaken by the *Komsomolskaya Pravda* Expedition will be continued.

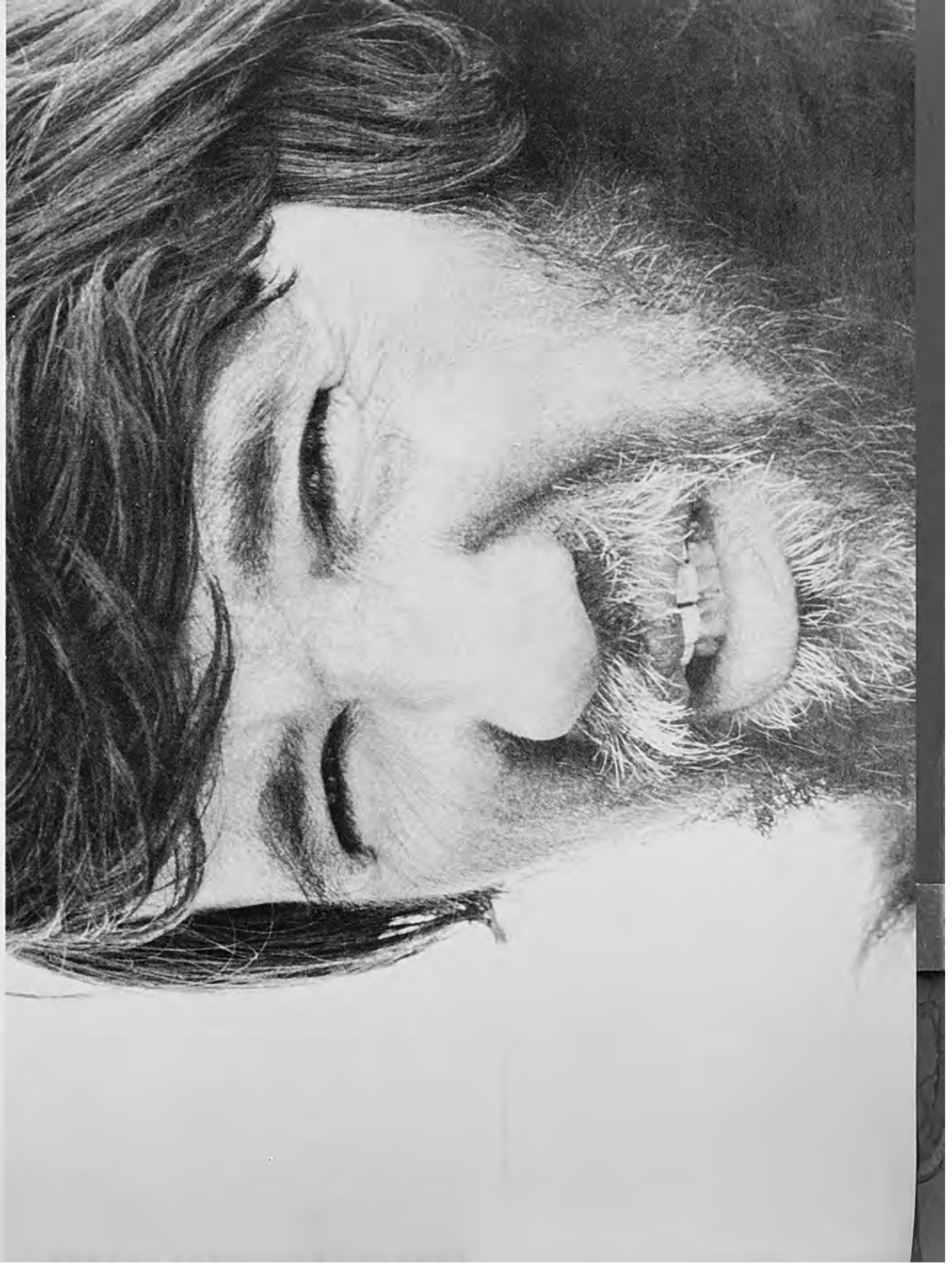
Last summer we found a big box of candy from 1941 on one of the islands in the Kara Sea. The delicious chocolate reminded us of another find in the Pyasin Bay on the southern coast of North Zarzara Island. We called it the "American Life Raft." A list of finds we have drawn up (to be published later in a collection called *Chronicles of the North*) gives the following description:

> Size approximately 3 x 3 m. In perfect condition. It has a table with the inscription: *Winner life raft, 18 persons, ocean deck area 15 sq. ft. Size 9'6" x 8'6" x 3'. Pontoon capacity 58 cu. ft. No. 1185. Date 4.30.42. Insp. by . . . C.M.U.S.I. Winner Mfg. Co., Inc., Trenton, N.J. USA.* Evidently it belonged to one of the ships that the Soviet Union received during the war under the Lend-Lease Act. Several ships were sunk in this area. This find will probably help us to learn about the fate of the Soviet sailors.

Unfortunately, we have been unsuccessful so far in our attempts to find out anything about the little raft. But who knows? Perhaps a SOVIET LIFE reader can determine which ship it belonged to by looking through archives. And maybe an American museum will take an interest in the design and photos of this life raft. ■

This American li raft, discovered by th members of th *Komsomolskaya Pravd* Expedition along th shores of the Arcti Ocean, evidentl belonged to one of th ships that the Sovie Union received unde Lend-Lease durin World War II. On th facing page in the to left corner is th manufacturer's plat on the raft. It say the raft was made in 194 in Trenton, New Jerse Perhaps a SOVIET LIF reader participated i its production and coul help answer this questio What ships had such rafts Facing page, top righ corner: The shorelines of th Arctic Ocean are sti full of unanswered mysterie Who left this woode sign here, thousand of kilometers away fro human habitation? Thi is just one of the man riddles Dmitri Shpar (below) and his friend are trying to solv


WINNER LIFE RAFT



A PROFI
OF MOSCOW STATE UNI

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RSITY

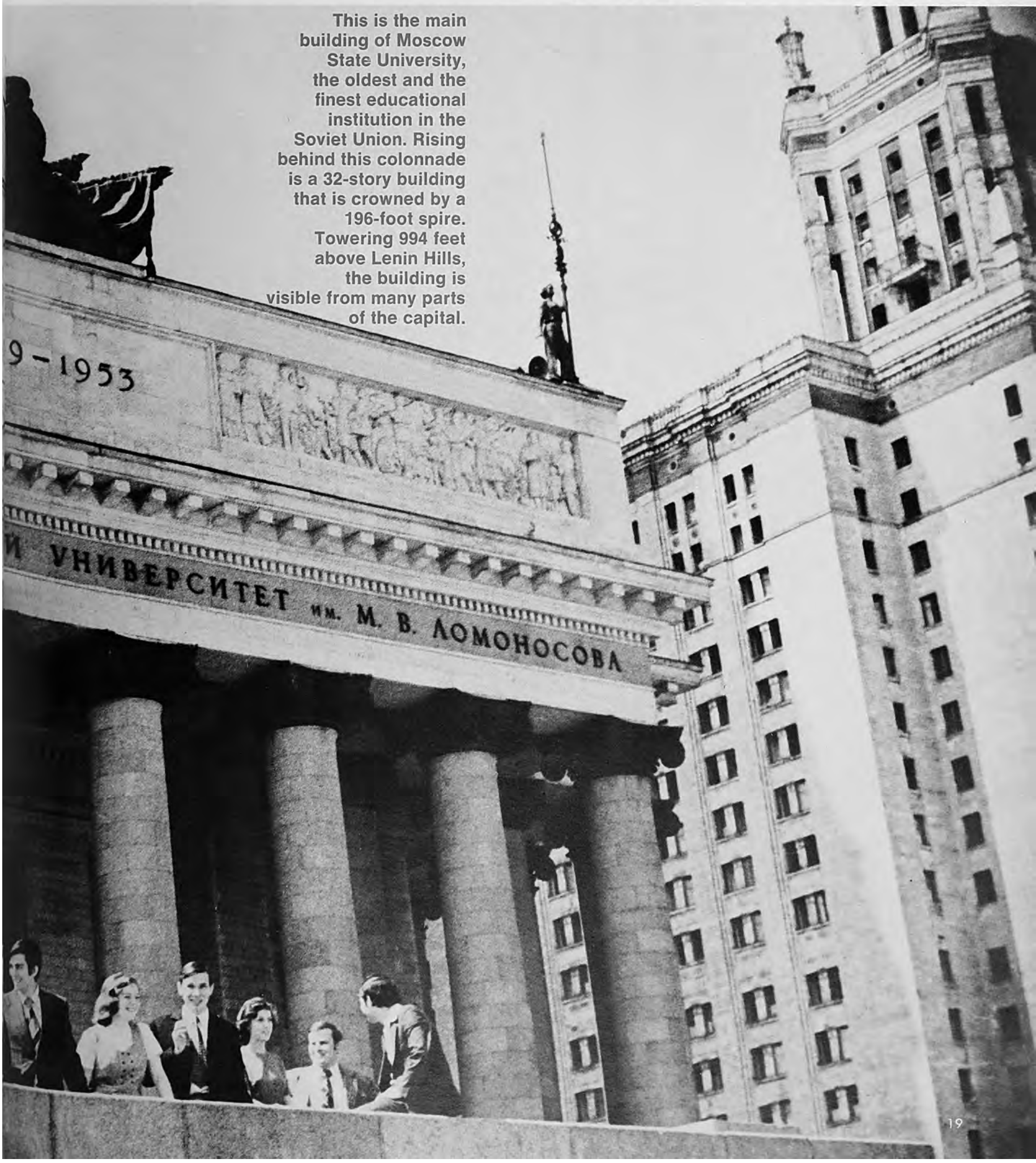
By Eduard Alesin

MOSCOW STATE UNIVERSITY (MSU) was founded in 1775 by Russian scholar and encyclopedist Mikhail Lomonosov. Even back then he tried to make education accessible to everyone. "Students who excel should receive honors regardless of who their parents are," he wrote.

From the very beginning, Moscow University was one of the foremost Russian educational institutions. Literary figures among its graduates include Mikhail Lermontov, Ivan Turgenev and Anton Chekhov. Among the great names of lecturers there were Nikolai Zhukovsky, the father of Russian aviation; Pyotr Lebedev, one of the founders of experimental physics in Russia; Ivan Sechenov, the noted physiologist; and Dmitri Mendeleyev, the world-famous chemist. Political thinkers like Alexander Herzen and Vissarion Belinsky were graduates of the university too.

By the turn of this century the university had four departments and a few hundred students. In the twenties it began to grow rapidly. The construction of a 32-story high-rise on Lenin Hills in the fifties was an impor- ▶

This is the main building of Moscow State University, the oldest and the finest educational institution in the Soviet Union. Rising behind this colonnade is a 32-story building that is crowned by a 196-foot spire. Towering 994 feet above Lenin Hills, the building is visible from many parts of the capital.



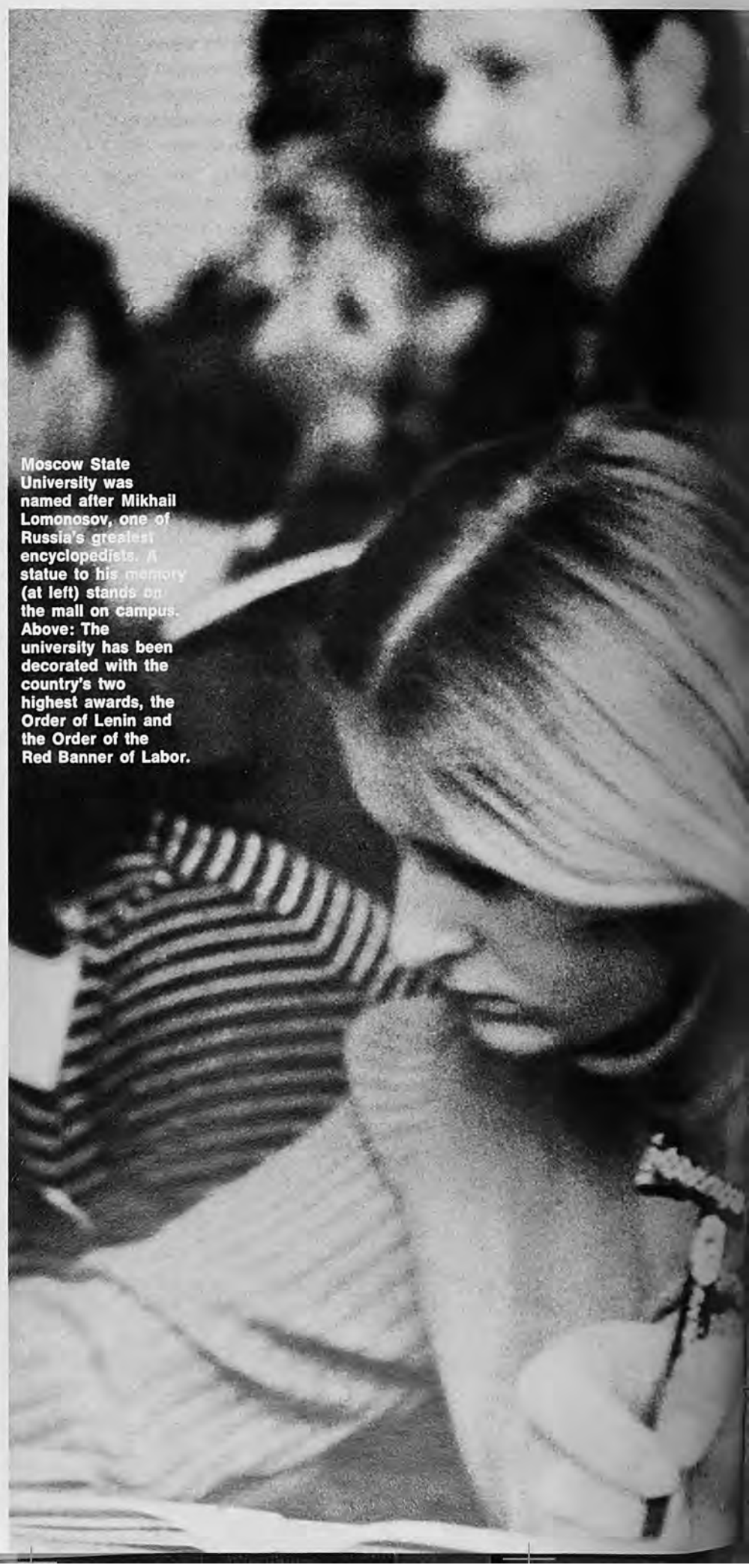
tant event in MSU's history. The huge building houses auditoriums, reading rooms and labs. MSU students joke about not having to go off campus because everything they need is right there—from shops to theaters. However, that's not quite true. There are several eighteenth and nineteenth century buildings that are still used in downtown Moscow.

Here are a few facts and figures on today's university, which is sometimes called a city within a city. The student body numbers 30,000. The university has 19 departments. There are more than 100 academicians and almost 1,000 full professors and doctors of science on the faculty. MSU has over 300 laboratories, about 170 study rooms, 3 museums, 4 observatories, a botanical garden and a library with 6,500,000 volumes.

The distinguishing feature of this higher educational institution is that it gives students excellent grounding in the professions as well as a broad general education. No matter what a student is preparing to become—physicist, chemist, biologist, cyberneticist, philologist or economist—he or she will receive a well-rounded education.

According to the university's records, one out of five is an honor student. Moreover, more than half the students get grades that are higher than satisfactory. For those who fall behind, special commissions are always ready to help. If necessary, fellow students help those who are not making headway. Student groups also make recommendations for curriculum changes. For instance, a poll was taken of students in the Chemistry Department for the purpose of discovering how much time their homework took and how they evaluated the quality of the lectures they attended. The poll showed, among other things, the need for a seminar on mathematical analysis, and it was included in the schedule at the proposal of the students. As a result, the majority passed the chemistry finals with flying colors.

On top of all that, the commission on education organizes tutorial hall



Moscow State University was named after Mikhail Lomonosov, one of Russia's greatest encyclopedists. A statue to his memory (at left) stands on the mall on campus. Above: The university has been decorated with the country's two highest awards, the Order of Lenin and the Order of the Red Banner of Labor.

for students preparing for tests or exams. During exam time tutoring services are available in the dormitories every day.

Students at Moscow State are encouraged to do research. Every other student goes in for research in one field or another. In the junior year the research work is principally conducted in groups, of which there are more than 250. Thus, the students have an opportunity to get acquainted with the research conducted in different departments and to choose an area that appeals to them. Seniors work on their own and participate in conferences and symposiums. Close to 800 articles and reports written by MSU students are published every year.

Students take an active part in research and development work that has practical application in the nation's economy. For many years now the university and the ZIL auto-making plant, Moscow's largest car manufacturer, have had an agreement on technological cooperation. One project that resulted from a diploma paper of a chemistry student reduced the time necessary to analyze cast iron at the plant's laboratories from two days to 30 minutes. The use of lasers for welding and cutting metals, a new technology for manufacturing rubber and many other innovations that reduce labor and enhance quality have been introduced in the ZIL shops by student researchers.

The university also makes a significant contribution to agriculture. It organizes volunteer groups that go out into the Non-Black Soil Zone, a large region in the northwestern part of Russia that has poor soil and a severe climate. MSU students help biologists, soil experts, geographers, economists, chemists and geologists draw up soil maps and develop new chemicals to protect crops and increase yields.

During summer break the university offers numerous excursions and tours. The History Department, for instance, has undertaken expeditions to the Far North several years in a row. Students of ethnography gather material about the life and cultural heritage of the northern peoples. ▶

They are interested in how the people live, their rituals, customs, household utensils and clothing. Their finds fill the archeological and ethnographic museum of the History Department. Students in the Philology Department set out for far-away places to collect folklore.

More than 1,000 students are involved in conservation efforts. They go on outings to study rare plants and animals and take water samples.

Student research extends beyond the borders of the Soviet Union. Students in the Geography Department, for example, are compiling a travel guide to Moscow, Berlin and Sofia with students from the other two capital cities.

MSU students are also active in helping high school students select a profession. After school many teenagers drop in for minicourses organized at 13 of MSU's departments. These minicourses for high school seniors are conducted by undergraduate and graduate students. Geography, chemistry, mathematics, Oriental studies and journalism are the most popular subjects.

At the School of Journalism, for instance, youngsters learn the basics of reporting and the secrets of writing better copy. They meet with well-known media people, essayists and satirists. They get on-the-job training at the editorial offices of Moscow's leading newspapers. Of course, they don't all go on to become professional writers and editors, but those who so desire can test their abilities and decide for themselves whether it's the profession for them.

One school at MSU does not have required attendance. It's the Mathematics School of Correspondence, which has an enrollment of more than 14,000 high school students. The teachers are undergraduate and graduate students in mechanical engineering and mathematics. They compile the programs that are mailed to the students and later check their work.

These programs for youth offer guidance in the choice of professions and encourage the most talented to apply for admission to the university. The clubs on various subjects that MSU students supervise in more than 50 of Moscow's schools serve the same purpose.

A young student sets off on the adventure of learning. Right: Academician Andrei Kolmogorov, a popular lecturer at MSU. Top, far right: There are full-length statues and busts everywhere on campus. They are the work of 70 sculptors.

MSU students are encouraged to choos a field that interests them and begin grou research in the university labs during their junior year. Some may choose astronomy, like this young woma (at left), or physics (facing page, top) or anthropology (facing page, bottom)

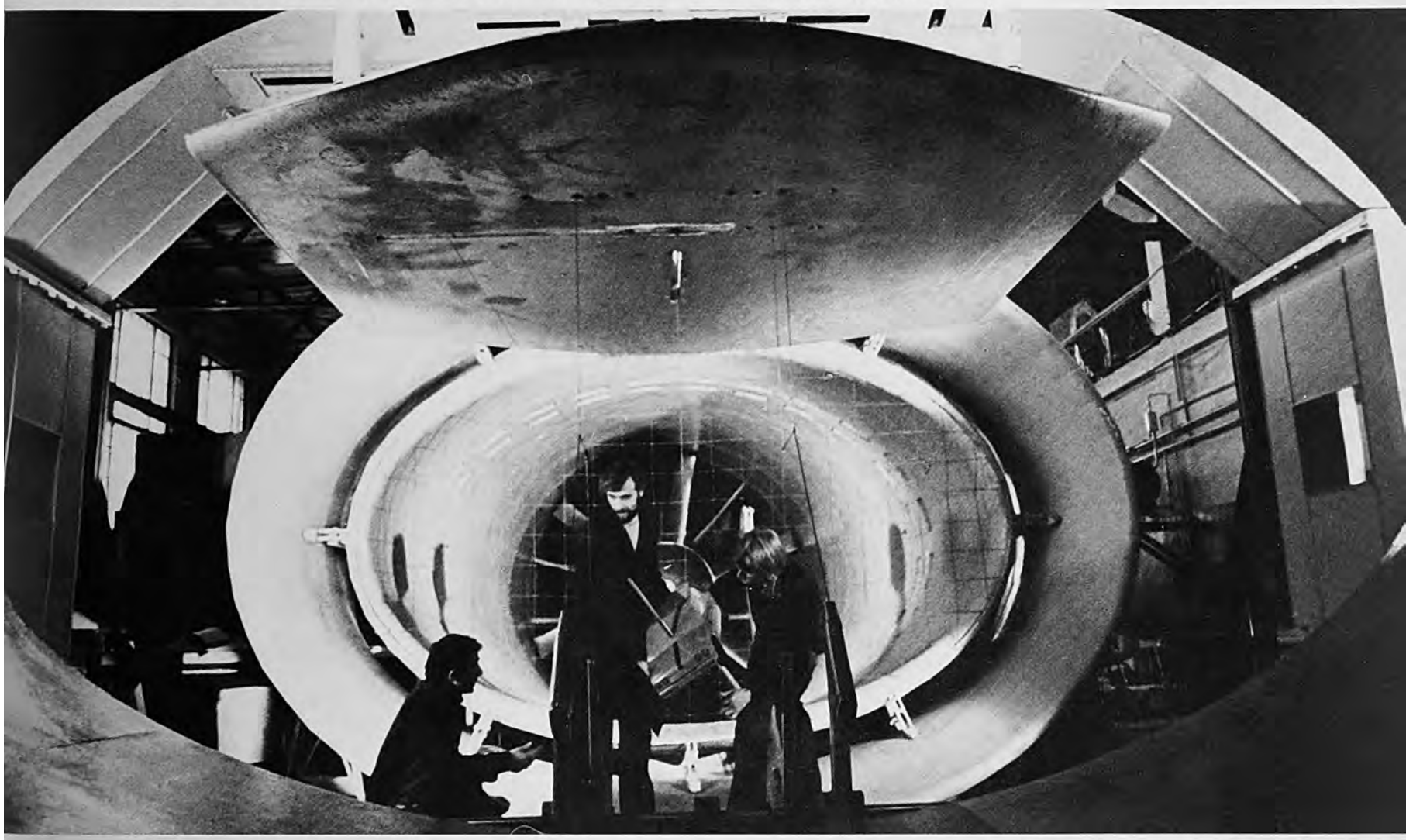
MSU students also organize contests in physics, chemistry, mathematics and foreign languages for schoolchildren. The fact that about half the young people enrolling at Moscow University each year are winners of these quizzes speaks for their popularity.

Students are famous for their love of active forms of rest, and the university offers just about every kind of recreation. It has 12 gyms, 2 stadiums, numerous swimming pools and 20 playing fields as well as campsites on the Black Sea coast and in the countryside near Moscow. There are clubs for almost every sport at the university. Many winners of the Olympic Games, Universiades and USSR championships as well as world and European titles are MSU graduates.

Moscow University's amateur art groups are extremely popular, and not only on campus. Muscovites flock to productions staged by the MSU Theater. Outstanding stage and screen directors like Sergei Yutkevich, Mark Zakharov and Rolan Bykov have supervised the theater at different times. Sergei Yutkevich, People's Artist of the USSR, summed up the theater's philosophy this way: "It should be poetic and political." Adhering to this philosophy, the theater has tackled plays like *The Resistible Rise of Arturo Ui* by Bertolt Brecht as well as modern Soviet plays on topical problems.

Not all the student actors leave the university theater after graduation. Vsevolod Shostakov, for instance, went from student to professor all the while remaining an actor in the company. Many former student actors have gone on to become professionals.

MSU has another theater group called The Comedians, which stages satirical shows bubbling over with student humor. The university also has a choir that specializes in old Russian songs. Although the choir members sing on stage, they prefer old buildings like the Alexander Nevsky Monastery in Leningrad or the Znamensky Cathedral in Moscow. The acoustics and the architecture make the university choir's performances particularly impressive. And finally, the Russian Souvenir Dance Ensemble is equally popular. ■



STUDENTS RESTORE KIZHI

Text and Photographs
By Sergei Grigoriev

ALTHOUGH my student years at Moscow State University (MSU) are long past, I am still interested in where the teams participating in the "work semester" are plugging away. Incidentally, the idea was born within the walls of my alma mater in the late fifties.

The way it works is that students organize teams during summer vacations and go to different construction sites throughout the country to do useful work and make some money.

To this day, I continue to take part in the "work semester" in the summer months. The only difference is that now I do it with a couple of cameras hanging around my neck.

Several times I've gone to Karelia as a member of the Kizhi team. The group takes its name from an island in Lake Onega, which is in northwest European Russia.

In ancient times the tribes living in Karelia gathered on the island to celebrate pagan rites. At the beginning of our millennium the people of Novgorod built the first Christian Orthodox church there. In 1714 the Cathedral of the Transfiguration, a world-famous masterpiece of wooden architecture, was built in its place. The cathedral has 22 cupolas.

Today Kizhi is a very popular open-air museum. It boasts numerous original buildings erected without a nail. The town is being restored and is expanding constantly thanks to new structures that are being brought to the island all the time. I learned how it was done when I disembarked at Kizhi's pier.

Valeri Gubarevich, the team leader from the Chemistry Department at Moscow State University, disappointed me by saying that the students were not on the island, but on the "mainland," in the village of Ust-Yand, dismantling an abandoned wooden house for the museum. They planned to move the house soon.

Seeing my letdown, Valeri promised to take me to the place where the team was working. The next morning we went out on Lake Onega in a small motorboat. A magnificent view of the skyline opened before us from the lake. The island is low and flat. Because there are no trees growing there, it appears that the buildings are floating above the water. There were the domes of the Cathedral of the Transfiguration, the majestic belfry built in 1874, the bright little Church of the Intercession and the Kizhi cemetery. Nearby stands the Church of the Resurrection of Lazarus, which has been transplanted from the Murom Monastery. This church is perhaps the most precious structure in the whole outdoor museum. It is the only wooden building in the country that dates back to the fourteenth century. The island also has two eighteenth and nineteenth century Russian villages that are typical examples of northern Russian architecture.

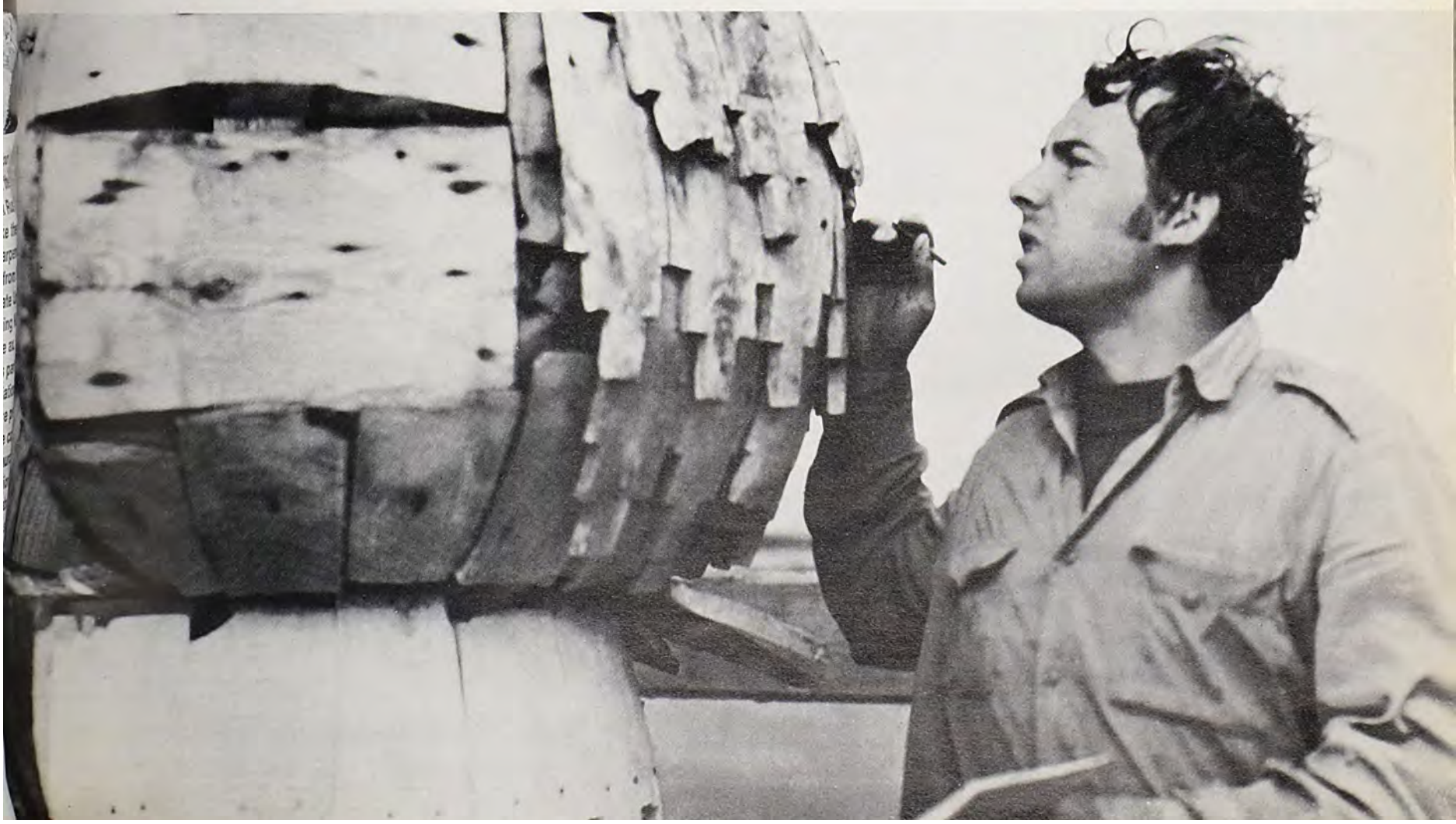
At the mooring several students from the Chemistry Department were waiting for us.

The village of Ust-Yand, which was probably abandoned at the turn of the century, looks like a cardboard stage set. Time has been unsparing to the two- and three-story houses made of giant logs. The roofs slanted inwards. The walls had sunk into the ground up to the windowsills.

Let me tell you a little about restoring wooden structures. After the buildings are dismantled and transported to the open-air museum, they are put back together again. The rotted fragments and lost pieces are replaced.

The building materials are prepared and aged as they were in years gone by. The students choose the most suitable logs at the nearest logging camp. They bind them into a raft and float it on the lake. The logs are dried for two years.

The only tool used by builders in the days of ancient Rus was the ax. Like the original master carpenters, the students from Moscow State University restoring Kizhi rely on the ax. Far left: As part of their initiation, young restorers are presented axes. The cupolas of the Church of the Intercession (facing page, above) are covered with skillfully cut squares of aspen.



More often than not it's the wooden roof that decays first, and most of the time it has to be replaced completely. For hundreds of years wooden boards were used for roofing in Karelia. But these were not just plain boards, they had grooves that the rainwater could run down. And that is a job for a skilled carpenter.

A massive hollowed-out log is placed at the peak of the roof where the two slopes meet. Preparing and raising this special log takes a great deal of know-how. But the most difficult job

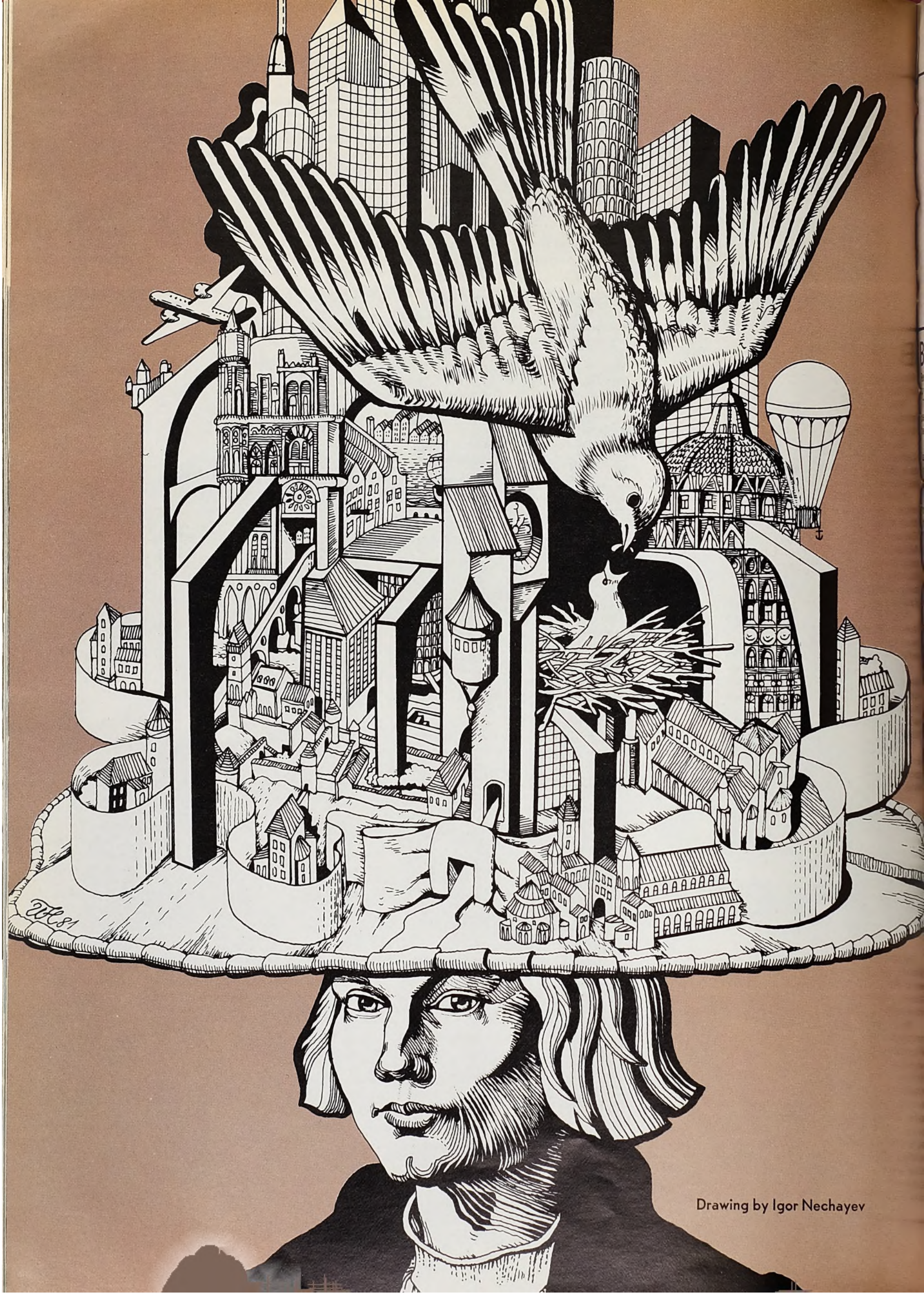
The 22-cupola Cathedral of the Transfiguration dates back to 1714. This masterpiece of architecture is surrounded by scaffolding for the time being while MSU students restore it.

is making the shingles that cover the cupolas of wooden churches in a scalelike pattern. The method of making them has long been forgotten. So the students and restorers had to do a lot of experimenting before they figured it out.

There are always more than enough students in MSU's Chemistry Department who are eager to spend their vacation working on Kizhi. Preference is given to those who know how to handle carpenter's tools. Team members are required to take a month-long course on restoration techniques as well as the fundamentals of ancient Russian architecture. On weekends both experienced students and novices undergo practical training at construction sites in Moscow.

The summers in Kizhi are usually hot. The sunrises and sunsets on the lake are exquisite. The flowers smell like honey, and the birdcalls are fascinating. I've been going to the island for eight years now, yet each time I see a new aspect of the harmony between the ancient architecture and its carefully protected environment. ■

Although there are few girls on the restoration teams, that doesn't mean their job isn't equally important. They saturate the wood with a chemical that prevents rotting and burning. Above: Tea from a samovar and homemade bread around a rough pine table—these are some of the memories the students will carry with them forever.



Drawing by Igor Nechayev

CONSIDERING ALL THINGS

By Sergei Leskov

For 20-odd years now the Green Patrol at Moscow State University has been studying the problems of wildlife conservation. The students research rare animals, determine the confines of their habitats, survey the local populations, make recommendations for the preservation of their natural environs and perform in-depth studies. In short, the students are trying to translate their ecological convictions into reality.

BY THE CALCULATIONS of the International Union for Conservation of Nature and Natural esources, one species or subspecies of animal, n the average, becomes extinct every year.

This is caused by the usual everyday activity of eople, which leaves the animals with no alterna- ve but to adapt or go away. But where?

Civilization continues to invade the forests. arge steppe areas are being plowed up. Cities e expanding. For reasons such as these, con- ervation efforts can no longer be deferred.

Coexistence of people and nature is one of the ost critical issues facing us all today. One group at knows full well the point in question is the reen Patrol at the Department of Biology at oscow State University. The group has numer- us duties (the students even take on poachers), ut for the moment we will concern ourselves with nly one aspect of its activity—the work of the una section.

Victor Zubakin is the head of the section. He as a candidate of science degree in biology and as one of the most active members of the patrol hile he was a student.

"What can we do," he asks, "so that people will ear not only the roar of engines, but also the ries of cranes? What can we do so they will see ot only airplanes in the sky, but also eagles and ea gulls? Our group is attempting to answer ese questions.

"Students are impatient. They get so involved research and then try to put the results into ractice as soon as possible. They try so hard to anslate their ecological convictions into reality.

"We are studying the rare species inhabiting ie forests around Moscow. We've made expedi- ons to far-off regions, too. The work is serious nd far from easy. It includes researching rare nimals and making regular calculations of their umber, determining the confines of their habi- ts, surveying the local populations, making rec- mmendations for the preservation of their natural nvirons and doing in-depth studies of the ources."

Destined to Perish?

Does this mean that animals are to become vic- ms, destined to perish, that their only refuges re to be reserves or national parks? Are scien- sts right in their assumption that an ecological isaster is inevitable?

MSU students say No. They cite the example of oose, which provided good, sturdy garb for the ussian army in the early nineteenth century, but as on the verge of extinction at the beginning of is century. Nevertheless, current statistics show at as a result of moose having been protected r decades, the forests of the Russian Federation re home for 750,000 today. For several years ow, 60,000 hunting licenses have been issued nnually to hunt these animals in order to restrain xtreme population growth. However, this is not ne case everywhere. In some places moose are ausing serious damage to forests—they eat the ark off aspens and root up young plants. In the forest areas around Moscow, where hunting is prohibited, the moose population has grown substantially. It would seem that with all the influence of human activity, they would have left these places altogether. But nothing of the kind has happened. In the parks and wooded areas near Moscow moose behave as though they were the lords and masters of all they see.

But is the moose only the exception that proves the rule? No, say my interlocutors, referring to ecology and drawing on their own observations. Far from being an exception, the moose is not even the most convincing example of animals adapting to human influence. Many forest inhabitants are so flexible that they don't mind living close to people. Take foxes and wolves, for instance. They have long since learned where danger may lurk so they can avoid traps. (Do you remember Lobo in the books of Ernest Seton-Thompson, the Canadian writer? He could never be caught!) They dig fearlessly through suburban rubbish and trash cans at camping sites.

A tractor putt-putt-putting away in the fields invites birds and animals to enjoy a meal of worms, grubs, insects and small rodents. The tractor is followed by whole flocks of rooks, jackdaws and crows and even a fox or two.

At out-of-the-way railroad stations where dried fish is sold, foxes know the timetable of the trains as well as the engineers. They sneak up to the tracks and patiently wait for the garbage containers to be filled with fish waste.

One of the most urgent problems of this whole coexistence predicament concerns airports. Birds interfere with landings and takeoffs.

Adaptation

The Green Patrol members have gathered a large card index of statements from experienced hunters that show wolves have developed remarkable intelligence. On a par with the most experienced hunters, they have mastered the distinctions of being hunted from cars and airplanes. They try to stay exclusively to the left side of the car, from where the driver finds it hard to shoot. They camouflage themselves in the shadows of rough terrain.

Conventional hunting is becoming more and more difficult. In order to keep dogs from following their trails, wolves and foxes, as a general rule, move along train tracks and paved roads. This trick can create real misfortune for hunters because many dogs get killed.

Certain ruses of wolves could be classified as wisdom. If they are being hunted without dogs, for instance, they make no attempt to run away, but lie quietly in the bush, letting the drivers go right by them. Then they calmly move in the opposite direction. (By the way, the same tactic is used by lynx and wild boar.)

The shooting of wolves continues. Over the past five years it has quadrupled to amount to 16,000 wolves a year. Despite the gory statistics, their number is hardly decreasing. While scientists and hunters were arguing about whether wolves should be killed, it appears that at present it is just about impossible to get rid of them, at least in the Soviet Union, where forests have been preserved. As long as there are forests, there will be wolves. They do cause harm. But that's another problem.

As for the birds, the gray crow, for one, always hides its nests in the forest. In Moscow, though, it sometimes builds nests in the most congested places—on Lenin Prospekt, near the Bolshoi Theater or the Pushkin Monument. The logic is quite simple: The greater the crowd, the less the danger of the nest being destroyed.

The gray crow ignores cars and buses and trucks completely. Often when driving down a road, one can see the motion of the car ruffling the feathers of a crow making itself comfortable in its nest. According to ornithologists, the number of crows' nests in the capital has multiplied almost 10 times in the last few decades! What's more, the gray crow is ceasing, slowly but surely, to be a migratory bird, preferring to live in Moscow year-round. This also creates problems for the city authorities.

The Intellectuals of the Forests?

Thus, many animals adapt themselves to new conditions, especially those that have lived side by side with people for many long centuries. Students at MSU's Biology Department are participating in a study of the intelligent activity of animals. On the basis of their research, they have arrived at the following conclusion: The brown bear is the champion when it comes to intellectuals in our forests. (Do you recall Seton-Thompson's bear Johnny?) Moose, foxes, wolves, boar and deer are also clever enough to get along with people.

Have the animals become so clever because they have lived so long side by side with people? Of course, people have been educators inasmuch as animals have been constantly forced to adapt themselves to new conditions and unexpected situations.

What's more, some birds and animals use the inability of their neighbors to adapt themselves to civilization. At high-voltage lines foxes and jackals gather killed birds. In national park lands, crows carefully follow an animal warden's boat and, when the frightened cranes fly up in the air, they scavenge in their nests.

Will these clever animals get so accustomed to people that someday they will become tame? Hardly so. Silver foxes, for instance, have been living in enclosures for a hundred years now, but they still don't recognize people. It is not only a matter of our desire, but also a matter of an animal's capacity to adapt.

The Factor of the Unexpected

No matter how accustomed to people an animal may be, when it comes in direct contact with humans, critical changes take place in its hor-

Continued on page 55

THE SKIES ARE HERS AGAIN

By Nina Maksakova

ZINAIDA KURITSYNA is a world-class skydiver. This is the story of how she got into skydiving and how she made a comeback after a bad fall and a year and a half in and out of a hospital.

Zinaida grew up in Yegoryevsk, a small textile manufacturing town near Moscow. Her father was the manager of the local printing plant, and her mother stayed home and cared for Zinaida and her three brothers. Zinaida was a good student, helped out around the house and was a real tomboy outdoors.

As she grew older, Zinaida became engrossed in the biographies of famous people. She spent hours reading books on gardening, digging beds and planting flowers. Her love for sports was boundless. She took up skiing, basketball and gymnastics. Her coaches even predicted a great future for her in hurdling.

It might have happened if Zinaida had not overheard two girls in gymnastics class talking about skydiving.

Zina wondered if she had the nerve to do it. The more she thought about it, the more she wanted to try it. By the time she had made up her mind, it was too late to sign up at the local air club. That meant Zinaida would have had to wait quite some time until another group was formed. But she didn't want to wait. So she got all the literature she could find on skydiving and even went so far as to borrow summaries from trainees.

Meanwhile, the air club instructor heard about Zinaida's intense interest in skydiving and invited her to one of his classes. Before long he was thoroughly convinced that she knew all about the different makes of parachutes and the techniques of jumping and landing. The instructor made an exception in Zinaida's case, and she was admitted to the group. One week later she made her first jump.

Zinaida still remembers all the details of that day and a conversation with her mother the day before.

"A skydiver doesn't necessarily have to break her neck or legs. That's why she has a head on her shoulders." That was Zinaida's closing argument. ▶

naida Kuritsyna, world-class skydiver, d a terrible cident during a ght jump in 1978. ter three major erations and nths in a hospital, naida began acticing the ordination of ovements in spension—a difficult k even for someone strong-willed and rd-wor king as she is.

A warm embrace for Zoya Mironova, the surgeon who saved Zinaida's life.

"Anyone who can conquer the fear of jumping out of a plane will always be a captive of the skies," says Zinaida Kuritsyna.

ing page: Zina
wns around with
nds. She's as
her and lithe as ever.

lthough Zinaida's mother didn't approve of her new by, she raised no objections. Knowing how determined daughter was, she knew it was useless to try to talk out of it.

inaida stood at the edge of the open hatch without the htest sense of fear. She felt a sense of joy, of freedom. order to bail out was given. After the first few seconds what seemed to be a fall into a canyon, the parachute ned, and Zinaida saw the green strip of a young forest, eld of rye and the sharp bend in the river that she had wn since childhood. The landing was soft. "I can do it, n do it!" Zina repeated to herself.

World Champion

three years' time she was the best skydiver in the club. then, Zinaida had graduated from high school and had un working in a shoe factory. Her scores in precision ding were the highest in the regional competition. Years ard training had finally put Zinaida on the national team.)f all the subsequent international meets, Zinaida par-ilarly recalls the socialist countries' championship in garia in 1976, where she took all five gold medals; the ld championship in Rome that same year, where she s voted the most charming contestant; the Soviet title et in 1978, when she set a still unbeaten world record 31 daylight bull's-eye precision touchdowns in the classic cm circle. Then two months later Zinaida had an accident.

The Accident

t happened on December 22, 1978, the final day of night-e skydiving in the city of Ferghana, Uzbekistan. Zinaida led out as usual, but a strong wind snarled the shroud s. She began spinning like a top. All her efforts to undo knot were futile. She decided to open her spare chute, according to instructions, the main one had to be astened first. Zinaida couldn't do it. The wind had jammed lock. At that point she should have cut the shroud lines, she thought that her skill would see her through. This y meant the loss of valuable seconds—but time in midair a matter of life and death.

The lights on the ground drew dangerously nearer. Cut-off the main chute now meant losing some resistance the speed of free fall. There was no time left to think. e tore off the spare canopy so that its shroud lines would get tangled up with the main lines.

As Zinaida hit the ground, she felt something warm flow wn her back and a sharp pain in one leg.

The diagnosis was multiple injuries—a fractured leg, two cked ribs, a broken thoracic vertebra and a torn pulmo-y pleura—and the loss of a lot of blood.

The Winner

Zinaida's hope lay in her stamina and her strong young dy.

All the other contestants were ready to wait in line to give od. They took turns sitting at her bedside after the eration. The first operation was followed by two more. e fight for Zinaida's recovery went on for a year and alf. She learned once again how to sit, to walk and later run. She spent hours each day doing therapy exercises. And finally the day came when Zinaida was able to say to rself, "I'm the same person that I used to be."

Throughout all those difficult 525 days, Zinaida dreamed a comeback in skydiving. Whether she would be able to it again depended upon the say-so of her doctors. After horough examination, they said Yes.

Strapped into her parachute, Zinaida headed for the iting aircraft to make jump No. 4,800. ■

Since the accident, Zinaida can only land on her left foot, though she does it with accuracy.

PEOPLE TO PEOPLE

Two Schools Get Together

FIFTH AND SIXTH grade classes from Shepherd Elementary School in Washington, D.C., spent a day visiting the new school for children of Soviet Embassy personnel one bright warm day this May. The tour was part of the six-year-old Embassy Adoption Program sponsored by the ESAA* Program of the District of Columbia Public Schools and the Women's Committee of the Washington Performing Arts Society.

The American youngsters fairly tiptoed through the halls and just peeked into the classrooms, while their fifth and sixth grade Soviet guides, who spoke the King's English like the best UN interpreters, whispered to them about what was going on in each lesson. Everyone broke ranks, however, when they saw the new gym. "Wow, what a place!" seemed to be the favorite expression of the visitors. Rounding a bend in the hall, they approached the principal's office, a subject that prompted quips and good-natured wisecracks from pupils, teachers and chaperoning parents alike. Someone jokingly asked where the bench was that usually stands outside the offices of American principals. The youngsters were surprised to learn that Soviet pupils have to stand in a corner, not sit on a bench.

The Soviet youngsters chose to wear their Young Pioneer uniforms for the day. This, too, provided a good conversation topic for the parents and teachers: To uniform or not to uniform? Uniforms, explained one American mother who used to wear them herself, make life a lot simpler in the morning. The only decision is clean or dirty.

*Emergency School Aid Act

Although lunch was served in the cafeteria, it wasn't your usual school fare. The youngsters were served hamburgers (all the way), grapes, pirozhki stuffed with apples, and Cokes. The sodas brought down the house. You would have thought that the American kids had never had a Coke with lunch before. "You mean you don't have milk?" "Do you get Cokes every day?" "Cokes! Great!" Of course it was just a special treat for a special day, but the kids couldn't get over it.

After the feast the youngsters assembled in the auditorium to hear the results of the second annual quiz on the Soviet Union for the American kids written by the seventh grade Soviet students and checked by the fifth grade. The girls from Shepherd almost took all five prizes.

"The Russians sure know how to eat," remarked a Shepherd Elementary student in the cafeteria.

Photographs courtesy of ESAA Program of D.C. Public Schools

Eduard Nikitin, right, principal of the Embassy School, explains the Soviet school system.

Doug White somehow slipped in to take third place. Maria Howell won the first prize; Pamela Gessert, second; Doug, third; Kerri Thompson, fourth; and Alison Hendricks, fifth.

"Of course there were a few wild guesses," remarked Irina Davydova, the sixth grade teacher who masterminded the contest, "but the answers demonstrated a real desire to be friendly with the Soviet Union."

Mrs. Edith Smith, the principal at Shepherd Elementary, called the visit "the highlight not only of the year, but of their elementary education."

"We really were adopted," Mrs. Smith commented. "The support, personnel and materials provided a very rich learning experience."

Earlier in the school year the Soviet children spent a day at Shepherd Elementary School. The Soviet youngsters performed songs and dances they had learned in their classes on American history and culture. It was sort of a people-to-people presentation, all in English. They did a play, impressions of American folklore and invited the Shepherd students to join in the Virginia reel. They even took their jazz band with them to play for the American kids. ■

QUERIES FROM READERS

Harvard L. Romence, M.D., of Illinois, is interested in the right of Soviet republics to self-determination. He has asked us to explain the contradiction, as he put it, between Article 72 and Article 134 of the Soviet Constitution.

Article 72 states: "Each Union Republic shall retain the right freely to secede from the USSR."

And Article 134 states: "The Council of Ministers of the USSR has the right, in matters within the jurisdiction of the Union of Soviet Socialist Republics, to suspend execution of decisions and ordinances of the Councils of Ministers of Union Republics, and to rescind acts of ministries and state committees of the USSR, and of other bodies subordinate to it."

Dr. Romence writes, in this connection: "The American readership of SOVIET LIFE would like to know, under Article 134, if freedom has a 'limited' meaning or really signifies nothing under the new Constitution."

At our request, Yevgeni Koveshnikov, Candidate of Science (Law), answers Dr. Romence here.

ANSWER: The USSR was formed in 1922 on the basis of the principle of socialist federalism as a result of the free self-determination of nations and the voluntary association of equal Soviet socialist republics. Voluntary here means the eloquently expressed desire of constituent republics to unite in a single state. That is why the right of every union republic freely to secede from the USSR, granted by Article 72 of the Constitution and by appropriate articles of the constitutions of the union republics, is a reliable guarantee of the sovereignty of the Soviet republics and their free will to unite. This right was first established in the Treaty on the Formation of the Union of Soviet Socialist Republics. Since then this right has been guaranteed by all the subsequent constitutions of the USSR, including the most recent one adopted in 1977. The fact that throughout its existence none of the Soviet Union's republics has ever raised the question of seceding confirms that the Soviet state is stable and solid.

Let us imagine the situation mentioned by Dr. Romence. The Council of Ministers of a union republic has passed a resolution to secede from the USSR. Such a decision would be unconstitutional since it is outside the realm of the Council of Ministers of the given republic as an executive and administrative body. What body could adopt such a decision? The only body that has authority here is the Supreme Soviet of the given republic, which has the right to make appropriate amendments to the republic's constitution. Such a decision requires at least a two-thirds majority. Hence, the problem of a union republic's seceding from the USSR can be solved only by the highest body of a union republic, that is, by its Supreme Soviet.

This is an opportune time to mention that the problem of forming the USSR was also resolved by the congresses of Soviets, that is, by representative bodies of state authority, not by executive bodies.

In accordance with the Constitution of the USSR and the constitutions of the union republics, the most important questions of government policy are submitted to nationwide referendums. The question of secession belongs in this category. That is why a referendum would have to be held on a resolution of the relevant Supreme Soviet of the union republic.

This shows that the problem of secession can be solved either by the Supreme Soviet of a republic or by referendum. Hence, there is no contradiction between Articles 72 and 134 of the Soviet Constitution. Moreover, the Soviet Government has no right to rescind the decrees or instructions of the Councils of Ministers of union republics. Article 134 of the Soviet Constitution, to which Dr. Romence referred, mentions the right to suspend, not to rescind, decisions and ordinances of the Councils of Ministers of union republics. This can be done only if such decisions are adopted on matters that fall within the jurisdiction of the Union of Soviet Socialist Republics. This is natural because the government of a union republic cannot solve the problems that Article 72 of the Soviet Constitution classifies under the jurisdiction of the highest bodies of state authority and administration of the USSR. What body can rescind the decisions of the Council of Ministers of a union republic? This question is answered by the constitutions of union republics. If some decrees or instructions of the Council of Ministers of a union republic are incompatible with its law, they are rescinded by the Presidium of the Supreme Soviet of the union republic.

By Gennadi Pisarevsky
SOVIET LIFE Commentator

ARE COMPUTERS PROGRAMMING OUR LIVES?

HUMAN LIFE is the most mysterious and complicated phenomenon in this "best of possible worlds," as Voltaire put it. Neither science or art can comprehend and assess it in all its aspects due to the infinity of the metamorphoses in our terrestrial and space existence. Although Leonardo, Newton, Mozart, Dostoyevsky and Norbert Wiener have already gone before us and although we are witnessing truly fantastic accomplishments, we do not know now and will never know the zenith of human spirit and reason.

I hope the reader will forgive this rather lengthy philosophical introduction. By mentioning some of the great men of genius, including the father of cybernetics, I would like to express my skepticism for the various theories claiming that people are becoming appendages, living robots if you will, of computerized production. Theories such as this abound today, but their assumptions about the realm of machine intelligence, which supposedly will be able to subjugate and suppress our reason, lie on the other side of the truth. People have been and always will be the only creators of material and cultural values.

Cybernetics is one of the greatest achievements of civilization. To my mind, the process of computerizing our work can be compared with such milestones as the taming of fire, the invention of the wheel, the creation of figures, alphabets and music.

I believe that electronics and cybernetics are laying the groundwork on which our descendants will begin to build a world economy unprecedented in history.

Computerizing the Economy

For a number of objective and subjective reasons the Soviet Union has lagged behind Western countries, primarily the United States, in designing and producing computers. In the seventies the gap was gradually beginning to be bridged. By then the growth in the production of computer facilities in the Soviet Union outstripped the growth of industrial production on the whole by approximately 10 times.

The Soviet Union still falls behind the United States in its use of electronics. But the quality of Soviet computers is in no way inferior to American ones, although we produce fewer than the United States. In the midseventies American specialists believed that the USSR lagged behind the U.S. by eight to ten years. In 1979, after studying several Soviet circuits, they estimated the lag at two or three years. In January 1981 *Electronics,* an international magazine of electronic technology that is held in high esteem by specialists everywhere, said that the Soviet Union can build integrated circuits about as well as the United States can.

Today the Soviet Union produces ultramodern (superlarge and superhigh-speed) integrated circuits. One such circuit, which is the size of a match head, contains hundreds of thousands of transistors. The speed of such a device is measured in billionths of a second.

During the Eleventh Five-Year Plan period (1981-1985) the Soviet Union will evidently bridge the existing gap between it and Western countries in its application of computers. Within the next few years millions of microprocessors, tens of thousands of microcomputers and minicomputers are to be produced. This, in particular, will make it possible to speed up robot construction, which is very important due to the shortage of workers.

The Japanese now have the lead in the manufacture of robots. This has enabled them to raise sharply the competitiveness of their goods. In the Soviet Union and the United States the production of complicated manipulators, that is, manipulators that can perform more than one operation, is approximately at the same level. However, the labor shortage compels Soviet managers to pay particular attention to the introduction of robots.

Mass production of integrated circuits on which the robot's "brain" is based makes it possible to cut costs on this equipment, which so far has been very expensive. Right now a complicated robot costs anywhere from 30,000 to 50,000 rubles (a ruble is equal to about 1.40 U.S. dollars at the official rate of exchange). From a purely economic point of view, it is not advantageous to replace a worker with a manipulator. But from the social point of view, the use of robots to perform difficult, dangerous or simply uninteresting work yields a very appreciable effect. Although there is no "technological" unemployment in the USSR, the shift of the labor force to more intellectual production is an important way to raise productivity.

The Road to Automated Systems

In 1938 the managers of a Soviet plant went to mathematician Leonid Kantorovich with a request to help solve a major production problem: How could wood waste be reduced to a minimum? Although Kantorovich was only 25 years old at the time, he was already a professor at Leningrad University and world famous.

After analyzing the problem, Kantorovich realized that the problem could not be resolved by any of the old methods. It was necessary to find a new method—something simple, easily understood and accessible to managers. He discovered such a method, and it proved to be universal. With it one can optimally determine the area to be planted with crops, compile the best form of transport and solve a lot of other economic problems.

During World War II this method was discovered by American economist Tjalling Koopmans, who called it linear programming. In 1975 Kantorovich and Koopmans were awarded a Nobel Prize in economics.

As far back as 1939, in a paper titled "Mathematical Methods of the Organization and Planning of Production," Kantorovich noted that his discovery made it possible to solve economic problems even in cases when the most favorable version had to be chosen out of millions and even billions of variables.

"Up to now, all these technical and economic problems have been solved at random, by approximation and by intuition. Of course, the solution arrived at was the best only in rare cases. Now it is possible to obtain not accidental solutions to such problems, but to find the optimal version by a scientifically based method," Kantorovich wrote.

That was theory. But there is nothing more practical than a good theory. Today this theory makes it possible to save hundreds of millions of rubles in almost every branch of the national economy. The significance of econometrics increases with the mass introduction of automated control systems.

The Fourth Generation

Today people pursue information with the same diligence and perseverance as cavemen sought fire. Theory defines information as the reduction of the uncertainty concerning expected events. The main function of automated control systems is to foresee events, to reduce uncertainty to the minimum and to correct mistakes accurately and quickly.

The human response to events is so slow that sometimes people can't even handle a car. People have learned, however, to control space transport vehicles. And people have learned to control nuclear reactors and chemical units. Electronic instruments have allowed us to handle stupendous speeds. That is why automated systems controlling technological processes have become an independent element of production.

Soviet industry has an enormous number of such systems. They regulate the operation of blast furnaces, rolling mills and even entire plants. At present the Soviet Union is launching

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NEW FRONTIERS

By Nikolai Tikhonov
Chairman of the USSR Council of Ministers

THE MODERN EDIFICE of the Soviet economy is being built on a firm foundation. Today, in only five days, we generate a national income equal to the income for all of 1928, which was before the first five-year plan was launched. In the last 25 years the Soviet Union's annual growth rate of the national income, which is a barometer of a society's economic might, was twice as high as that of the United States.

The Soviet Union is the world's largest producer of steel, pig iron, petroleum (including gas condensate), iron and manganese ore, coke, cement, chemical fertilizers and diesel and electric locomotives. The country's share of world industrial output before the 1917 Revolution was slightly more than 4 per cent. In 1922 it dropped to about 1 per cent. Today it stands at 20 per cent. It's not hard to imagine how great the increase was in absolute terms if you take into account that world industry was not marking time either.

The Soviet Union scored outstanding successes in the seventies. As compared with 1970, industrial output rose by 80 per cent in 1980. Real per capita income increased by 50 per cent. More than 107 million people, which is over 40 per cent of our total population, moved into better housing.

Impressive Results

The Tenth Five-Year Plan, which was summed up by the Twenty-sixth Congress of the Communist Party of the Soviet Union, has taken a praiseworthy place in the labor chronicle of the Soviet people. In those years the Soviet Union realized considerable achievements in all spheres of the economy, social development and culture.

The country's national wealth has increased. Compared with the Ninth Five-Year Plan period, the national income rose by 400 billion rubles, industrial output by 717 billion rubles and agricultural output by 50 billion rubles. More than 1,200 large industrial enterprises have been put into operation. Considerable progress was achieved in setting up the Integrated Power Grid, which now covers an area with a population of more than 220 million people. Production of oil (including gas condensate) increased 110 per cent and gas yields rose 330 per cent in Western Siberia.

Heavy industry, the foundation of the economy, made headway; the economic potential of every constituent republic developed noticeably; and the creation of major territorial and production complexes continued.

Extensive work has been carried out in agriculture. Capital investments here amounted to more than 170 billion rubles, which is over 27 per cent of all such investments. The result is a stronger agricultural network. Productivity has grown too. The mean annual grain output reached 205 million tons for the first time. The country has increased its output of meat, milk, eggs, cotton and other farm products.

Modern production cannot be separated from science. In these years, researchers, engineers and designers in all the constituent republics worked on fundamental scientific problems, solved applied problems, effected innovations in technology and created original manufacturing processes that secured the Soviet Union's preeminence in many developments and contributed to progress in science and technology.

The scale on which new technology is being implemented has grown, technical standards of production have risen, efficiency has increased and quality has improved. In industry 75 per cent of the increase in output was due to higher labor productivity (which has grown by 17 per cent in the national economy); in agriculture the entire increase was due to productivity; and in building 95 per cent of the increase in construction and assembly work was due to boosted productivity.

All of the state's efforts in the economic field are aimed at steadily raising living, education and cultural standards and providing the individual with the best possible conditions for all-round development. The faster the country's collective wealth grows, the richer the Soviet people's life in material and intellectual terms will become.

During the Tenth Five-Year Plan period 80 per cent of the national income was channeled directly to public consumption funds, construction of housing and social and cultural development. In five years 334 billion rubles more went into programs to improve the people's welfare than in the preceding plan period. Average wages and salaries increased by 16 per cent, and the income of collective farmers from collective farming grew by 26 per cent.

Serious attention was given to the solution of social problems in rural areas. Extensive investments were directed to agriculture. Not only was the industrial aspect important, the social implications of the changes taking place in the countryside were equally important. The nature of work is changing, workers' skills are improving and a noteworthy leveling out of material and everyday conditions in town and country is taking place.

Public consumption funds have reached 527 billion rubles during the entire Tenth Five-Year Plan period. These funds provide for free education, free medical services, old-age pensions, various fringe benefits, paid leaves and other social needs. In the over-all family incomes of industrial workers they top 23 per cent, and in those of collective farmers, 19 per cent. Payments and benefits from these funds in 1980 amounted to 438 rubles per capita as compared with 354 rubles in 1975.

Housing construction proceeded on a large scale. A total of 87.2 billion rubles was invested in this field during the Tenth Five-Year Plan period—1.5 billion more than intended. The network of day-care centers and kindergartens, summer camps, sanatoriums, holiday homes and hotels was expanded. The number of doctors increased from 834,000 in 1975 to one million in 1980.

Everyone in the Soviet Union today can read and write. More than 80 per cent of the population employed in the national economy have a higher or secondary (complete or incomplete) education. The country has finished the transition to mandatory universal secondary education. In the years from 1976 to 1980, 12.5 million young men and women graduated from vocational schools and 10 million people finished higher and specialized secondary educational institutions.

The Soviet Union has entered the eighties with a powerful economy, impressive scientific and technical potential and highly skilled personnel.

A Guide to Action

The Twenty-sixth Congress of the Communist Party of the Soviet Union endorsed the Guidelines for the Economic and Social Development of the USSR for 1981-1985 and for the Period Ending in 1990. The Guidelines are a policy-making document that summarizes the practice of building communism in the USSR and also takes into account the experience of other socialist countries. The Guidelines reflect the continuity in the party's strategies on basic issues of development for the eighties. More than 121 million people took part in the discussions of the draft. This clearly points to the true democracy of the system and the complete unity between the party and the people. Participants in the discussions expressed their viewpoints on a wide range of vitally important problems and introduced proposals and amendments of great merit for the draft.

Shortly after the victory of the October Revolution, Lenin said that the system of exploitation had left in its wake an extreme suspicion on the part of the masses for everything connected with the state. He emphasized: "It is very difficult to overcome this, and only a Soviet government can do it. Even a Soviet government, however, will require plenty of time and enormous perseverance to accomplish it."

The Soviet people's lively interest in the success of the party's and the people's common cause, which was particularly apparent during the discussions of the Guidelines, showed that Soviet power has coped with this task. The new man and woman, who feel they are the country's masters, do not divorce themselves from the state. They regard public interests as their own. This is one of socialism's greatest historical gains.

In the eighties the country is entering a new stage in creating the material and technical base of communism, developing social relations and shaping communist consciousness. The Eleventh Five-Year Plan is a major link in the chain of plans that are being mapped out and implemented.

A further rise in the Soviet people's well-being will be assured as a result of stable economic growth rates. The economy of the new five-year plan period is an economy of enormous scale. By the end of 1985 the output of electric power is to reach 1.55 to 1.60 trillion kilowatt-hours, oil (including gas condensate) 620 to 645 million tons, gas 600 to 640 billion cubic meters, coal 770 to 800 million tons, rolled steel products 117 to 120 million tons, and chemical fertilizers 150 to 155 million tons (in conventional units). A scientific analysis of the economy's condition and prospects enabled the party to contemplate a sharper turn of the national economy under the Eleventh Five-Year Plan toward securing the people's well-being.

The party outlined a social program that covered everything from consumption, housing, living and working conditions to culture and recreation. In the next five years real per capita incomes will increase by 16 to 18 per cent. Average monthly wages and salaries are to rise by 13 to per cent. The incomes of collective farmers are to grow by 20 to 22 per cent. A larger part will be played by payments and benefits from the public consumption funds. These funds will grow 20 per cent and will amount to 138 billion rubles in 1985, or an average of 2,000 rubles per family of four.

A food program that will be an integral part of the Eleventh Five-Year Plan is to be implemented. It is intended to give priority development to consumer goods. The range and quality of food and consumer goods will increase. The state and cooperative retail trade turnover will grow by 22 25 per cent, while the policy of ensuring stable retail prices for the basic food and nonfood products will be maintained.

Housing construction will be continued on a large scale in the next five years. During that time it is planned to build 530 to 540 million square meters of housing. Most of it will go up in developing and rural areas. New layouts that offer more comfort are to be used everywhere.

The Guidelines set forth a whole list of measures aimed at providing the most favorable conditions for highly productive labor and a creative approach to it.

A great deal will be done to improve living and working conditions for women. Beginning in 1981, women employed in the social sector in different areas of the country will receive a partially paid leave to take care of a child until he or she reaches the age of one. Subsequently, this leave is to be extended to one and a half years. In the whole, more than 9 billion rubles is to be allocated under the Eleventh Five-Year Plan to finance measures aimed at increasing state allowances to families with children. Kindergartens will be built for 2.5 million children. The number of children in schools and extracurricular groups will increase to 13.5 to 14 million.

The level and quality of medical services will be improved, the network of health institutions expanded and work aimed at improving their structure and siting carried on.

The social security system will be further developed. Minimum old-age and disability pensions for factory and office workers and collective farmers, and pensions for persons who have lost breadwinners will be raised, as well as some pensions granted earlier. The state will additionally allocate nearly 6 billion rubles to improve the social security of the population during the five-year period. Incentives for pensioners to get jobs will be improved. New measures are to be implemented to better the living conditions of veterans of the Great Patriotic War. The working people are constantly aware of the party's and government's concern and feel confident about tomorrow.

The intellectual life of Soviet people will be enriched; education and culture will rise to a new level. Between 1981 and 1985 vocational schools will train something like 13 million skilled workers and about 10 million students will graduate from higher and specialized secondary educational institutions.

The Aim: Intensive Development

Our plans and their prospects are based on overall economic growth and a steady rise in the country's productive capacities. In the eighties we are to complete the transition to the intensive development of the economy. Quite a few scientific, technical, production, organizational and managerial problems must be solved during the Eleventh Five-Year Plan period to achieve this aim. Above all else, it is a matter of more efficient use of production capacities created by many generations of Soviet people.

The national income used for consumption and accumulation will increase by 18 to 20 per cent in the Eleventh Five-Year Plan period. No less than 85 to 90 per cent of the increase will be due to higher productivity.

In this connection, particular importance is attached to progress in science and technology. It is intended to pursue retooling of production more energetically, introduce advanced technology, develop fundamentally different materials and techniques and implement them in practice extensively (thus saving labor and improving working conditions), sharply reduce the material and energy requirements of products and process raw materials with a minimum of waste. Emphasis is being placed on the introduction of all-round mechanization and automation of production processes, scientific organization of labor, a rise in the output-asset ratio in all sectors of the national economy, an increase in efficiency of work and quality of all products, expansion and renewal of the range of goods in line with the requirements of the economy, progress in science and technology and the growing demands of the population.

Capital investments are being channeled first of all into the renovation of existing enterprises and the completion of projects already under construction. Labor and resources are to be directed to the realization of major complex programs in phases, above all the food and consumer goods programs.

Today state and collective farms receive an average of 40 tractors and 30 trucks every hour. More than 9,000 tons of chemical fertilizers are brought into the fields every hour. Some 80 hectares of irrigated land and over 70 hectares of drained land are put into use every hour as a result of work financed by the state and the collective farms.

The average annual output of agriculture will increase by 12 to 14 per cent. The successful implementation of the food program will be assured by integral planning, proportionate and balanced growth, efficient interaction between all parts of the agro-industrial complex: agriculture, the industries serving it, buying agencies, storage facilities, transportation and enterprises processing agricultural products, the food industry and food retailing. The task of developing consumer industries will be solved on the basis of a long-term program pooling the efforts of all sectors on which the situation in this field depends.

As for heavy industry, the main focus will be on power, metallurgy, engineering and chemistry, as well as capital construction and transportation.

The Soviet Union is the only major developed country completely self-sufficient in fuel and raw materials. The Soviet power industry is developing at a high rate. In 1980 average daily generation of electric power increased by more than 690 million kilowatt-hours as compared with 1975, oil drilling (including gas condensate) by over 300,000 tons, and gas by nearly 400 million cubic meters. But the demand for raw materials, fuel and power is also growing rapidly. To satisfy this demand, geological exploration is to be stepped up during the Eleventh Five-Year Plan period.

In the search for resources we have to penetrate deeper into the Earth, into the land of the Far North enclosed in permafrost and the remote areas of Siberia. But we are solving this problem. The involvement in the economy of fuel, power, mineral and raw material resources in eastern and northern areas, development of nuclear power, reduction of the share of oil used by electric power plants, rapid growth in natural gas extraction and the use of new energy sources on a par with traditional ones—all these measures will provide for the more stable supply of raw materials, fuel and power to the national economy during the Eleventh Five-Year Plan period and in the long term.

The most effective way of augmenting national wealth and quickly increasing socialist accumulation lies in making rational use of existing production capacities and utilizing resources economically. Particular attention has been paid to improving the structure of, and renewing in due time, fixed assets, rapidly replacing outdated technology and reducing the time required for new enterprises to reach full capacity. In order to save material resources, it has been decided to make extensive use of comprehensive processing of raw materials, resource-saving technology and techniques with little or no waste. Economizing in all spheres of production will be increased; norms for consumption of production resources will be improved; outdated norms will be regularly reviewed and progressive norms introduced in line with the modern technological level and organization of production and work.

The Soviet economy is developing as a single national economic complex, and the economic potential of each republic is growing from year to year. Such an approach is possible only under a socialist social system, which has the advantages of planned economic management. This approach opens up enormous reserves. It becomes possible to secure unity in solving current and long-term problems, taking fuller account of all the varied economic, social, scientific, technical, demographic and ecological factors, make more efficient use of material, labor and financial resources and improve the location of productive forces.

The economic mechanism and management of the national economy must be in full accord with the rapidly growing scale of the Soviet economy. These questions have been allotted a special section in the Guidelines. They outline a long-term, unified system of measures covering the most important aspects in the running of the national economy.

A system of interrelated long-term and current measures is being implemented. It includes a complex program of scientific and technical progress for the next 20 years; guidelines for economic and social development for 10 years; a five-year plan for economic and social development—the main tool for implementing the party's economic policies; and the annual plan. This provides for continuity in planning, timely elaboration and implementation of major national economic programs.

An urgent problem related to planning is maintaining a correct relationship between centralism and democracy. We will consistently implement the principle of proper relationship of rights and responsibilities between different agencies of economic management so that all managers, possessing the necessary rights and within their limits, bear the full weight of responsibility for fulfilling targets, doing their jobs quickly and solving urgent problems without delay and excessive coordination.

The actual prospects of the intended programs, which are infused with the spirit of innovation and creative research, are supported by our extensive experience in centralized planning and the organizational experience of our finest enterprises.

The results of the Twenty-sixth Congress of the Communist Party of the Soviet Union, the Central Committee's report, endorsed as a guide for action, and the Guidelines for the country's economic and social development enable us to draw at least three conclusions.

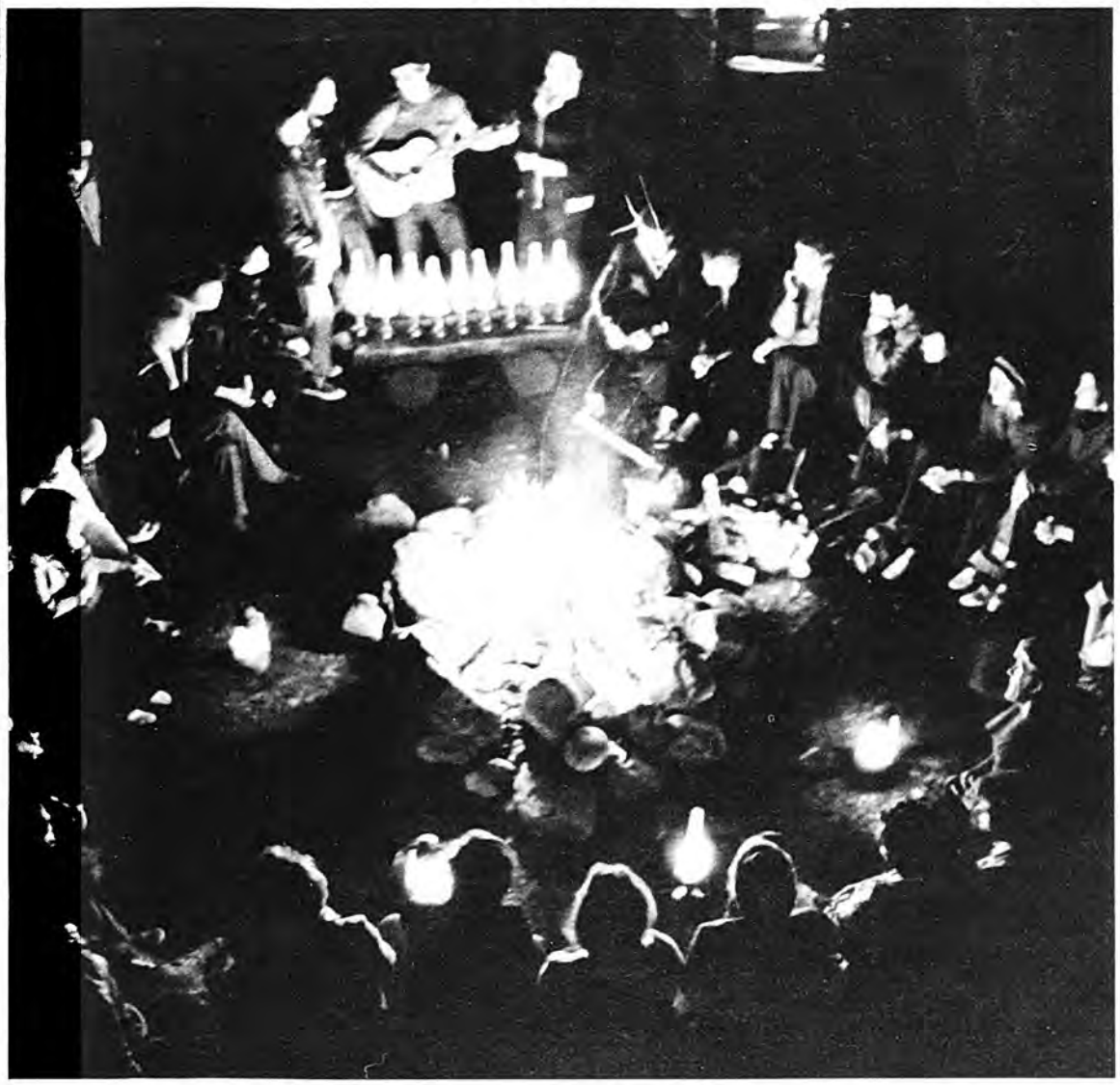
The first conclusion, and the most important one: Concern for the people's well-being remains a priority task of the policies of the CPSU and the Soviet Government.

The second conclusion: The new frontiers envisaged by our plans cannot be divorced from the policy of peace and security pursued by the Soviet Union and the course aimed at détente.

Finally, the third conclusion, one very important for our foreign business partners: These plans open up broad possibilities for long-term, stable and mutually beneficial cooperation with the Soviet Union.

Courtesy of the illustrated monthly *Soviet Union*.
Abridged.

A WEEKEND RETREAT CLOSE TO THE CAPITAL



By the light of a campfire and lanterns young people sing ballads they've written themselves. Right: Pleasure boats are decorated with wooden cutouts to resemble Russian canoes of yesteryear.

Lunch alfresco is recommended after a morning ramble through the woods. Top: Architects use as little steel and concrete as possible in the recreation centers. Wood is the word.

Most cities in the Soviet Union are surrounded by forest-park zones. These zones are the lungs of a city. They're used as national parks for camping and recreation. Tourist centers like Solnyshko, which is only 10 kilometers outside Moscow, near the Istra water reservoir, offer city folks who are tired of asphalt and concrete a change of scene and a chance to sit back quietly and fish for an afternoon. At the same time, such centers protect the city environs from the onslaught of "wild" tourists. Places like Solnyshko are open to everyone, though you will most often find young people there. The older folks prefer the comfort of dachas, holiday hotels and sanatoriums.

It's hard to remember the pace of city living after a day's sail on the water. Sunday evenings find a lot of young people asking, "Do we have to go back?"

DOSTOYEVSKY IN THE MODERN WORLD

By Georgi Fridlender

The centennial of Fyodor Dostoyevsky's death (1821-1881) finds his novels and stories as popular as ever. Georgi M. Fridlender, Doctor of Philology and assistant editor in chief of the academic edition of the novelist's complete works, explains the meaning and importance of Dostoyevsky for us today. Fridlender is also the author of several books about the great writer, including The Realism of Dostoyevsky, The Poetics of the Russian Novel, Dostoyevsky and World Literature.

TO UNDERSTAND the true significance in our day of any classic of literature, we should appraise it not only in light of the age in which it was written, an age sufficiently removed from us today, but in light of subsequent history. There are untold numbers of writers, artists and thinkers whose works were enthusiastically received by many contemporaries and, sometimes even the next generation, but whose fame has turned out to be fleeting. On the other hand, there are great writers, artists and thinkers whose significance has not diminished with the passage of time, but, on the contrary, has increased and has been even better revealed only in the considerably broader and complex historical perspective of our time. Unquestionably, Dostoyevsky belongs to the latter.

Dostoyevsky lived in a transitional period so tragic that the people of those days could not perceive it. A talent equal to Shakespeare's was necessary to feel and adequately express through the medium of art the features symbolic of that age. The special quality of Dostoyevsky's talent, his sensitivity to the tragic aspects of life and his sympathy for human suffering made him the Shakespeare of his age.In the genre of the tragic novel that he created, Dostoyevsky described with shattering force many of the crucial features of Russian and West European life not only of his time but of the following decades for future generations to see.

Following in the wake of Dmitri Merezhkovsky, Nikolai Berdyaev and other Russian critics of the early twentieth century who shared the ideas of the symbolist movement, quite a few Dostoyevsky scholars in the West maintain to this day that the key problems of Dostoyevsky's works were problems of a metaphysical nature, the solution of which had no connection whatever with the solution of social and political problems. The works of the great Russian novelist contradict this profoundly erroneous interpretation.

Dostoyevsky's novels and long stories indisputably testify to the fact that his attention, both as a man and a writer, from the very outset of his literary career to the very end of his life was focused on the key problems of the social life of his times. Dostoyevsky is known to have called himself a writer possessed by "a yearning for realism." All his novels were invariably concerned with the life he saw around him. At the same time, he viewed this "realism" as a crucial period in the life of Russia and Europe, a period that summed up the results of one age and served as the prologue of a new era in social, historical and cultural development.

Dostoyevsky did not share the point of view fashionable today among philosophers of social reaction and regress that history does not have a single common direction, that it consists of a number of basically unchanging, repetitious phenomena. On the contrary, Dostoyevsky was firmly convinced that the major importance of his age was "the transformation of human society into a more perfect society," that is, the search for ways and means of realizing forms of social life founded on justice and fraternity.

"Man, who lives on Earth, has no right to turn away from and ignore what is happening on that Earth, for that there are higher moral reasons," wrote Dostoyevsky in defense of his stark realism. It was not Dostoyevsky who was "cruel," it was the life of the times that was cruel. The history of the twentieth century with its two devastating world wars, massacres of defenseless people, Hitler's death camps and other crimes exceeded in cruelty even the most horrible of Dostoyevsky's previsions.

Dostoyevsky was not only the new Dante who was unafraid of descending into the foreboding subterranean circles of the hell of the bourgeois soul, but he also took upon himself the task of studying his moral ulcers. The more "fantastic" and inhuman the world that surrounds a person, the greater the yearning for the ideal, according to Dostoyevsky, and the greater the duty of the writer "to search out the human element in man," to show without any embellishment, "with complete realism," not only the ugliness and "chaos" that hold sway in the world, but also the striving after the ideal that is hidden in the "human soul." As Dostoyevsky wrote in an article about Victor Hugo's *Notre Dame de Paris*, the writer should strive to "resuscitate the doomed man, crushed by the unjust burden of circumstances, the stagnation of ages and the prejudices of society."

The world described by Dostoyevsky is a world where, according to Lenin's observation referring to post-Reform Russia, the heightened sense of individuality manifested itself with special force in different sections of the population.*

In *Poor Folk* and other early works Dostoyevsky described the awakening of individuality even in the most depersonalized characters and "human bundles of rags" robbed of everything by fate. In Dostoyevsky's novels and stories there is not a single completely passive and depersonalized character in whom, in one way or another, in broken or distorted form, his individuality would not break the bounds of traditional class modes of behavior and mentality.

Dostoyevsky's artistic world is a world that is "all struggle." It is a world of searching and thought. According to the author's diagnosis, the same social conditions that alienate men and breed evil in their souls, also activate their awareness and urge his characters to resistance, arouse in them the desire to comprehend not only the contradictions of their times, but the results and perspectives of all of history and awaken their reason and conscience.

Shakespeare has dissimilar characters—kings and jesters—each one of whom expresses the conviction, common to all people of that period, that the world is tragically "out of joint" and has to be reformed. Each one of them does so in his own special language, elevated or vulgar, depending upon the level of his thinking. It is the same with Dostoyevsky, whose Marmeladov and Raskolnikov, Myshkin and Lebedev, Fyodor Pavlovich and Ivan Karamazov are inwardly active and feel, each in his own way, his "ugliness" and the "ugliness" of the society in which he lives. All these characters possess, in different measure, both conscience and intelligence. Each one is intelligent and observant in his own way to the extent of his practical and theoretical life experience and participates in the general dialogue which touches upon and sheds light from different angles on the central, "sore" problems of the individual's history, his past and future.

Hence the penetrating intellectualism of Dostoyevsky's novels and the restless, probing philosophical thought that permeates them. Both are close to the people of our times and kindred to the best specimens of twentieth century literature.

However, it was not only the theme of inner contradictions, the "irrationality" of the inner world of the individual living in a society whose everyday life was influenced by barely perceptible, impersonal, obscure laws hostile to a living person that Dostoyevsky wrote about with such profound tragicalness. His works also gave a vivid description of the opposite trend in the social life of the nineteenth and twentieth centuries—the greatly increased role of ideas in the life of society.

Dostoyevsky scholars have written a great deal about the special role and special propounding of "ideas" in his novels. The novelist expressed the increased role of ideas in social life at the turn of the century with exceptional keenness and in many respects with prophetic insight, considering the time in which he wrote. Dostoyevsky maintained that ideas were not to be taken lightly; that they were kinds of

* Vladimir Lenin, *Collected Works*, English edition (Moscow: Progress Publishers, 1963), vol. 1, p. 414.

living, flesh and blood beings. They could be beneficial, but they could also be parasites and a destructive force in the life of an individual or of a whole community.

In his novels Dostoyevsky constantly put to the test not only different types of people, but also the systems of ideas current in his day as well as ideas that were being born under his very eyes. Having witnessed in his youth the downfall of Hegel's philosophy, Dostoyevsky shared the skepticism regarding the possibility of the existence of an "absolute idea" felt by all the outstanding personalities of the period between 1840-1860 in one way or another. Dostoyevsky always attempted to test abstract ideas by the experience of a living person or masses of people. In reality, Dostoyevsky's books are huge literary laboratories where different social and philosophical ideas of the past and present are tested for strength and their obvious and hidden potentialities. Thus, their pros and cons, their benefit for humanity or their capacity for serving as instruments of evil in the hands of a fanatic or a deceived deceiver (a category in which many of his tragic heroes belong) are brought to light.

Early in life, while still under the influence of the utopian socialist thought of his time, Dostoyevsky realized that the culture of his age was on the threshold of a great historical change, one equal or even exceeding in significance the downfall of the Greek and Roman civilizations. The germs of this idea, which in many respects became the guiding principle in the works of the great writer, can be discerned in the disturbing meditations on the future destiny of Western Europe that Dostoyevsky expressed in 1849 in his testimony at the trial of the Petrashevsky circle. The belief that the old civilization had arrived at a historical watershed was articulated with particular clarity in Dostoyevsky's writings after his return from penal servitude.

In *Crime and Punishment* Raskolnikov has a deep revulsion for the world which for him is symbolized by the lecherous landowner Svidrigailov, who woos his sister, and the usurer Alena Ivanovna, a lone hag who is repulsive both morally and physically. In contrast to other kindred literary heroes like Pushkin's Gherman and Balzac's Rastignac and Julien Sorel, Dostoyevsky's hero does not want so much to better his position or that of his mother and sister and the other poor, as he is eager to overturn the entire existing world order. This Russian student, expelled from the university because of his poverty, wanted to open a new, as yet unexplored, era for humankind. That was the essence of the new (as it seemed to Raskolnikov) code of morals adopted by him, which recognized the right of individual "extraordinary men," the "rulers of destiny," to "shape" history at their will without stopping at bloodshed and cruelty.

Other of Dostoyevsky's characters like Myshkin, Ippolit and Lebedev in *The Idiot;* Kirillov and Shatov in *The Possessed*; Versilov in *A Raw Youth*; Father Zosima, Dmitri, Ivan and Alexei Karamazov in the writer's last novel all feel and express in their own way their awareness of the need for a radical change in the social and ethical destinies of humanity. They realized that all previous historical roads had reached a dead end and that there was a need for establishing new social and ethical norms which would set human society moving along a new road.

After penal servitude and acquaintance with the inmates of the "house of the dead," Dostoyevsky refused to believe that the mass of humanity is just passive material, merely the object for "manipulation" by all kinds of utopians and "benefactors"—even the most noble and disinterested. The people were not an inert lever to be operated by individual, more highly developed or "stronger" personalities, but an independent organism, a historical force with an intellect and high moral values. Any attempt to foist on the people ideals that did not find support in the innermost layers of the people's consciousness and their deep conscientiousness and their need for social truth would lead the individual into a vicious circle, would condemn him to moral torture and agony of conscience—such was the conclusion that Dostoyevsky drew from the experience of the failure of the Petrashevsky circle and the West European revolution of 1848.

The main shortcoming of many of even the best works about Dostoyevsky's social outlook and ethical views is that their authors give an undialectical explanation of the essence of the author's ideas. They describe Dostoyevsky as either a man who believed in God or an atheist, an apostle of rebellion and destruction or a proponent of universal love. It is true there is also a third widespread point of view that Dostoyevsky's sympathies were divided and that he was in equal measure inclined toward rebellion and humility, vacillating between one and the other. All of these interpretations can easily be corroborated (as is usually the case) by a sufficient number of Dostoyevsky's utterances. Nevertheless, I believe that all of them sooner refer to the periphery of the author's outlook than form its true core.

Dostoyevsky himself has pinpointed more accurately than any of his scholars the basic question that was the beginning and end of his searching. Despite accepted opinion, it was not a religious or purely ethical question, but a social and historical one. Dostoyevsky defined the core of his philosophy as the problem that concerned "nine-tenths of humanity" —the problem of the people and their right to have their say in history. Describing it thus, he was more correct than those who believed that purely moral or religious problems were uppermost in his mind.

While in the "house of the dead" in the 1850s, Dostoyevsky came up against a phenomenon that 20 or 30 years later (1870-1880) many of the Narodniks confronted when they went among the simple folk to spread enlightenment. He arrived at the place where he was to serve his sentence fully aware that he was a champion of the freedom of the common folk. But the common folk in prison did not accept him as one of their own; they viewed him as a stranger, a member of the nobility. That is where Dostoyevsky's tragic social and ethical searching stems from.

Like other revolutionaries from the nobility, Dostoyevsky had given little thought to the people before his imprisonment. He was surprised by the very special strength and truth that the common folk had. The people were not a tabula rasa on which the intelligentsia had the right to write the words they chose. The people were not the object but the subject of history. They possessed their own outlook, which was molded by centuries, and their own point of view on different things, which was formed through hard experience. Without a sensitive, attentive attitude toward them, without the support of the historical and moral consciousness of the people, no one could transform their life to any serious extent. That was the conclusion painstakingly reached by Dostoyevsky after his imprisonment, and it became the cornerstone of his outlook.

The "homage to the people's truth" that Dostoyevsky wrote about was not just a metaphor, but the actual core of his outlook, which is as important as ever today. That is the source of both the strong and the weak sides of the writer's principles. Dostoyevsky paid homage to the image of Christ not because he had been religious from childhood as some authors say, but because he believed that in Christ (as the people saw him, and not the official church) was expressed the faith of the people, their ideal of a person. Though he hated Nicholas I, the writer was ready to recognize the need for a czar (paradoxical as that may seem) because the common folk whom he met were mostly apolitical and inclined to think of the czar as the protector of the people. In other words, the common folk, their moral and spiritual life, their aspirations, their sympathies and aversions were the bounds that Dostoyevsky tried to follow and on which his social stand and ethical mood depended. The writer accepted his ideals out of the hands of the people with all the falsities and delusions of the popular thought of the time.

Hence his social and philosophical stands did not always coincide. There was considerably more dialectical logic in Dostoyevsky's views than he is credited for.

During the 1860s and 1870s Dostoyevsky did not see the revolutionary people in Russia. That, in the final count, is the explanation for the main contradictions in his outlook. But the important thing is that he did not proceed from deductive metaphysical and moral hypotheses as do most of his present-day abstract-philosophical interpreters, but from actual experience with the life of the people and their moral searching, which he had the opportunity to observe. That is the living foundation of his confused yet effective, and not contemplative, humanism.

In contrast to some contemporary foreign authors who belittle the role of the masses and exalt the image of the lone individual, Dostoyevsky was firmly convinced that an individual who viewed the people merely as a passive object is incapable of leading civilization out of the dead end. If that individual is intelligent and has a strong sense of conscience, he is invariably doomed to inner turmoil. This conviction appears in different forms in all of Dostoyevsky's novels and stories.

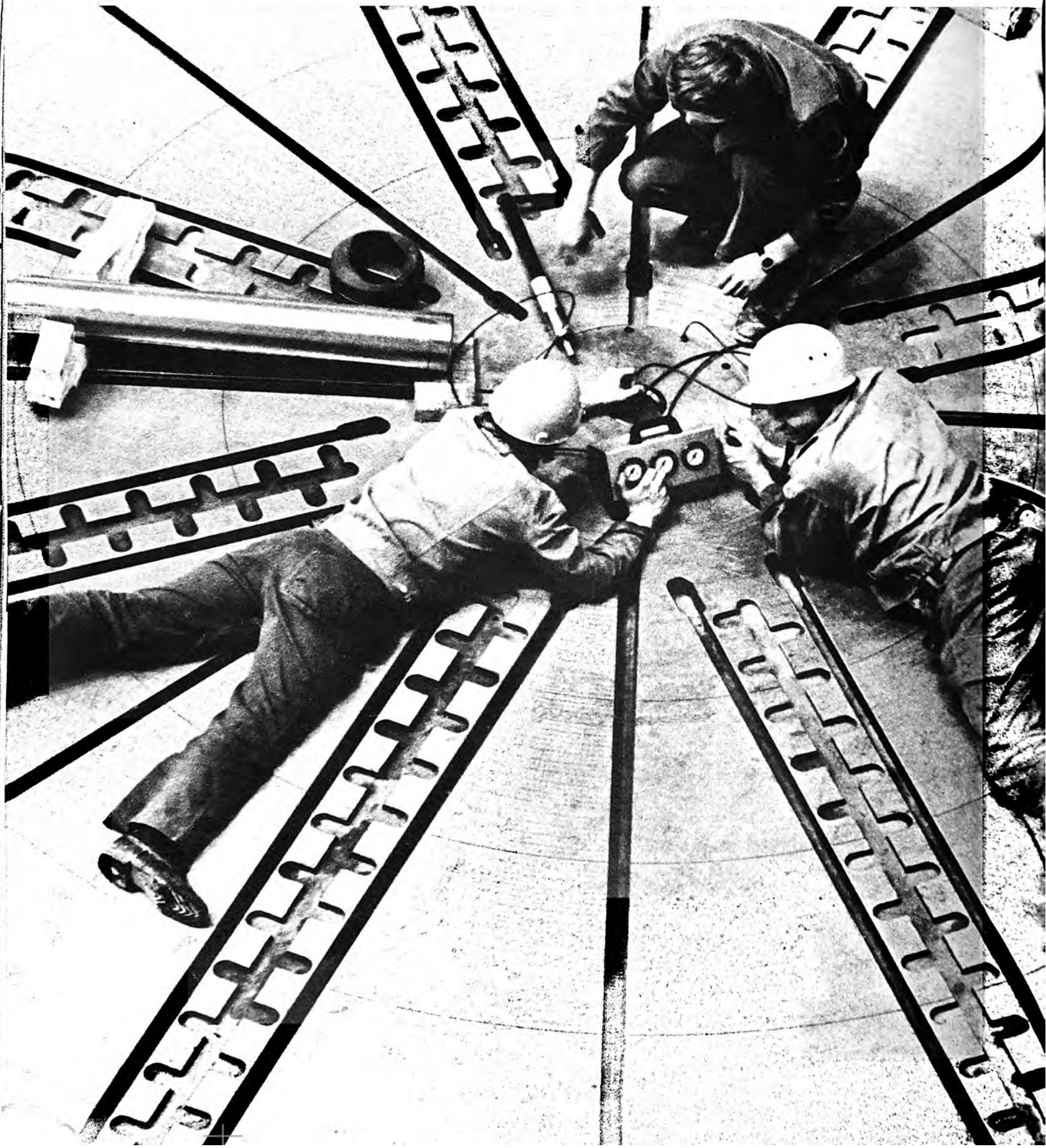
In December 1877, shortly after the death of Nikolai Nekrasov, the great poet with whom Dostoyevsky embarked on his literary career, he wrote in his *Diary of a Writer*:

> He cleansed himself in his own eyes by serving his people with his heart and his talent. The people were an inner need to him . . . he found his justification in his love for them. He elevated his spirit with his feelings for the people. . . .
>
> His constant pursuit . . . of the truth, his constant thirst and striving for it clearly testify, I repeat, that he had an inner need for the people, a need greater than all else, and that cannot but testify to his inner, constant yearning, a yearning that never ceased, that was never satisfied by the crafty arguments of temptation, by any paradoxes or any practical justifications.

When Dostoyevsky wrote these words, he was thinking not only of Nekrasov but also of himself. These words express that constant concern for the destiny of humanity, anxiety for the future, that sincere humanism and democratism which make Dostoyevsky's heritage live on today. ■

ATOMMASH,

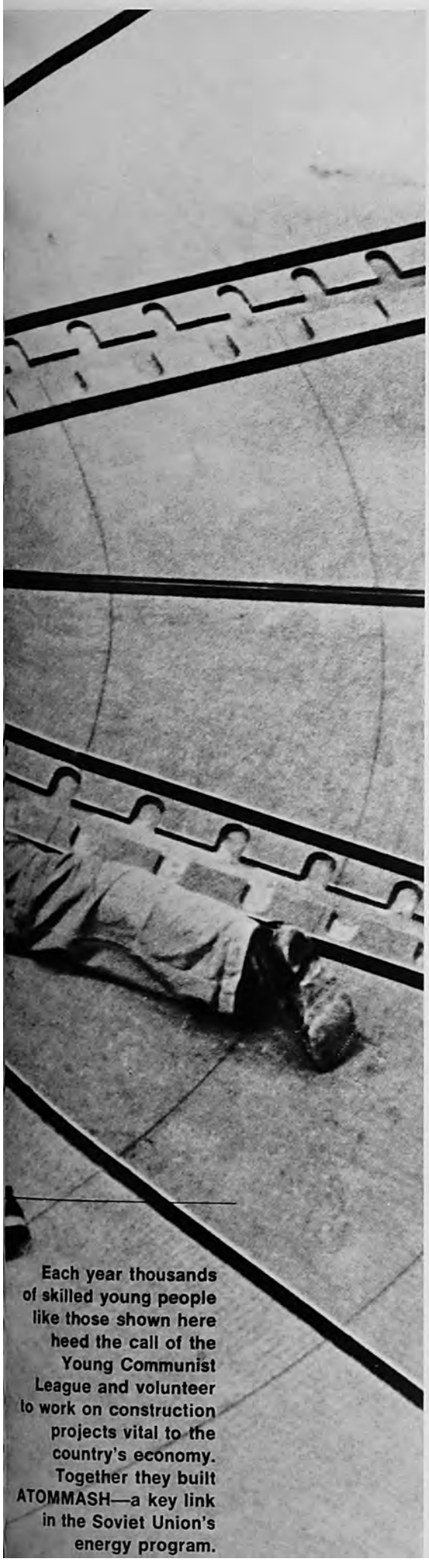
A PLANT BUILT BY YOUNG PEOPLE

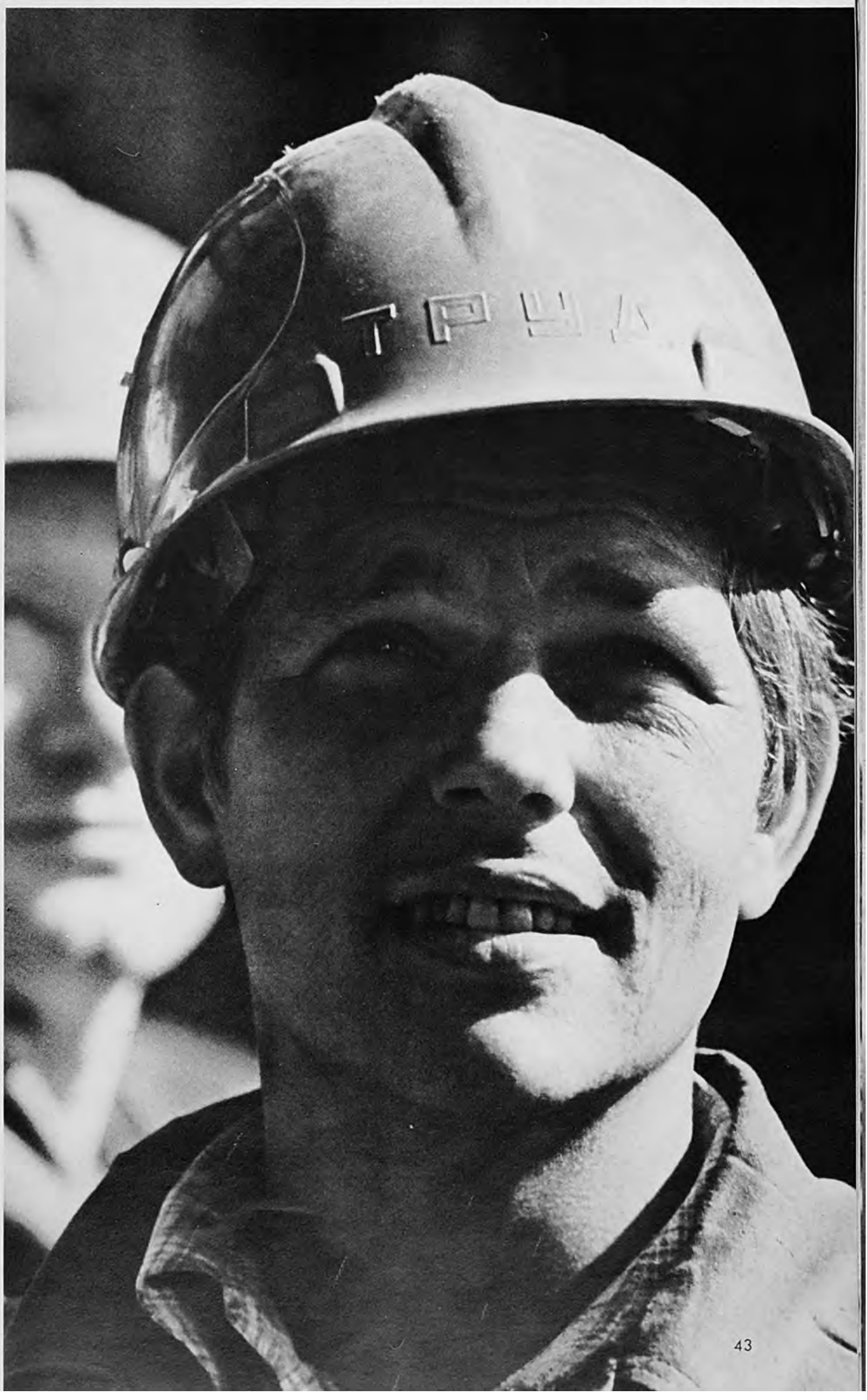


ATOMMASH is a plant in Volgodonsk that produces equipment for nuclear power stations. Like numerous other industrial enterprises, railroad trunk lines and oil pipelines, ATOMMASH was built by young people. According to an established tradition, the Young Communist League, or Komsomol, calls volunteers to work at such construction sites.

More workers are needed in every community in the Soviet Union. But the projects where things often have to be started from scratch are the most popular among the young generation.

The plant wasn't even completed before work began on the first nuclear reactor, which was tested last year. Heeding ▶





Each year thousands of skilled young people like those shown here heed the call of the Young Communist League and volunteer to work on construction projects vital to the country's economy. Together they built ATOMMASH—a key link in the Soviet Union's energy program.

ATOMMASH,
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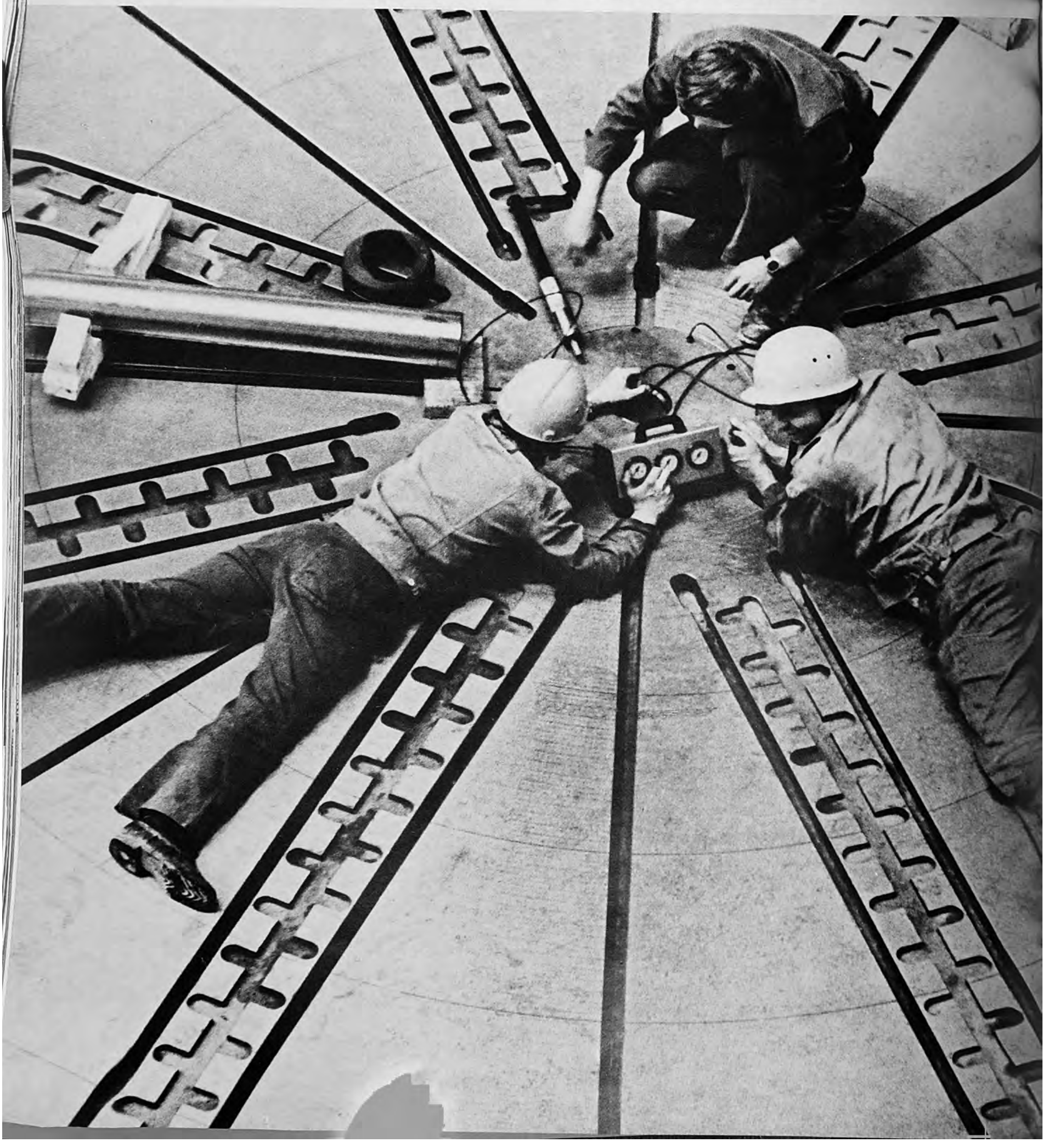

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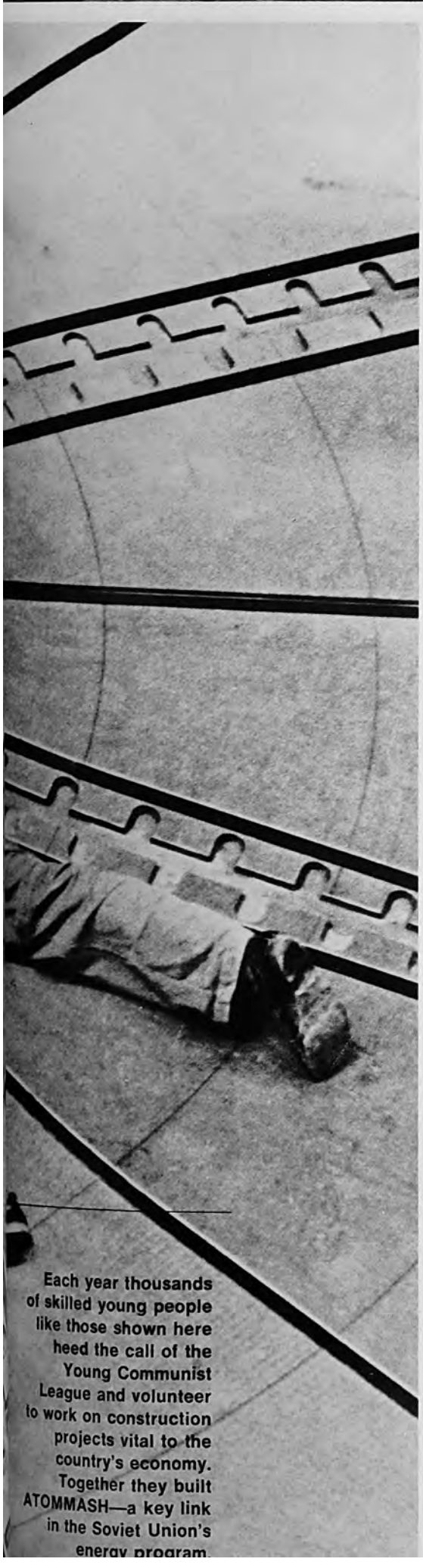

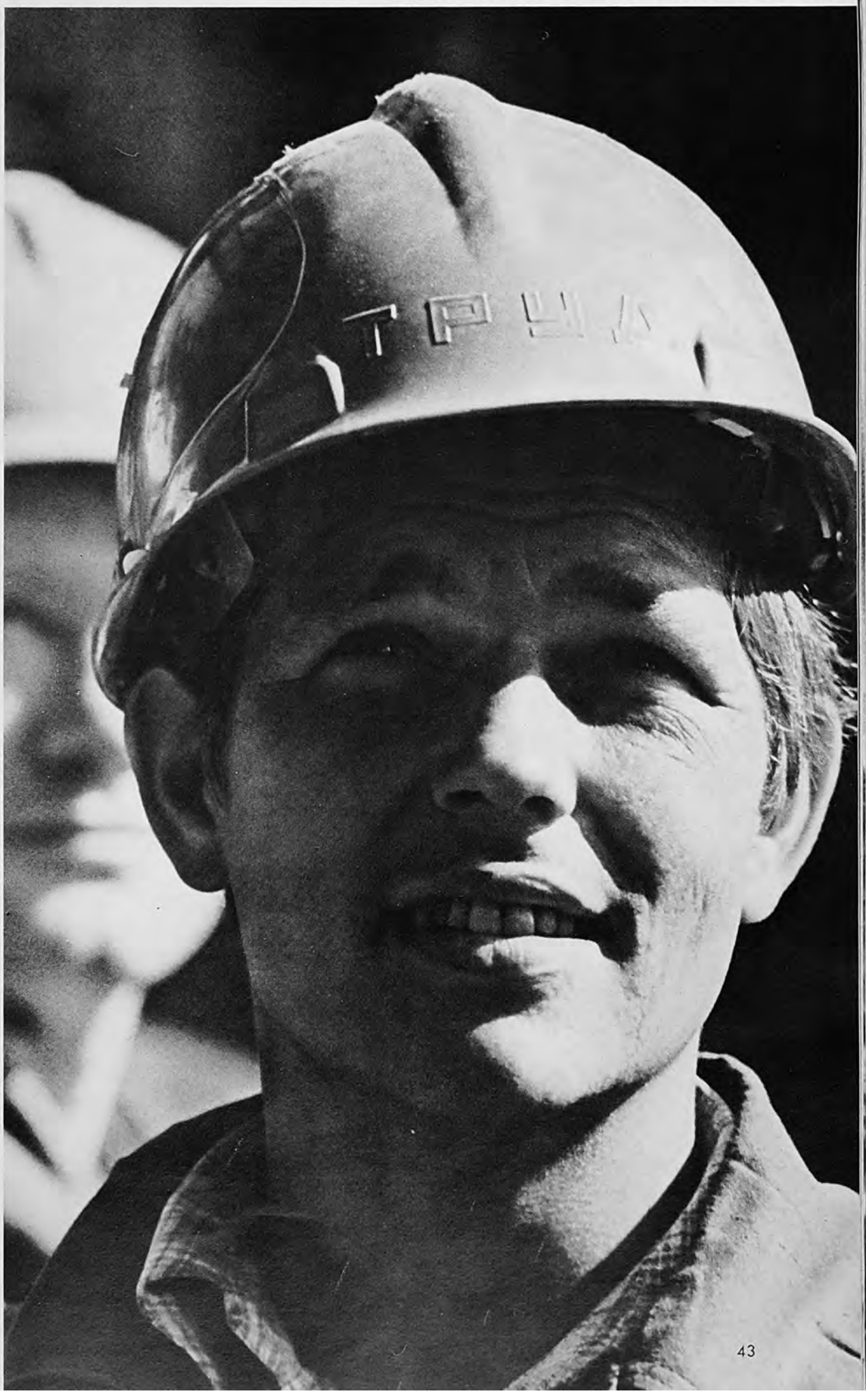

Each year thousands of skilled young people like those shown here heed the call of the Young Communist League and volunteer to work on construction projects vital to the country's economy. Together they built ATOMMASH—a key link in the Soviet Union's energy program.

the call of the Komsomol, young specialists from all over the country came to Volgodonsk.

The desire to help society by doing work where it is most needed, to take part in construction projects that are followed by the entire country; the special moral and intellectual climate that reigns among people of the same age and the same views; the opportunity to build and develop new towns and organize life there in keeping with one's ideals—these are some of the reasons for the great popularity of the projects, according to sociologists.

ATOMMASH is one of the key links in the nationwide energy program. The complexity of the tasks tackled for the most part by young workers reveals not only their enthusiasm, but also their skills. And this, in turn, is to the credit of the vocational-technical school system. Most of the Soviet Union's new young workers learned their trades at these educational institutions.

The town of Volgodonsk grew up along with the giant plant. Today it has a population of 109,000. Like many new towns in the Soviet Union, it was designed so that young people have adequate facilities for sports and recreation.

In Volgodonsk the houses face the canal, which connects Russia's two largest rivers—the Volga and the Don. Ecologists participated in the planning of the town and the plant. Their careful research and foresight should protect the natural environment. ■

out
owing
ie canal,
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a quick puff
cigarette.

LIFE WITH TEEN

Some call it the "difficult age," those years from 14 to 18. This is the time adolescents begin to become conscious of themselves as individuals. Actually it's during this period that young people complete their preparation for independent adult life. We talk anxiously today about the stress and informational overloads students must bear. Side by side with the term "difficult age," the phrase "organization of young people's leisure time" acquires greater significance. Adolescence is more than just a time of preparation for the future. It has its own separate meaning as well. This is one of the most joyous and fullest periods of life. To waste it without reason is a loss that cannot be made up either for the individual or society.

Asserting One's Ego

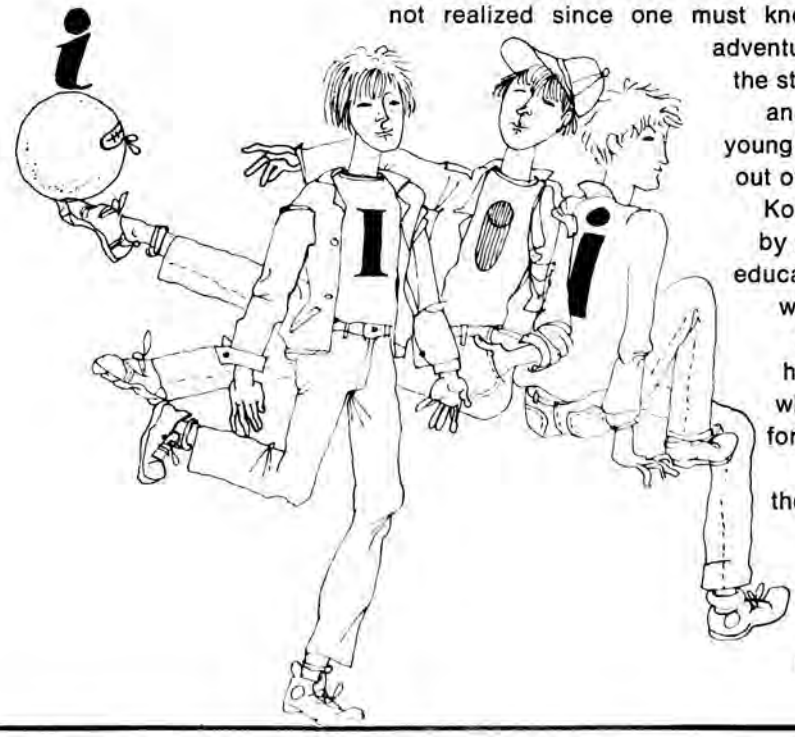
THE "difficult age" is a time of forming, shaping, molding, developing. And, quite naturally, the process of becoming an individual is both hard and subject to criticism. The desire to assert one's ego in spite of everything (psychologists claim that the authority of parents, teachers and adults in general is never so low as it is during this stage), the striving to stand out at any expense, to prove one's worth and uniqueness to everyone around and to oneself—these are the main character traits at this age.

This desire to be a star of the first magnitude often comes into painful collision with the reality of life. What if you can't break sports records? What if you play the guitar worse than a fellow student? What if you have no knack for technology and no talent for writing poetry? Even your jokes fall flat. Then the yearning for self-assertiveness leads you to the darkest path in the public gardens or to the courtyards where other young people like yourself are in the habit of gathering. Together, as a group, they become a force, something to be reckoned with. It happens that the inability to make friends causes adolescents to gather in bars, and this makes the expression "difficult age" a term used by lawyers, and not only those engaged in research but also, it is to be regretted, those speaking in court.

The Need to Belong

This craving to belong, which manifests itself particularly strongly between the ages of 14 and 18, is quite a natural phenomenon in itself. Here is what Professor Igor Kon, a well-known Soviet sociologist, has to say about it:

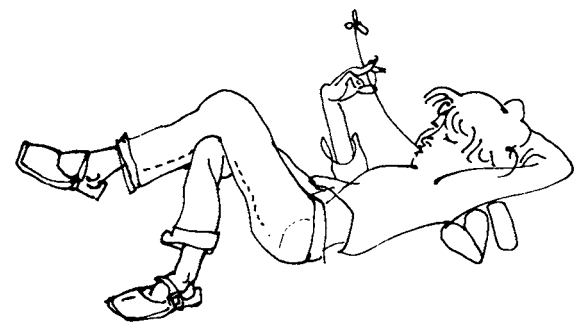
"Free association is not merely a way of spending one's leisure time, it is also a means of self-expression. A young boy thirsts for new acquaintances, adventures and stimuli. A peculiar, often unconscious, sense of having no place of his own drives him away from home, from its stable customary environment. He constantly expects something new to happen—around the next corner, something important must happen—an intriguing meeting or a well-thought-of acquaintance. Most often these expectations are not realized since one must know how to organize an adventure. Simply loafing around the streets won't bring it about, and yet the next evening the young boy finds himself seeking out other young people again."



Kon's sentiment is reiterated by Anatoli Mudrik, a Moscow educator. "It's not so important what they do together, as it is that they get together," he claims. "Perhaps that is why in spite of all their love for diversity and their desire for something new to do, their diversions and conversations are occasionally monotonous. They take the same routes every day, listen to the same records and discuss what

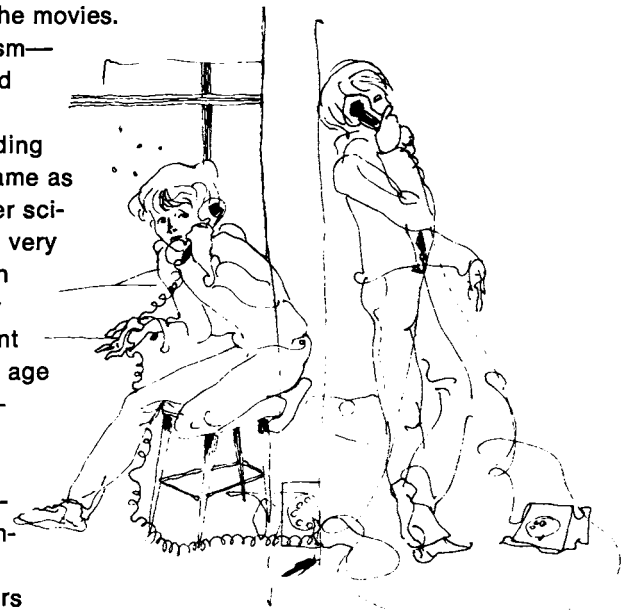
AGERS

By Pavel Gutiontov



ıey've all seen on television or at the movies. hey exchange ideas with enthusiasm—ıough they don't always understand hat they're talking about fully."

I find it interesting that the preceding bservations say pretty much the same as ozens of papers and books by other sci-ntists. Each year we are witness to very eep and important developments in ducation—not all of which we fully nderstand. It is vital that the present eneration of adolescents comes of age ithout knowing war and the starva-on, devastation and deprivations ıat go with it.



From the point of view of prosper-ty, this is the best provided-for gen-ration in the Soviet Union. Today's ıdolescents grew up during the years f the rapid development of the ıcientific and technological revolution. Many of our present ıocial problems have been caused by this.

Leisure Time—New Reference Points

Free time should not be considered time off from duties to ıociety. On the other hand, society itself is considerably re-ıponsible for where adolescents go after school and what :hey do before the school bell rings. What does a city have :o offer them?

The hundreds of thousands of various study groups or-ganized at Young Pioneer Palaces in cities throughout the Soviet Union still aren't enough to meet adolescent children's needs today. Although they offer teenagers new knowledge, habits and skills, they cannot begin to satisfy the growing need for association. Incidentally, social scientists believe that it's impossible to turn spontaneous groups into organ-ized ones because they meet different psychological needs.

In years gone by these "spontaneous groups" were formed in the courtyards of the apartment buildings where the adolescents lived, the same places where their fathers and older brothers grew up, where everyone knew every-one and where third graders played soccer on the same team as tenth graders. New housing is carving up many of the old neighborhoods that formed over the course of dec-ades. In the new open spaces there is no sense of the continuity of time. It's hard to call a narrow strip of asphalt between the shrubbery and a building "a yard."

So those free contacts that I was talking about earlier move from the courtyards either to a cozy room with a tape recorder at home or into the streets.

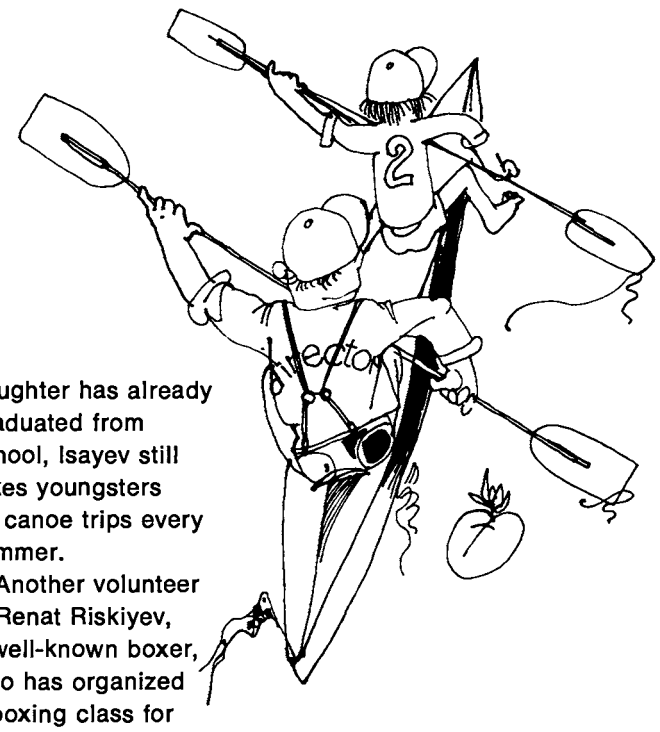
Adults Rallying Adolescents

Groups of youngsters who share common interests are coming together everywhere. Each month there seem to be more and more of them. As a rule, they rally around adults (and they come from the most varied professions) who are eager to help them. All these grownups have one thing in common—they know how to motivate youngsters. In fact, these groups are becoming more than an important modern trend. They are made up of students, workers, young scien-tists and athletes who unite to help teachers and school-children. In Rostov-on-Don, a city in the southern part of the Russian Federation where the idea originated, members of these groups number almost 8,000.

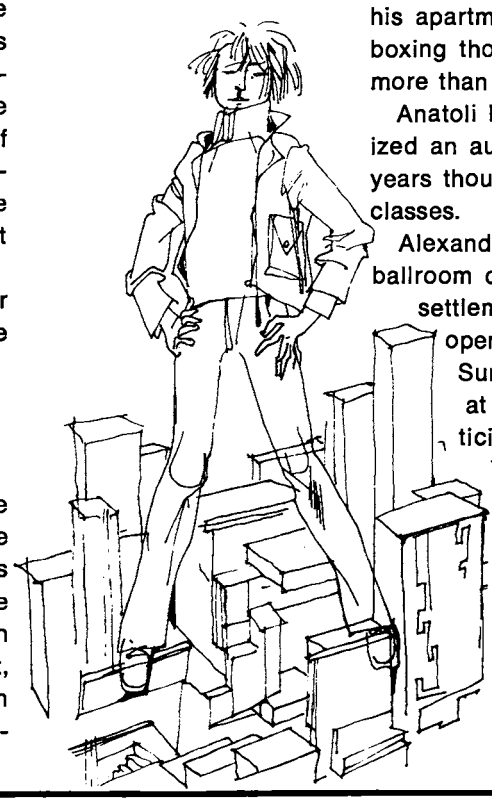
Who Are These Adults?

Who are these adults and what do they have to offer young people? Teenagers, you know, are often scornful and dis-trusting on the one hand, but ready to make an idol of a man or woman who has won their confidence on the other.

One of these volunteers who works with youngsters is Valeri Isayev, director of a plant in Lipetsk that manufactures concrete pieces. He spends nearly as much time at School No. 24 in Lipetsk as he does in his office. Although his daughter has already graduated from school, Isayev still takes youngsters on canoe trips every summer.



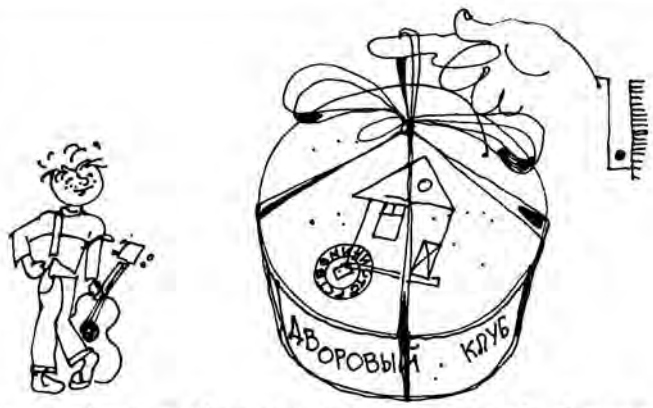
Another volunteer is Renat Riskiyev, a well-known boxer, who has organized a boxing class for the boys living in his apartment building in Tashkent. He teaches more than boxing though; he counsels the boys to respect others for more than just the strength of their fists.



Anatoli Novikov, a teacher in the town of Izhevsk, organ-ized an auto club 15 years ago. In the course of all those years thousands of young girls and boys have attended his classes.

Alexander Kushnaryov is a builder by trade, but he enjoys ballroom dancing too. Shortly after he arrived at the small settlement of Nadezhny near the Arctic Circle, he opened a dancing school. On the last Saturday and Sunday of November a dancing competition is held at the Nadezhny gym. Last year 630 teenagers par-ticipated in the contest.

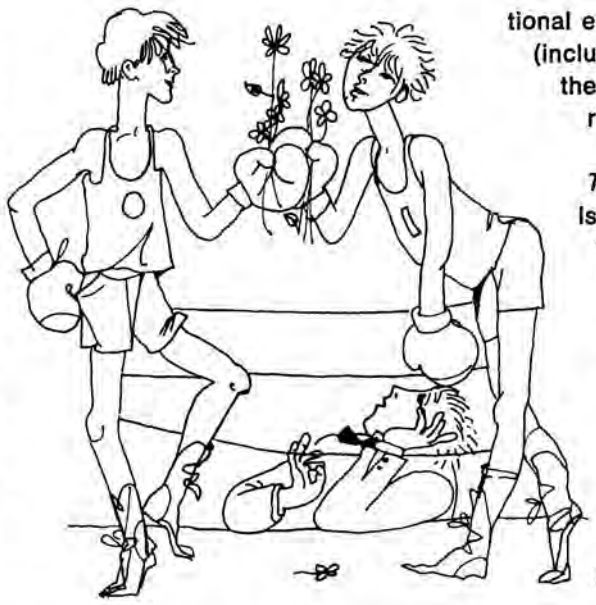
Twelve years ago Alexander Lazarev, a theater critic, organized a drama group called The Beacon at Moscow School No. 233. I have at-tended a number of the group's rehearsals, which sometimes run late into the night. After re-hearsal the members of the company usually have tea and go home. But the exhausted Lazarev, who lives on the other side of the city, often sleeps on a cot in the wardrobe room. ▶



Lazarev shouts at his actors, waves his hands in desperation and makes them go over scenes again and again. Occasionally an actor snaps back at him. But the company has won several city and nationwide festivals. The youngsters produce plays by Euripides and Shakespeare, and every summer they tour out-of-the-way villages.

Come holidays, Lazarev has a real problem—he has to choose whom among his graduates he wants to spend it with. This has been going on for 12 years, and he tries hard not to offend anyone.

Valeri Tokmakov, a guard at Yuzhno-Sakhalinsk Airport, has two hobbies, playing his guitar and tinkering with radios. One time Tokmakov caught a young boy climbing out of a window of his home. The kid's pockets were stuffed with radio parts. The upshot was Tokmakov organized a radio club in his neighborhood. After that he directed a popular



music group. Then he got the idea that a free cinema should be run in the courtyard during the summer months, and he persuaded the housing administration to pay for the films. After that idea was set in motion, he asked his commanding officer to turn over a dozen motorcycles that had already been written off and organized a cycle club. As a result, he has no free time—to the great displeasure of his wife.

Why Do They Do It?

One day I asked Tokmakov why he did all this. He thought for a few moments and answered, "First of all, I find it very interesting." This, I think, is the common denominator that unites the thousands of adults who work with teenagers.

I would like to tell you about another club, this one organized in Novosibirsk. Five years ago Oleg Markin, who holds a master of sports title, organized a rafting expedition for children from School No. 11. They named the raft the *Kon-Tiki* after Thor Heyrdahl's famous craft. The children sailed across the Ob water reservoir. It took Markin's exceptional energy to convince six city organizations (including the department of education and the rescue aid society) to assist in this risky undertaking.

The following year a modernized *Kon-Tiki 2* skimmed across the waters of the Issyk-Kul, a mountain lake in Kirghizia. In 1979 another expedition covered over 600 miles on Lake Onega and Lake Ladoga from Petrozavodsk to Leningrad. And in the summer of 1980 the youngsters sailed across the Sea of Azov from Rostov to Kerch. By this time Thor Heyrdahl himself consented to become honorary president of the school club.

The voyages are preceded by a year of physical workouts each school morning from 6 until 7:30 for all the potential crew members. (There are usually six for each slot.) On Saturdays and Sundays they go on hiking expeditions. In May they race at the city boat club. The prospective crew members also take part in a 200-kilometer bike race from Novosibirsk to Barnaul. On top of all that, in the evenings members of the club work on the raft since they build the whole thing themselves.

It would take a long time to enumerate all the wonderful qualities that are developed by the expeditions and the preparation for them. One of the most exciting developments now is that "Captain" Markin has about 20 former members to assist him. For a year now the Kon-Tiki Club has been operating as a citywide organization and has close to 600 members.

Meeting the Needs

The needs of adolescents are increasingly being recognized and met. The Ministry of Education of the Ukraine, for instance, has changed the hours of school closings. Gyms and the stages of the assembly halls are kept open till late in the evening for the children's use.

In Leningrad architects and city planners are including areas for courtyard clubs in new suburban districts. At present there are 346 such groups in the city.

Hope

We adults are often inclined to go to extremes, particularly in areas that are beyond our control. We often find ourselves condemning adolescents' entertainments as wild and uncivilized and doing our best to overcome them. The "all or nothing" approach sometimes prevails—either free time devoted to culture or no free time at all.

Practice has shown that only a complex approach to the problem of organizing young people's free time can help to solve many of the problems of raising teenagers. ■

WHAT WILL THE FACTORIES OF THE TWENTY-FIRST CENTURY BE LIKE?

norrow's automated factory, which will run virtually without personnel, eing born today. Machinery is increasingly capable of taking over the uous and monotonous jobs from people. "By relying on the endurance of chines rather than people, we can achieve a high level of labor nsification," says Professor Yevgeni Yurevich, a well-known Soviet igner of automated manipulators, in the interview below. Professor evich and Professor Konstantin Pupkov, who is concerned with training sonnel for the introduction of robot technology, explain why the use of ots does not mean unemployment for the Soviet people.

: You have been dealing with robots for many s. What tasks face your design bureau now industrial robots have been spoken of so ly at the Twenty-sixth CPSU Congress?

urevich: A state program for work on indus- manipulators has now been drafted, and I e been assigned to supervise it. Our team of cialists has been working for over 10 years on igns for these remarkable, clever machines. even "teach" the more sophisticated ones. ots can simulate only the outward manifesta- s of the workings of the human mind. They only do the things that they have been in- icted to do.

Ve have already learned how to make robots a distinctive behavioral pattern, so to speak. day robots can be given certain creative capa- ties and a sense of purpose, and "taught" to nember a situation and to make decisions. h the necessary information, robots can go ough different options to find the best one, of rse, within the limits of the task formulated by programmer. That is why the robot is becom- an increasingly important and very useful nd to society.

said "friend." It was not a slip of the tongue. at else can we call robots? They replace us only in excruciatingly monotonous operations, instance, on the assembly line, but also in the st difficult and dangerous jobs. Our mechani- helpers never tire. They can work for any gth of time without a break. They are not aid of heat or cold and remain indifferent to working conditions that cause discomfort to ople, such as noise, high humidity, noxious air ality and risks of explosion. They operate in a cuum and under radiation. And they can be t into deep space.

By relying on the endurance of machines her than people, we can achieve a high level labor intensification. Production efficiency will e sharply as a result. Moreover, robots will ve the way for fundamentally new advanced chnological processes that cannot be intro- ced so long as people are personally involved production since priority must be given to hav- g the best possible working conditions for them.

Q: The Soviet Union operates 30 per cent of e world's robots. What were the robots' "first eps in life" and how are they used today?

Yurevich: The robot has come a long way. In e early part of this century Ivan Pavlov experi- nted with dogs, food and bells. He eventually ntributed the fundamental concept of condi- tioned reflexes to world science. Many interna- tional achievements in the field of learning ma- chines can be traced to Pavlov's experiments.

Then in 1970 a Soviet lunar vehicle, a sophisti- cated robot, was put on the Moon. It brought back samples of Moon rocks that are still being studied in research centers throughout the world.

Today thousands of robots, some of them de- veloped by our design bureau, are operating successfully in hundreds of Soviet factories. Com- plete production lines and even workshops have been automated. For example, take clock and watch production or electronic instrument assem- bly. Both of these fields involve precision opera- tions and minute components. The introduction of robots has raised labor productivity several times. An engineering plant in the town of Kovrov that makes motorcycles and mopeds has 60 in- dustrial robots. Many other factories in different industries use them too.

Robots, like people, belong to different genera- tions. Those of the first generation operate within the bounds of stringent programs, although once a program is replaced, the robots can quickly "learn" new trades and operations, performing them with an accuracy of up to one-hundredth of a millimeter, which is far beyond human ability.

Robots of the second generation have techno- logical "eyesight" and other devices, including sensors, that enable them to react and to promptly adapt to changes in technological pro- cesses. They are adapting robots with a special "sensory" system. The first models of these ma- chines are being used successfully in our indus- try. They are being applied in assembly work and in research on the ocean floor.

Third generation robots, which will have ele- ments of an "artificial intellect," have not yet emerged from the cradle, that is, design bureaus. These machines will be able to identify a situa- tion, appraise it and independently work out a program for their subsequent actions. They will also accumulate experience over the course of operation and use it to improve their performance.

Q: In short, we might say that the robot is a clever and obedient "child" that is rapidly be- coming a practical helper in tackling major social and economic problems facing society. Your bureau has already acquired a wealth of experi- ence in developing and introducing robots. Would you say that the purely theoretical principles of their development change as time goes on. And if so, how does production benefit from this evo- lution?

Yurevich: Over 100 models of robots have been developed in the Soviet Union, some of them by our bureau. A new modular principle has been formulated that serves as the basis for the further development of robot technology. According to it, we are developing modules, that is separate standardized units, that can be used in small numbers to assemble various robots just as chil- dren build toy machines from bricks and blocks. These modules will dramatically reduce the time required to introduce new models, increase their dependability, cut back costs and simplify operation and maintenance.

The modular principle is also effective in creat- ing control technology, the memory of a robot or a whole automated complex. By 1985 the number of robots will largely consist of second genera- tion machines—those with flexible memories that are capable of adapting. This means that they will have extensive readjustment potential and will be able to automatically adapt to various new and changing working conditions. This is very important in modern production, which is con- stantly improving in step with scientific and tech- nical progress. We have already developed an integrated system of modules for control blocks that can be used to assemble a single memory for dozens of robots working on one production line. This will make it possible to develop vast automated complexes in the basic types of pro- duction.

I think this is a realistic approach to the fac- tories of the twenty-first century.

Q: What will happen to those people who now work in "conventional" production when the in- vasion of robots that you are planning gets under way?

Pupkov: Within the next few decades, sophis- ticated automated technology is expectd to re- place millions of workers. Maybe people don't like the ideas of their being "replaced"? Perhaps they fear losing their jobs and livelihoods? I can say outright that robots will neither leave Soviet workers without jobs nor reduce their earnings. The socialist economy is developing according to plan, and improvement in production is being accomplished along with retraining and reassign- ing personnel.

Under socialism, the introduction of new tech- nology is accompanied not by layoffs, as the his- tory of Soviet experience shows, but by the re- assignment of jobs and by the raising of workers' skills.

Q: Why is this so?

Pupkov: First of all, improvements in produc- tion, and this includes automation, are aimed not at making higher profits for private owners—we have none in our country—but at meeting the growing needs of society as a whole and each individual, in particular. Second, our economy is developing according to plan, which makes it possible to balance out all production factors, in- cluding employment, at any given time.

Q: What does the automation of production offer the members of a socialist society in the long term?

Pupkov: People will have more time and energy to use as they see fit. In the meantime, produc- tion will offer them an even bigger choice: They will be able not only to improve their occupa- tional skills—with a corresponding rise in earn- ings—but also to learn new trades and often get higher positions. ■

hobby

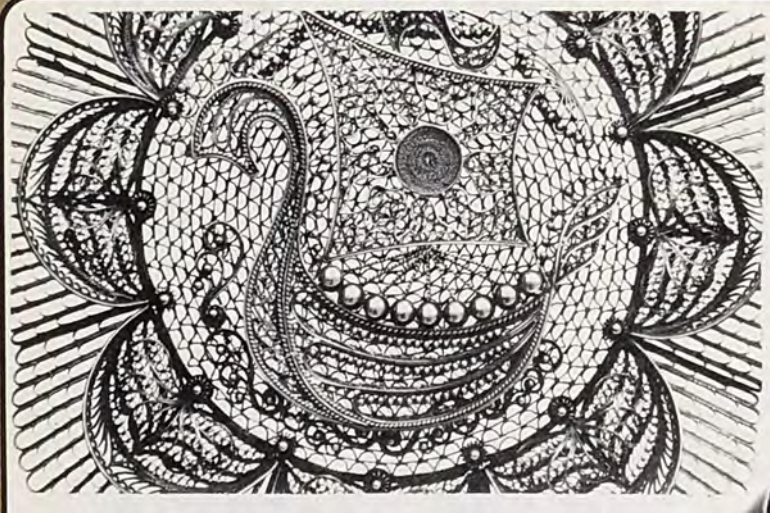
WHAT a remarkable old man! He looks like a contemporary of the Wright brothers. However, he is still well and living in the city of Gorky. His name is Leonid Yeliseyev. He has built his own glider, and he flies it often. Yeliseyev is a member of the Olympic Glider Pilots Club. He doesn't miss a single lesson or a single flight. (The club glides on a steep slope overlooking the Volga.) Vasili Peskov, a journalist who likes to discover unusual people during his travels around the Soviet Union, did a story on this wonderful old man for the newspaper *Komsomolskaya Pravda*.

things cultural

MOVIES

IN celebration of Dostoyevsky Year, Mosfilm Studios has released *Twenty-six Days from the Life of Dostoyevsky*, a movie based on an episode that played an important role in the writer's life. It is the story of how he came to write *The Gambler*. Persecuted by creditors and on the verge of despair, the lonely writer met Anna Snitkina, a stenographer, who later became his wife. Alexander Zarkhi directed the film. The performance of young actress Yevgenia Simonova in the role of Anna Snitkina is unquestionably a success. It was Anatoli Solonitsin's difficult task to play the part of Dostoyevsky, for which he was awarded the Silver Bear for best male actor at the International Film Festival in West Berlin.

the arts



THE old Russian town of Kostroma is famous for its jewel-work. The craftspeople use a special filigree technique. Out of thin gold or silver wire twisted into thread or left smooth, the jewelers create a lacy pattern and weld it to a metal background. They make not only women's jewelry, but also small figurines in this way. At right is *A Russian Trio* and *A Russian Beauty*. Above is a decorative dish with a silver boat, the symbol of Kostroma, in the center. Even from a photograph one can get an idea of the fine workmanship and great skill involved. Today's jewelers are well acquainted with the work of their predecessors and try to add a touch of something new and individual to their jewelry and art objects, which can be found all over the country.

EXHIBITIONS

MOSCOW book designers had a show recently. Above is Tatyana Mavrina's jacket design for *Rabbit Trails* by Yuri Koval. At left is Yevgeni Sokolov's cover for a children's book titled *Bread*. At right is one of Boris Sveshnikov's exquisite illustrations.

BALLET

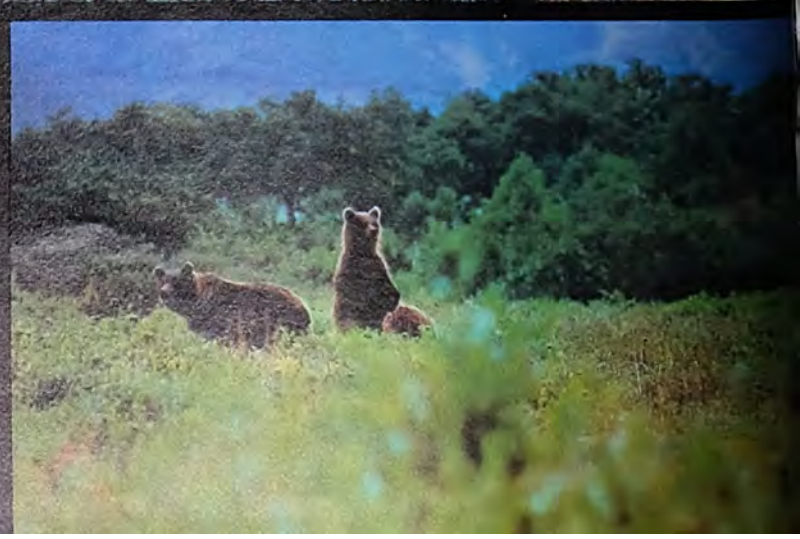
MAYA PLISETSKAYA, the celebrated ballerina of the Bolshoi Theater Company, recently choreographed and starred in the ballet *The Sea Gull* after the play with the same title by Chekhov. She danced the two main roles, that of the sea gull and Nina Zarechnaya. The music was written by Rodion Shchedrin, who is noted for his love of themes from Russian classical literature. He wrote the libretto with Valeri Levental of the Bolshoi. "We tried to transcribe the drama into musical and impressionable images that would retain Chekhov's intonations," explained Shchedrin.

The Sea Gull's première at the Imperial Alexandrinsky Theater in St. Petersburg in 1896 ended in complete failure. Two years later, however, it was a smash hit at the newly founded Moscow Art Theater. Since then, the sea gull has become the symbol of this theater and adorns its curtain. Bolshoi ballet premières always arouse excitement, and the staging of an unusual ballet like *The Sea Gull* makes it doubly so. In recent years literary classics have firmly established themselves on the stage of the famous theater.

Theater

JESSICA TANDY and Hume Cronyn performed in Donald Coburn's Pulitzer prize-winning play the *Gin Game* in Moscow and Leningrad last year. The two were a great success and played to full houses. The upshot is that Leningrad's Grand Drama Theater, whose productions always evoke great interest, has staged the *Gin Game* in Russian. The cast is made up of Lyudmila Makarova and Yevgeni Lebedev (below).

KAMCHATKA IS FOR ROMANTICS



By Victor Rudenko

SELDOM do you meet an old man or woman on the streets of the towns and villages on this peninsula in the Soviet Far East. Kamchatka is a land of young people. The harsh climate of the region undoubtedly has something to do with the age of its residents.

Here the barometric pressure bounces up and down like a tennis ball. The powerful arctic currents make swimming unpleasant even on sunny summer days. The coast is one of the most tsunami-prone and earthquake-prone areas in the world. The peninsula also boasts 27 volcanoes. The weather is cold, the humidity is high, and clouds practically float on the ground.

Because Kamchatka's economy has always centered around fishing, the mountainous land remained unexplored. Only at the turn of the century did biologists discover that the brown bear inhabiting the peninsula is a relative of the Kodiak bear, the largest carnivorous animal in the world. The famous hot subterranean waters were unknown until the early forties. Even today one still feels like a trailblazer on this peninsula. All you have to do is go out into the mountains for the weekend.

Today Kamchatka is home for a huge fishing fleet and numerous geological posts. And the population is growing each year.

Few people settle here for good, though they have every opportunity to do so. The collective farms, for example, will give anyone who so desires a plot of land and an interest-free loan for building a house. The majority, however, prefer not to bother with a home of their own and live in hostels.

I had an opportunity to talk about life in Kamchatka with several young fishers, a few members of a geological team and a couple of drivers. One of the men I spoke with used to be a tractor driver in a village near Voronezh. Others were college students on academic leave for a year, still others had worked in the oil fields of Tyumen. Their reasons for coming to Kamchatka were as varied as the young people themselves. Some came to make money for the down payment on a house (earnings are good here); others wanted to see the world, work like pioneers and live "a real life"; and still others simply wanted to try a new job.

Most people plan to stay no more than 12 months, but many are captivated by Kamchatka and linger for years.

Where else can you work in places that no one has ever set foot on before? Life on this Soviet Far Eastern peninsula breeds a strong brand of friendship—a friendship forged by overcoming hardships together. But life on Kamchatka is not all grueling work and a battle against the elements. Canteens turn into discotheques in the evenings, secondhand bookstands pop up on sidewalks, and the great outdoors beckons for rest and relaxation. ▶

The slopes of Kamchatka's volcanoes are covered with a mist of hydrogen sulfide. The whole Earth may have looked like this when it was young. Left: This peninsula is one of the few places where you can truly get away from it all. Far left: Hikers often get snapshots of whole families of brown bears like this.

The turbulent mountain rivers overflow the waterlogged plains before reaching the Sea of Okhotsk to the west or the Pacific Ocean and the Bering Sea to the east. Bottom left: These constantly erupting little mud volcanoes are companions of hot subterranean waters. Bottom right: At any moment a huge column of hot water and steam may shoot up from the crater of this geyser.

ONSIDERING ALL THINGS

Continued from page 29

ones and circulatory system. The breathing bemes heavy, the heart beats faster and the gestive system and the nervous system are disrbed. Pregnant females may even have miscarages. There is a term for all of this, it's called the isturbance factor." A bear caught unawares by e appearance of a person may die of a heart tack. And a bear is supposed to be the cleverest rest inhabitant! Then what about other animals? MSU students call for a national park system to e created everywhere. Ideally, any woodland or rest could become a park. Certain animals can protected only in reserves because proximity people is disastrous for them. The Ussuri tiger, e curly horned goat, the cheetah, the mountain oat, the panther and the wild cat lived in the lds, far from humans. They came in contact with ople who were already fully equipped with odern technology. There has been no time for aptation.

Concrete Steps

Once MSU students scientifically prove the ed for say a game preserve, they often take rt in its creation.

That's how the vast game preserve called Crane Land, which covers 11,000 hectares, was established in the Taldom District of Moscow Region. From late August to mid-September, about 150,000 cranes stop here on their way south. MSU students recently made recommendations for the creation of seven more game preserves.

Lake Kiyovo, situated within the town limits of Lobnya, near Moscow, has become a natural laboratory. More than 15,000 lake gulls make their nests there. This is a unique example of adaptation to city conditions.

In late 1978 and 1979 MSU students and several other groups sponsored Project Golden Eagle. Several kinds of birds were on the verge of extinction in Moscow Region. Since the beginning of this century there has been no sign of the golden eagle, the white-tailed sea eagle or the falcon nesting here. In order to protect them properly and effectively, it was necessary to determine their number and find their nesting places. That was the purpose of the project. Posters and booklets describing the birds in detail were sent to many institutions and organizations, state and collective farms, schools and game lands. Large rewards were offered for spotting a nest. Well of course true nature lovers aren't out for rewards. In two years 72 reports on about 26 previously unknown nests were received.

All the work of both the Green Patrol and the fauna section is aimed at making recommendations and realizing them. Far from being abstract, the job is realistic and has produced results.

One of the veterans of the Green Patrol, Dmitri Kavtaradze, now deputy chairman of the Soviet working group for the training of specialists for the UNESCO Program on Man and the Biosphere, says: "Conservation work is particularly important for students and young people. It gives them the opportunity to take part in a socially meaningful activity. It is not by chance that each year more and more students are participating in expeditions. Incidentally, most of these young people are not science or biology majors."

Following the Patrol's Lead

Seventy student patrols based on the example of MSU's patrol have been set up in cities throughout the Soviet Union. MSU students stay in close touch with all of these offshoot groups. More than 20 patrols in other schools and colleges have adopted the program of the fauna section. Thus, conservation efforts are being coordinated.

To be sure, the conservation problem is far from being solved. However, the initiative of the young people enjoys state support and gives us hope for the future. ■

RE COMPUTERS ROGRAMMING OUR LIVES?

Continued from page 35

e production of qualitatively new systems based n computers of the fourth generation.

Automated equipment, even if it is computered, cannot solve complicated logical problems. nly people can do that. However, by using a ell-designed program, one can—almost autoatically—control every function of production r a whole enterprise.

At Soviet enterprises integrated systems are ed that, as a rule, have three levels:

Automated systems controlling technological ocesses.

Coordinated operation of automated units of oduction sections and shops.

Control of the economic activity of the entire terprise.

The SIGMA Automated Control System elabated by the Siberian Department of the USSR cademy of Sciences is the most efficient. It enles one to effect the comprehensive manageent of even a complicated enterprise. The structre of factory management is multifaceted: It es from a worker to a team to a section to a op to an enterprise. The transmission of inforation to the computer center is the basis of any pe of automated control system. And the process is ongoing. A worker is given a process chart to fill in. Let's say he calculates his wages. We often make mistakes, but not when it comes to figuring our earnings. The principle of this activity by a person, in which he makes the least number of mistakes, enables the automated control system—after processing accounts—to supply information about the state of all production at the end of each shift. Of course, this description of an automated control system is not exact, but it helps one to understand the principle behind its work.

Computerization of labor in the Soviet Union signifies a change in direction to a higher level of economic management on the basis of scientific planning. This is especially important now since the Twenty-sixth Party Congress has set quite new tasks for economists. I am referring to the enhanced role of econometrics in management, which will boost production efficiency and the quality of work in all branches of the national economy.

Automated control systems are multifold. Each enterprise needs its own program. However, with centralized economic management, when a ministry stands at the head of the branch, it is possible to reduce all the systems by a common denominator within the framework of a given branch.

In the Soviet Union automated control systems are at work in every ministry and department that relate to the economy. In the future these and other information systems will become component parts of a nationwide system for collecting and processing information. This will ensure the efficient solution of ever more complicated problems of economic management in the best possible way.

To conclude, I would like to note that as a result of cybernetics, human labor is becoming increasingly more managerial in nature. Now problems of controlling information—the sum of knowledge and ideas accumulated for hundreds of thousands of years—are emerging. However, as the ancient Greek philosopher Protagoras put it, "Man is the measure of all things." Computer programs are prepared by people, and computer operations are also controlled by people.

Computerization of production is gradually releasing people from tedious work, both physical and mental, giving them more time for creative activity and more fully satisfying their need to know, their need for self-expression and self-assertiveness.

All of this is fine. But we must not forget that the achievements of the scientific and technological revolution bode ill too. Computer programs can contain the evil that may burst out as a thermonuclear conflagration. People should compel computers to operate only according to peaceful programs. ■

Dear Subscribers,

Congratulations are in order—to us and to you. In September SOVIET LIFE will celebrate its twenty-fifth anniversary.

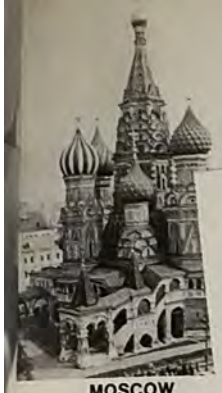
Although many of our staff writers, editors, translators, photographers and artists have come and gone over the years, many of you have stayed with SOVIET LIFE. As part of our celebration, we'd like to know more about who reads our magazine. And we'd like to know how long you have subscribed to SOVIET LIFE. Perhaps someone out there in those 50 states and the District of Columbia has been a SOVIET LIFE reader for a quarter century. If so, we'd definitely like to hear about it.

Will you drop us a line and tell us how long you have been reading SOVIET LIFE? Be sure to include your address. SOVIET LIFE would like to express gratitude to you personally. So let us know who you are.

Yours, G. Isachenko

Georgi I. Isachenko

THE CHALLE



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VILNIUS

SAMARKAND

SOVIET LIFE Magazine

Dear Subscriber:

You may remember our Lucky 100 Olympic Sweepstakes last year. Certainly the two Grand Prize Winners, who attended the Olympic Games in the USSR at our expense, will never forget it!

Because that sweepstakes was so popular with our subscribers, we are pleased to announce another even more exciting sweepstakes to commemorate SOVIET LIFE'S *SILVER ANNIVERSARY* — 25 years of continuous publication in the United States.

This year, if you are one of our two Grand Prize Winners, you will not only receive an all-expense-paid, 10-day tri p to the USSR, but you will be able to choose from several fascinating itineraries.

If you win, you might wish to travel across Siberia to magnificent Lake Baikal and to the ancient Russian city of Irkutsk. Or, if you especially enjoyed our May issue, you might wish to personally explore fascinating Tbilisi, capital of Soviet Georgia, or to visit modern Tashkent, capital of Uzbekistan, or old Samarkand, or to see the Gothic architecture of Tallinn and Vilnius, the capitals of two Soviet Baltic republics. Of course, there is beautiful Leningrad with its incomparable Hermitage Museum and Moscow with its majestic Kremlin. The choices will be yours if you win!

But you cannot win without entering. And to enter, all you need do is fill in and return the 25th Silver Anniversary Sweepstakes Entry Card below. Enter now!

Good Luck!

G. Isachenko

Georgi Isachenko
Editor

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B. All prizes will be awarded. Winners need not be present at the drawing to be held on August 20, 1981. Shortly after the drawing, winners will be notified by telephone or mail.

C. Winners of the Grand Prize 10-Day Trips to the USSR are responsible for transportation to and from their homes to Washington, D.C.'s Dulles International Airport. Trips must be taken by December 31, 1981. Trips are not refundable or transferable, but if a Grand Prize Winner is unable to take a trip because of health or other reasons, *Soviet Life* will award a consolation prize.

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GE OF THE PLOW

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Soviet newspapers and magazines regularly carry reports on various contests that require special skills. As a rule, these competitions are organized by the Young Communist League for the purpose of raising the prestige of trades needed by the country. It is a well-known fact that an adolescent choosing an occupation considers not only earnings, but also the importance of the job. Our story is about the fifth national competition of young farm machine operators. As many as 118 of the top students in rural vocational schools came together in the village of Inyakino to take part in a plowing contest.

There were also milking machine operators at the competition. They not only have to know how to handle the equipment with ease, they also have to know how to handle a nervous cow as well. Bottom: Sharifan Kasimova from Tajikistan learns that she came in first in her category.

Teams from all 15 Soviet constituent republics took part in the competition for the title of the country's best young plower. Above: The young women easily match the young men in speed and quality of plowing. Right: Their turn is over. All they have to do now is wait for the results of their rivals.

THE VILLAGE of Inyakino lies 200 miles southeast of Moscow, in the very heart of Russia. The vocational school there is one of the best of the 1,700 schools in our country that offer training in agriculture. The school has a motor pool that includes 60 tractors, 30 motor vehicles and 10 harvesters. In 1975 it was accredited as a secondary school, which means that its students receive a complete secondary education along with a trade. After graduation they can take jobs in line with their training or enroll at institutes or colleges and universities.

In addition to a dairy farm, Inyakino's vocational school has an experimental farm. A plowing contest was held on its 1,750 acres for three days in July last year.

Before the plowing began, however, entrants were required to take an exam based on their knowledge of farm machinery. The test was given in the school's workshop, which is equipped with parts and machines.

On the second day the blue and orange tractors were moved to the fields. Residents of neighboring villages swarmed around the giant machines, giving the contest the atmosphere of a country fair. The referees and judges, armed with stopwatches and measuring tapes, took their places. The competition was tough from the start. Only the best young farm machine operators from the 15 republics were taking part in the contest.

Even from a distance you could see the orange tractor of Budris Gintauskas from Lithuania slowly moving from one peg to another, as if it were feeling the ground with its treads. Each contestant had to plow about one and a fifth acres in two hours, staying at a consistent depth of seven inches. Budris was working just as he would back home in Lithuania, where the fields are small and irregularly shaped. This kind of plowing requires a lot of skill.

Asker Kerimov from Azerbaijan drove his tractor to the next plot. Only the week before he and several other people had saved their village from a flood. As the snow in the mountains began to melt, it ran off into the valley and deluged the village. All the heavy equipment in the valley was mobilized to build a dam and aqueduct. "That was some job!" Asker recalled. "I didn't leave my cab for 24 hours. It was nothing like this—going from one peg to another."

In one of the dairy barns Volodya Bruyevich from Byelorussia was stroking a cow. His turn was soon up. The day before it took him only seven minutes (the time limit is nine minutes) to take apart a milking machine and put it back together again. But one doesn't hurry these things along too much because a lot depends on the cow. A sudden movement could scare the cow, and it might refuse to give milk. Then the operator would have to unhook the machine and milk by hand. Imagine a first-class machine milker doing that!

By noon the Sun had warmed up the field, and meadowlarks were flying overhead. One of them seemed to be following Tanya Karetnikova's blue tractor. Tanya, who is a graduate of the Inyakino vocational school, appeared to have the field well in hand. After three years she has come to know every bit of it, and her even furrow was the proof. Like a shuttle, her tractor moved back and forth, leaving clear-cut furrows.

When Tanya entered the vocational school three years ago, she had never considered becoming a tractor driver. She just wanted to work on a farm. But the school's headmaster, Alexander Shmachkov, took the new students around the workshops and showed them the motor pool. The blue tractor that Tanya now drives caught her eye right away.

By evening the roar of engines in the field had stopped. The boundaries between the separate plots had disappeared, and a light breeze was blowing over the land. Despite their fatigue, all the contestants assembled in the auditorium after dinner for a performance by Moscow artists. After that they organized an amateur concert of their own. ■

FANTASIES
ABOUT THE L.A. OLYMPICS

It seems like only yesterday that Moscow was getting ready for the 22nd Olympic Games. The new world records and Olympic records are past history now, and the four-year cycle has begun again. Soviet athletes are already fixing their sights on the 1984 Games in Los Angeles, California. Several winners of the 1980 Olympics share their views on what it will take to win a gold medal the next time around with correspondent Mikhail Dmitriev.

Yelena Davydova, right, says the floor routines for women are becoming "much more complicated." Facing page, top: Two-time Olympic medalist Yuri Sedykh predicts the winning distance in the hammer throw will be "somewhere around 84.5 to 85 meters." He says that the distance increases by 2.5 to 3 meters every four years. Bottom: Victor Krovopuskov hopes to become the first Soviet fencer to win five Olympic gold medals.

ONE OF THE MOST EXCITING and surprising events at the Moscow Olympic Games was Yelena Davydova's win in the all-round gymnastic event. In her first Olympic appearance the 19-year-old Leningrad student scored a perfect 10 in the floor exercises and took a gold medal in the all-round event.

Q: Yelena, tell me, how do you envision women's gymnastics in 1984?

A: The competition in Moscow showed that routines are becoming much more complicated. Take the floor exercises, for instance. I think that even the pros had a hard time following the cascades and all kinds of somersaults—forward, backward, stooped, tucked, double, triple, and what have you.

A woman gymnast today must be able to execute three series of acrobatic stunts, with anywhere from three to five intricate parts in each, if she wants to make the top grade in the future. The idea has been suggested to make it a series of four.

People are saying that elegance and artistry are being crowded out of women's gymnastics by acrobatics and that very soon they will be eliminated completely. I don't believe that. Elegance and artistry have always been characteristic of the Soviet school of gymnastics. Take Nelli Kim in the floor exercises. She combines cascades of intricate jumps with superb choreography and gymnastic skill. She is proof that gymnastics will prevail over acrobatics and grace will win over strength.

I might add that all of the first-rate gymnasts are seeking this harmony. They may be doing it in different ways, but each one is striving to surpass the others not only by means of very difficult jumps, vaults and turns, but also by fascinating parts that are of a purely gymnastic nature. I think that the laurels in Los Angeles will go to the contestant who shows the finest pattern of this synthesis of complexity and beauty. Of course, there's a little bit of luck involved too.

Unlike Yelena Davydova, Yuri Sedykh was an Olympic winner in Montreal. He made it twice in a row, setting a new world record this time with 81.8 meters in the hammer throw.

Q: Did you expect to win again?

A: I knew what I was able to do, and I set my mind on taking one of the medals. The distances increase by 2.5 to 3 meters, on the average, every four years. Add 3 to my best showing in Montreal, and you get 80.5 meters. That was my target in the Moscow Games. So that world record came as a bit of a surprise to me, too.

Q: How do you explain all the rungs on the Olympic victory stand in Moscow being occupied by Soviet hammermen? Do you foresee it happening again in Los Angeles?

A: We have at least half a dozen guys who can count on a berth on the 1984 Olympic team, which means that they can also hope to win a medal. We all train together, so there are no secrets. Besides, we have first-class coaches. All this spells progress for us.

The three of us—my coach Anatoli Bondarchuk, another student of his, Moscow Olympic bronze medalist Yuri Tamm, and I—are looking forward to making a three-rung repeat in L.A., though it will be harder there than in Moscow. Personally, I'd like to be the second person in Olympic history to win the hammer event three times in a row. John Flanagan of the United States did it first, but that was back in 1908, with the missile landing somewhere in the vicinity of 49 to 51 meters. I'll be 29 in 1984, but that's the right age for our event.

Q: You mentioned the rapid progression in the hammer throw. Do you think that perhaps in Los Angeles the field will have to be extended or the hammer increased in weight?

A: Oh, no. That's still a long way off. Our world record now stands at 81.8 meters, so there's still about 20 meters left before the boundary of a regular size field. The hammer's weight right now is exactly what is needed for the fascinating feature of our event—speed combined with strength. I doubt, therefore, that L.A.'s field will prove to be "too short." My forecast is that the winning distance will be somewhere around 84.5 to 85 meters.

An even larger collection of Olympic gold medals can be seen in the home of Victor Krovopuskov, who won two in the individual and team sabre events in the Montreal fencing tournament and added another pair in Moscow.

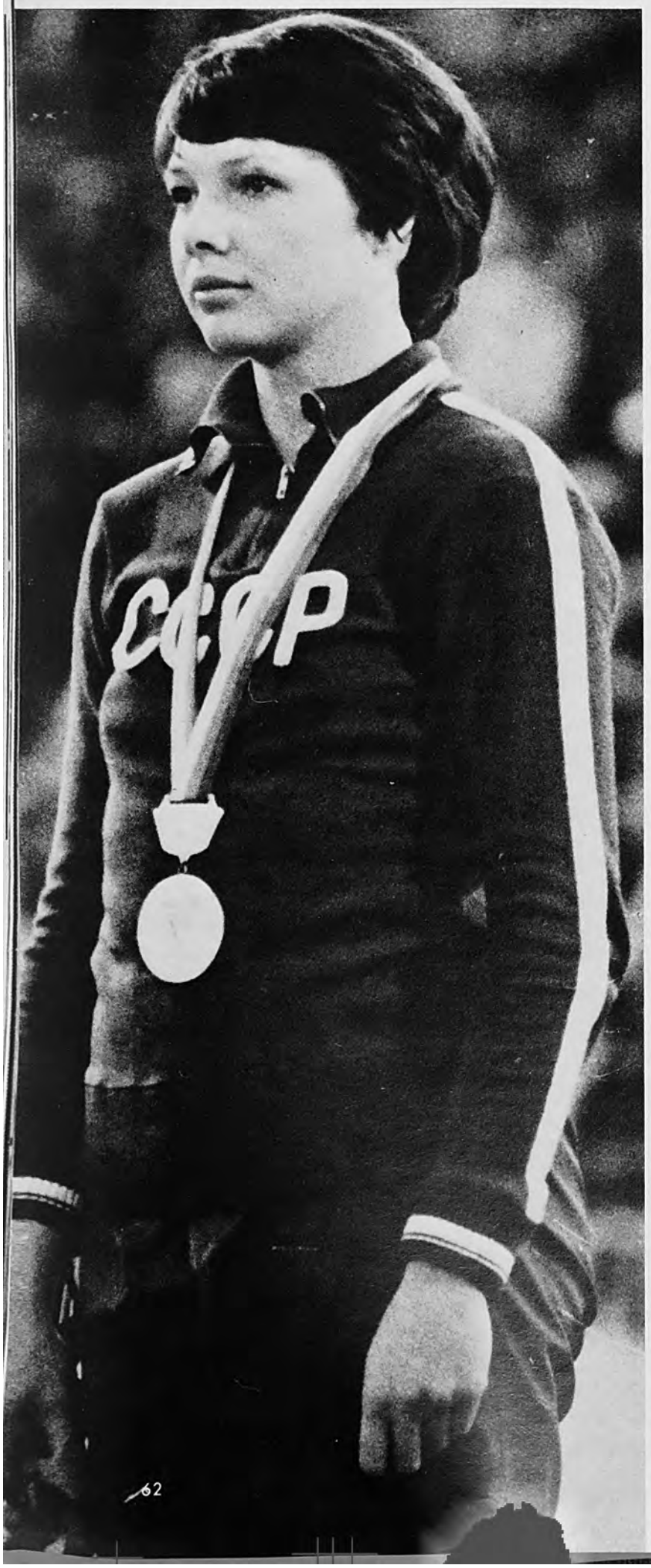
Q: Can you describe the ideal Olympic fencing champ in 1984?

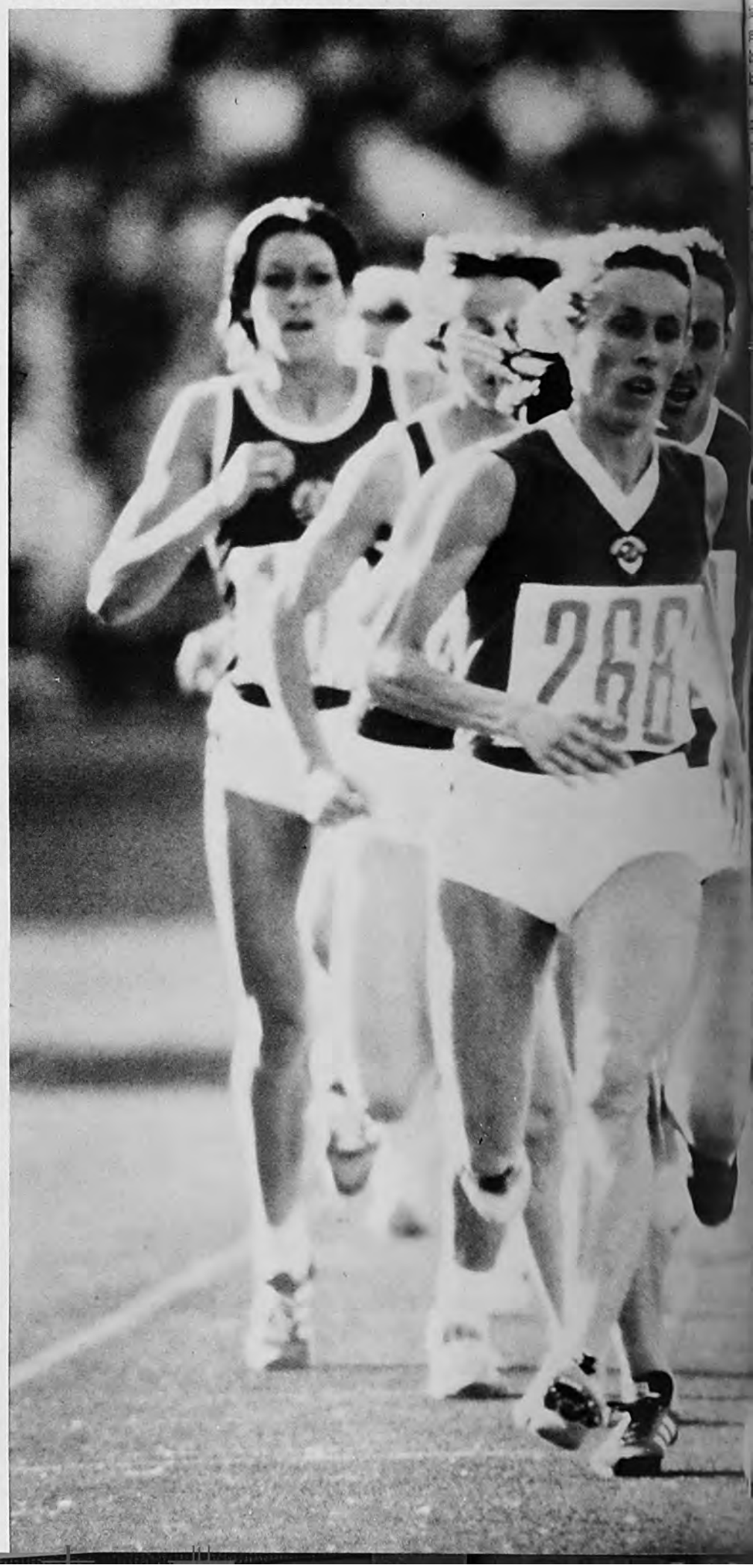
A: We don't talk about ideal types in our line of sports. A fencer can be as tall as Don Quixote, as short as Sancho Panza, as thin as ballerina Nadezhda Pavlova or as heavy as the famous Italian fencer Mario-Aldo Montano. I'm joking, of course, but as in any joke, there is a grain of truth in it.

Q: Joking aside, what is the standard for a fencer?

A: A champion's strongest point is his character. This is the deciding factor when everything else is equal. This will certainly be the case in Los Angeles, too. ▶

Vladimir Salnikov, who swam 1500 meters in under 15 minutes in 1980, is already doing some thinking and reading about his next target. Below: Runner Tatyana Kazankina says that athletes everywhere are making such strides forward that she won't hazard a guess about what will happen in L.A. Left: Lyudmila Kondratyeva, winner of the 100-meter dash at the Moscow Olympics, predicts that by 1984 the time will be down to 10.5 seconds.





: You're over 30 now, and you'll be 36 when the next Olympics come up. 'ill you be in them?
: I'll do my best to be selected again. As for age, there have been older ıampion fencers before me. I'd like the chance to become the first Soviet ıncer to win five Olympic gold medals.

yudmila Kondratyeva, a 22-year-old student from Rostov-on-Don, achieved her coveted goal of winning the Olympic 100-meter dash.
: Would the results have been different if Evelyn Ashford of the United tates had come to Moscow?
: Evelyn is a strong and gifted challenger, and it's a pity that she wasn't ith us on the Luzhniki track. But I doubt whether she would have made ıy difference in the finals. You see, all the finalists were in top form for ıe Moscow Olympics. I also was in fine form then and still am. I feel sure ıat it won't be long before I better my post-Olympic world record of 10.87 econds.
: What time do you think the Olympic winner will show in 1984?
: Guessing is not so easy because I think that records in women's races ill increase rapidly in the next few years. Talented sprinters keep popping ɔ all the time in various countries, and they are all ambitious. I believe ıat by 1984 the time in the 100-meter dash will be down to 10.5 seconds.

The No. 1 star performer in the Moscow Olympics was, unquestionably, Vladimir Salnikov, the 20-year-old Leningrad student who captured ree gold medals in freestyle swimming and clocked a fantastic world ecord time of 14 minutes 58.27 seconds in the 1500-meter event.
: A reporter asked you in 1979 what your next goal was and you replied: Covering 1500 meters in under 15 minutes." You've done it. Are you atisfied now?
: I certainly was glad to win that gold medal in my favorite race. But nce then I've been thinking about my next target. I said in the year be- re last that the record in the 1500 meters would be less than 14 minutes the end of this century. I recently read a magazine article about the ork done by a West German physicist, Dr. Gunther Kohen of the Univer- ty of the Saar. He not only substantiated scientifically the forecasts for vimming times in the next 20 to 30 years, but also tried to guess the inning times in the L.A. Olympics. His conclusion is that none of today's ecords will last until 1984. Times can be expected to be reduced in the ext few years in a number of swimming events, even by several seconds. or instance, according to Dr. Kohen, in 1984 the time in the 1500 meters ill be down to 14 minutes 41.2 seconds, while in 2000 the best will be ocking 14 minutes 7 seconds, with the ceiling set at 13 minutes 39 econds. As for the year 2000 and the ceiling, this still is a matter of the ture, but the forecast for 1984 is quite convincing. Perhaps the winner ill clock a faster time.

Middle-distance runner Tatyana Kazankina of Leningrad also has three Olympic gold medals. The 29-year-old postgraduate student of the esgaft Physical Culture Institute triumphed in the 800 and 1500 meters Montreal and took top honors again in Moscow in the 1500 meters.
: Frankly speaking, even some of your most fervent admirers didn't ex- ect to see you on the Moscow victory platform. Why not?
: I was eager to repeat my Montreal performance in Moscow, but I had baby girl in 1978 and taking care of her and studying besides left me ith very little free time for sports. Still, my coach, Nikolai Malyshev, and ound a way out. As my daughter got a little bigger, I was able to devote ore time to training for the 1980 Olympics. While I was away from the ack, certain changes were made in running techniques. With the faster nes being returned in competition, I had to do some fast changing myself. paid more attention to speed. A final burst of speed used to be my ump. But I didn't have it then. I believe I could have "caught" that speed the Olympics had been held a year later. That's why my present style running looks odd to many onlookers. That last burst of speed for me w begins at 600 meters, and not at 250 as before, from the finish line. ıt what happened in my case proves again that in four years' time, and metimes even less, an athlete can master any technique in the lane.
: What are your forecasts for the 1984 Olympic Games? Will you be mpeting, especially after setting a new world record in the 1500 meters st fall?
: The gap in the world records in the 1500 meters for men and women is now been narrowed by nearly 20 seconds. Thirty years ago it was most a minute. When I clocked a new world high of 3 minutes 52.5 econds in Zurich after the Moscow Olympics, I was surprised to learn at it was better than the men's record of 3 minutes 53.6 seconds, set by e legendary Finnish runner Paavo Nurmi back in 1924. With such

A NEW LIFE FOR ETHNIC MINORI

National Statehood Achie

The August issue is dedicated to t North, a vast region covering 11 r kilometers that is, for the most ciently developed as yet. The rac that have taken place in the life o ples of the USSR are particularly the fate of small ethnic groups—th inhabitants of the European and S and the Far East. Threatened w before the 1917 October Revolut only have survived, they are actual

DEVELOPING THE NORTH

A Huge Construction Site

Harsh climate, long distances fro regions, a work force shortage and special frost-resistant machinery a are ever-present problems that hav with to develop the northern oil fi mines, build towns and settlements, highways and railroads and erect pc sion lines. Yet these things are al and at a rapid pace. But industrial times entails undesirable conseqU

EARTH

By Andrei Voznesensky

Barefoot, we love to tread the earth,
Earth vaporous, soft, dear.

Where?
In Ethiopia?
Or in Havana?
In Ryazan's shady grove?
In a sun-baked savanna?
In parts remote?
In the place of one's birth?
We are men,
We love to tread the earth.

Its currents run through us, liberated,
But from the earth we are isolated,
City dwellers that we are,
By cobblestones,
asphalt,
rails,
cars . . .
Yet with smiles we greet a sapling
Up through the granite
like a geyser
spurting!
I dream of an Earth free of fetters and trenches,
Free of warfare's acrid stenches,
Decked in lindens, rich in dreams luminous,
Blazing with showers aluminum,
An Earth of women,
of steaming trains,
Pregnant with fruit,
heavy with grain,
An Earth of magic, of human magic,
Rumbling,
puffing,
flaunting its music! . . .
Somewhere on Mars
a visitor from Earth
Will take out a handful of warm, brown earth
And lovingly gaze at the blue-green sphere,
Never distant,
Ever near!

Translated by Irina Zheleznova

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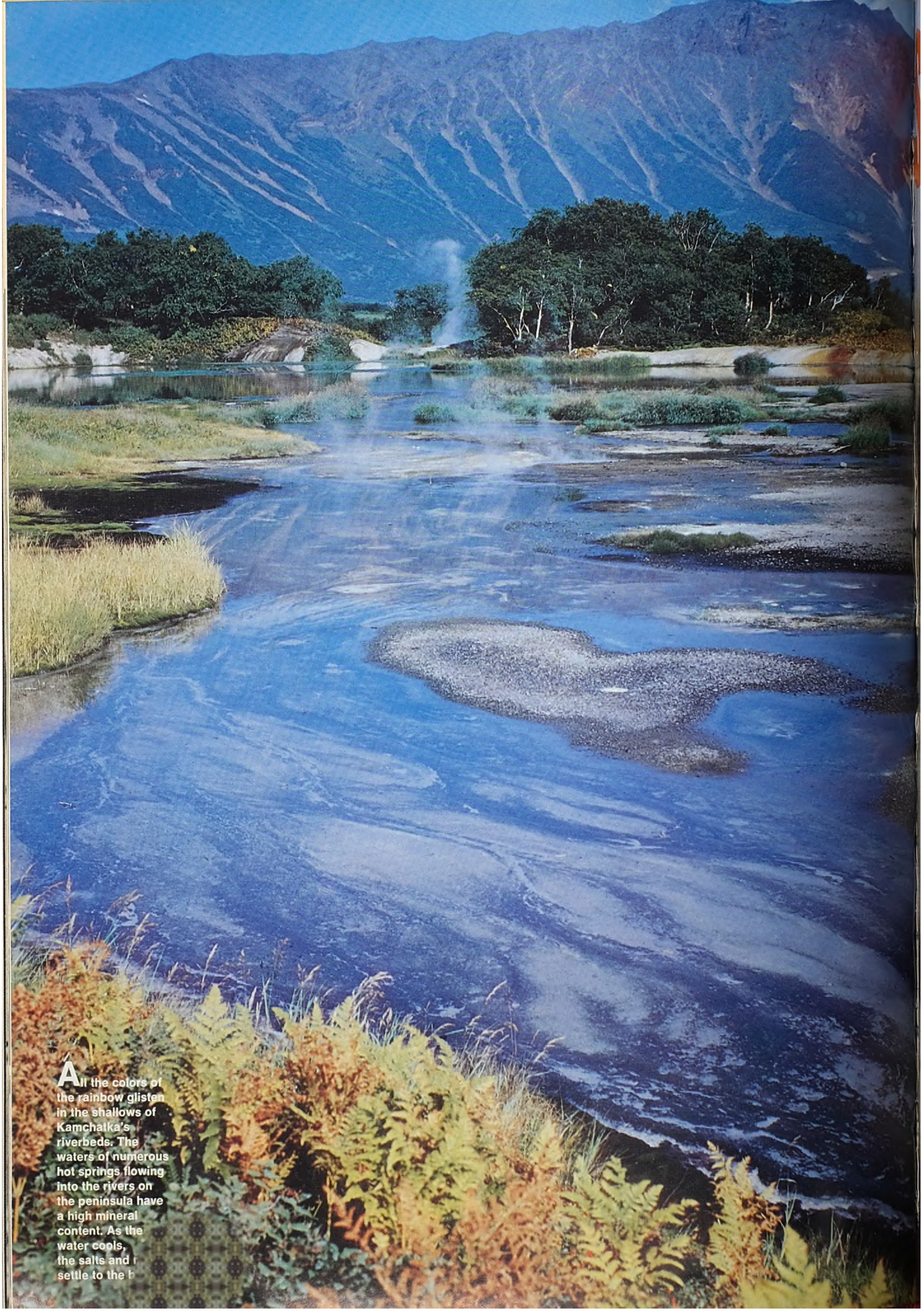

All the colors of the rainbow glisten in the shallows of Kamchatka's riverbeds. The waters of numerous hot springs flowing into the rivers on the peninsula have a high mineral content. As the water cools, the salts and m settle to the b

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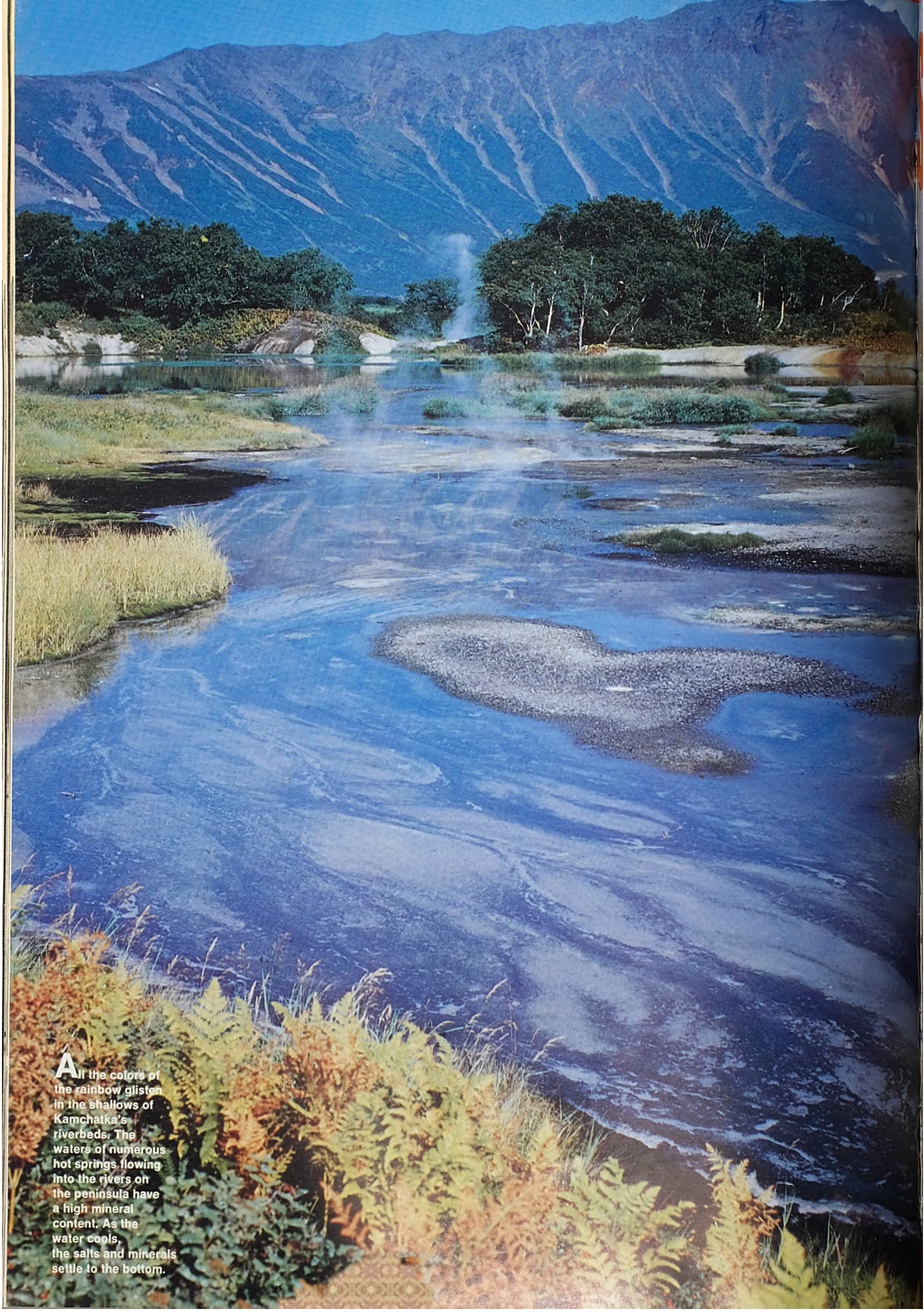

All the colors of the rainbow glisten in the shallows of Kamchatka's riverbeds. The waters of numerous hot springs flowing into the rivers on the peninsula have a high mineral content. As the water cools, the salts and minerals settle to the bottom.

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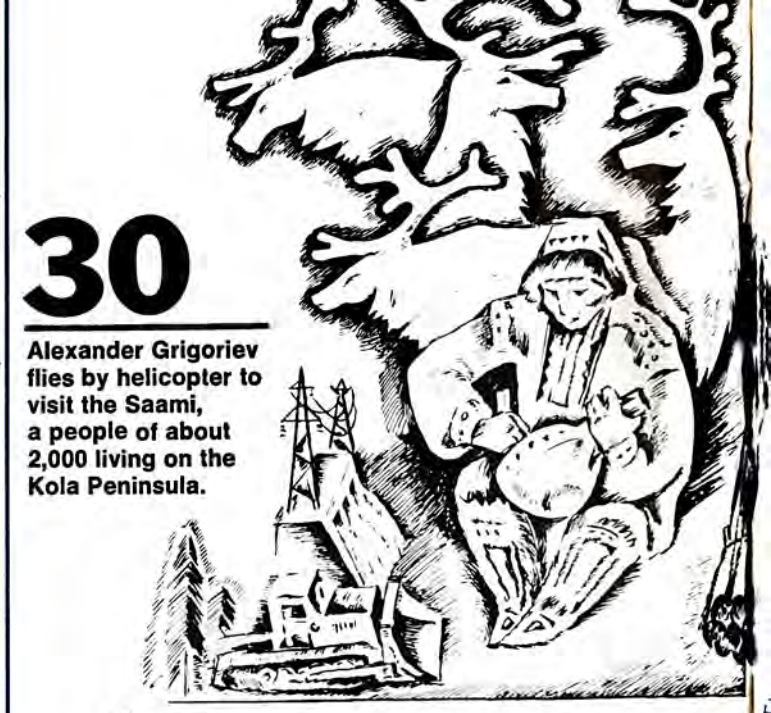

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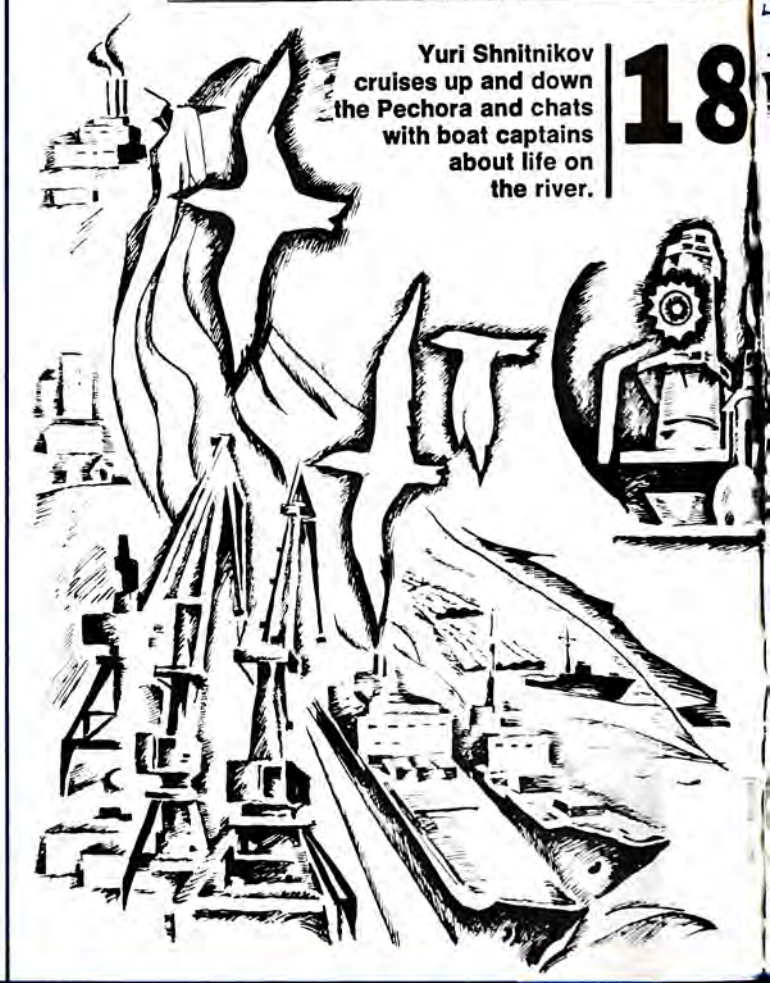
Alexander Grigoriev flies by helicopter to visit the Saami, a people of about 2,000 living on the Kola Peninsula.



Yuri Shnitnikov cruises up and down the Pechora and chats with boat captains about life on the river.

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August 1981, No. 8 (299)

SOVIET LIFE

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Front Cover: A radiant smile from a young Chukchi girl for special photographer Lev Ustinov.

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LETTERS TO THE EDITOR

I would like to tell you how much I enjoy receiving SOVIET LIFE. It was most instructive to read about your various states, and I firmly believe that this type of literature will help bring together our two great countries.

Your magazine is beautifully printed, photographed and edited. Keep up the fine work and know that you are pleasing many of your readers.

William N. Graf
Los Angeles, California

I wish to acknowledge your excellent efforts through your fine magazine to present information about the Soviet Union to the American people. I am 75, so I lived through the terrible years of World War II. Therefore, I for one recognize the contribution the Soviet Union made to the Allied victory in 1945!

Since 1953 I have played a number of Russian chess players through tournaments offered by the International Correspondence Chess Federation. Consequently, I do have some personal knowledge of your country.

Walter Muir
Salem, Virginia

I am very much interested in winning a trip to the Soviet Union.

In 1929 I had a most interesting two weeks in the coal mining region of the Ukraine. I wrote back to family and friends about the 6-hour day and the fine electrically-powered homes the coal miners lived in. These letters tell of the hardships of the moment but also showed the great hope for the future. So I want to go back to the coal mines again. In my early youth I worked several years in the coal mines of Illinois.

With sincere good wishes for a peaceful world, I am,

C. H. Mayer
Andes, New York

Alexander Tropkin travels to the 10-year-old city of Nadym in Siberia and reports on life and work there. **4**

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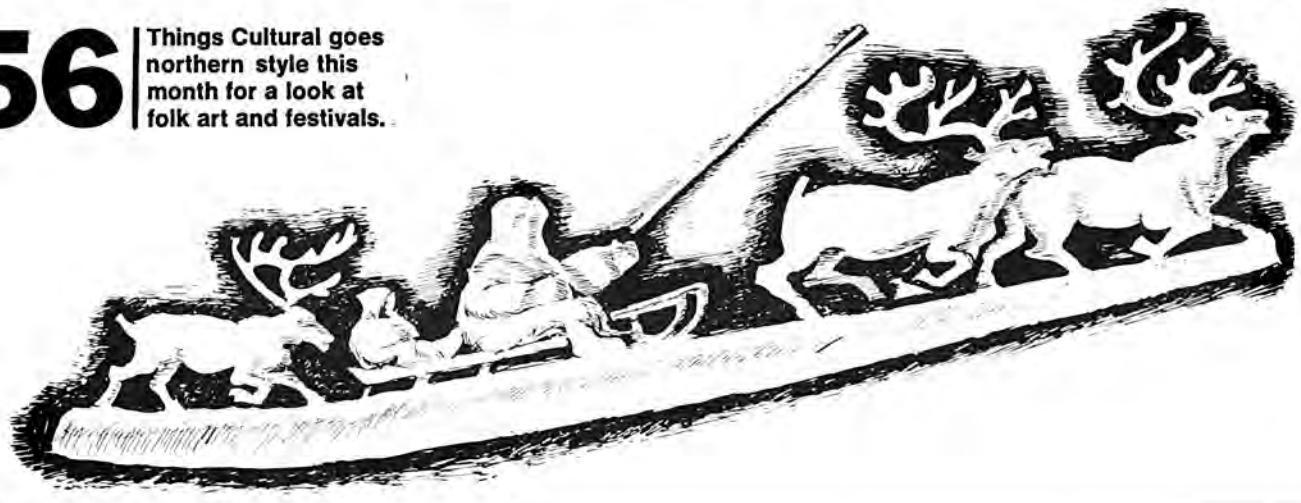


58 Ninel Novikova describes U.S. Customs official Colonel Kenn's hearty welcome for Soviet captain Alexander Pronkin and his crew in Saginaw.

EDITOR'S NOTES

Our next issue will be No. 300 and will mark an anniversary. It will be 25 years since SOVIET LIFE's readers got the first issue of this illustrated monthly that, along with AMERICA magazine, is published as part of a Soviet-American intergovernmental agreement. A quarter of a century is not so long, historically speaking. But it is a rather considerable length of time in terms of the life of people or magazines.

I would say it's a bit too early to talk of our having come of age in the full sense of the term. Yet we have certainly been well on our way to it throughout this period. The subjects that we need to deal with have become quite clear. The primary one is to present the Soviet people and the way they live, their problems and their dreams.

Our readers are people in business, scientists, students, teachers, clerks, housewives and schoolchildren. Had it not been for their sincere interest in this magazine—which I see from all kinds of letters from every corner of the United States, including Alaska and Hawaii—we would have had a much harder row to hoe during these 25 years. Incidentally, most of the credit for the selection of topics, style and even the very choice of writers goes to our searching, sincere, ever-inquiring and always well-wishing subscribers.

So it would seem that we have everything we need to do our job. We know what we have to write about and who we have to write it for.

Yet you may well ask, "What is the main thing you would wish for your magazine and its readers now as you are about to celebrate your anniversary?" My answer is a clear sky and a bright Sun for everyone on this planet. This is really the main thing for everyone on Earth to work for today.

TO PREVENT ANOTHER WORLD WAR

USSR Supreme Soviet Appeal To the Parliaments and Peoples of the World

"The Supreme Soviet of the Union of Soviet Socialist Republics, anxious over the increasing military danger, the unprecedented scope of the arms race, appeals to the parliaments and peoples of the world.

"The USSR Supreme Soviet issues this appeal on the fortieth anniversary of the attack by Nazi fascism on our homeland. The Soviet people bow their heads to the glorious memory of 20 million fellow citizens who fell in the war. World War II inflicted incalculable disasters and suffering on all humankind. We profoundly revere the memory of all those who sacrificed their lives in the struggle against aggression, for the sake of peace on Earth.

"History has taught a stern lesson. The peoples have paid far too big a price for the failure to prevent war, to avert in time the threat hanging over the world. A repetition of the tragedy must not be allowed. Everything must and can be done to prevent another world war.

"The world has already been saturated with weapons of mass annihilation. But the stockpiling continues. Arms ever more sophisticated and destructive are being developed. Launching pads are being prepared for hundreds of new nuclear missiles in Western Europe. People are being conditioned to the criminal idea of the permissibility of the use of nuclear weapons.

"Political tension is being aggravated once again. The stake is on attaining military superiority. The language of threats is resorted to, claims of intervention in the affairs of other countries and peoples are being openly advanced. All of this is being covered up by a crude concoction about a 'Soviet military threat.'

"The USSR Supreme Soviet solemnly declares that the Soviet Union does not threaten anyone, does not seek confrontation with any state in the West or the East. The Soviet Union has not pressed and is not pressing for military superiority. It has not been and will not be the initiator of new spirals of the arms race. There is no type of weapon that it would not agree to limit, to ban on a mutual foundation by agreement with other states.

"The safeguarding of peace has been, is and will be the supreme aim of the foreign policy of the Soviet Union. This is the aim of the peace program for the eighties adopted by the Twenty-sixth Congress of the Communist Party of the Soviet Union. It includes steps for the reduction of both nuclear missiles and conventional arms, contains proposals for the settlement of existing and the prevention of new conflicts and crisis situations, is permeated with the desire for deepening détente and developing peaceful cooperation between countries on all continents. It expresses the readiness of the Soviet Union to hold negotiations on all topical issues of peace and security, and to consider attentively any constructive ideas of other states.

"In this nuclear age dialogue and negotiations are needed equally by all, just as all need peace, security and confidence in the future. Today there is no other sane method of solving disputed problems, no matter how acute and complex they may be, except by negotiations. No opportunity must be missed. Time does not wait.

"The risk of a nuclear conflict increases with each day lost for negotiations. The solutions to vital problems confronting each people and all peoples are being shelved. Time does not wait.

"In our time all those who through their actions encourage the arms race, the further stockpiling in the world of weapons of mass annihilation, who advocate the use of force in the solution of disputed issues between states or who just close their eyes to the dangers threatening the world today are,in fact, pushing humankind toward the abyss.

"The USSR Supreme Soviet appeals to the legislative bodies of all countries to speak up vigorously in favor of negotiations that would result in the impermissibility of another round of the nuclear arms race—honest and equal negotiations without any preliminary conditions or attempts at diktat.

"The USSR Supreme Soviet expects that its appeal will be considered with all the attention deserved by the most important, the most pressing issue of our time. It is convinced that parliaments have the necessary prerogatives and authority to press effectively for curbing the arms race and for disarmament through negotiations. For its part, the USSR Supreme Soviet will continue to make its contribution to the creation of such an atmosphere that would promote positive results through negotiations.

"Peace is the common possession of humankind, and in our time it is also the paramount condition for humankind's existence. It is only through joint efforts that peace can and must be maintained and reliably safeguarded."

(The Appeal was adopted at a session of the Supreme Soviet of the USSR on June 23.)

THE SOVIET NORTH: A LOOK AT ITS FUTURE

Today the North not only swallows up state investments of billions of rubles, but also repays them with interest. Dozens of modern towns and settlements, large atomic and thermal power stations, mines and groups of enterprises have been built there and thousands of kilometers of long-distance gas and oil pipelines laid. Still, this is only the beginning.

In his report to the Twenty-sixth Party Congress, General Secretary of the CPSU Central Committee Leonid Brezhnev singled out a rapid increase in the production of gas in the north of Western Siberia as a top economic and political priority. He said:

> The deposits of the Western Siberian region are unique. The biggest of them—at Urengoi—contains such gigantic resources that it can for many years meet the country's domestic and export needs, including exports to capitalist countries. The production of gas and oil in Western Siberia and their transportation to the European part of the country have to be made the most important elements of the energy program in the Eleventh Five-Year Plan and also in the Twelfth.

But the North today is not only gas and oil. According to USSR Central Geological Exploration Board data, the production of tin, mica and tungsten is concentrated in the northern territories of the country. Nickel and copper are also being extracted there, and at a lower cost than anywhere else in the country. In the north of Central Siberia a Tunguska iron ore field and a coal basin have been discovered. Indeed, the northern belt contains a number of coal basins: the Pechora, Lena, Tunguska and South Yakutiyan.

Yes, the riches of the North are really great. That is why the decisions of the Twenty-sixth CPSU Congress pay special attention not so much to the building of individual giant mines and dressing plants as to the establishment of major territorial industrial complexes in the region.

It is natural that this scope of industrialization calls for a radical solution to energy supply, transport, railroad and highway construction and the building of new seaports and airports. Large thermal and hydroelectric power plants to be built there in the future will contribute substantially to accomplishing this task. The famous Baikal-Amur Mainline (BAM) railroad will eventually be extended still farther to the north—to Chulman and Yakutsk—and then to the east—to Magadan. The railroad between Surgut and Urengoi, stretching across oil-bearing regions, will reach Norilsk and link that important center of nonferrous metallurgy to the railroad network of Siberia.

The season of navigation on the Northern Sea Route is being prolonged; in fact, year-round shipping on it is now the order of the day. Nearly half of all the capital investments for river transport in the State Budget has been earmarked for its further development in the northern territories of Siberia and the Far East in the five-year period.

Of course, the construction of factories and new roads and the development of mineral deposits presuppose an increase in population numbers as well. Many people will move there. Is the North ready to receive them?

The Twenty-sixth Congress of the CPSU answered this question. Leonid Brezhnev singled out the following problems in his report:

> The cultural amenities and everyday life of people differ in the various regions of our huge country. These are the distinctions that, more often than not, complicate the manpower problem in a number of places. Implementation of the programs for the development of Western Siberia, the zone of the Baikal-Amur Mainline railroad, and other areas in the Asiatic part of the country has stepped up the flow of people to these places. . . .
>
> That is why in the next five years we plan a faster rate in building housing and the entire sociocultural complex in these areas and a larger supply of goods for which there is a mass demand. You will agree that the situation there must be changed, and that this must be done as quickly as possible.

Another important problem of our day, one which is perhaps most acute for the North—the protection of nature and a thrifty attitude toward its riches—has also found reflection in the explicit and succinct formulas of the major congress documents.

The tremendous scope of northern development throughout the world and the adverse effects of careless human activity there underline the need for effective governmental measures on environment control and long-term ecological programs. So far there are not so many industrial plants in the Soviet North, and the air is comparatively clean. But urban and industrial growth will proceed apace there in the coming years.

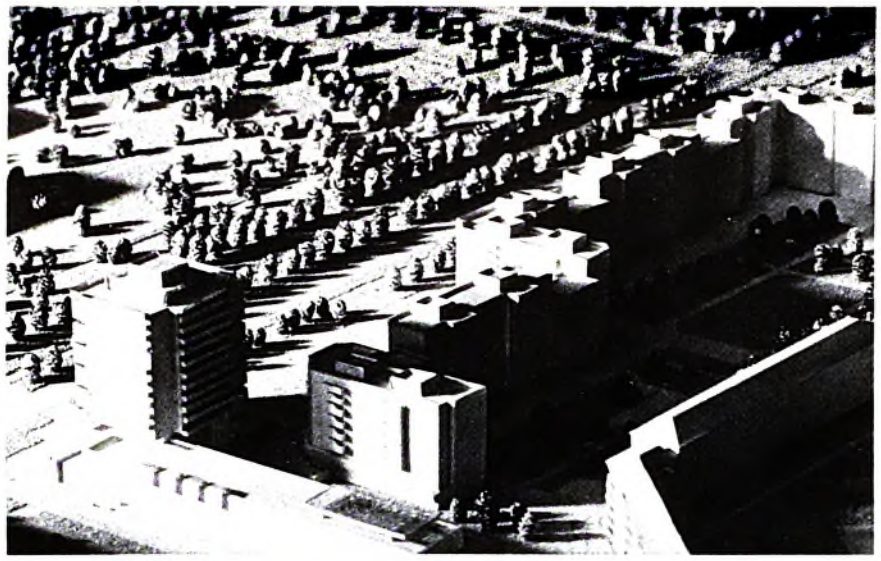
It is therefore essential to anticipate the possible consequences of pollution. The new congress-endorsed plan for 1981-1985 envisages concrete measures to improve the protection of the seas, rivers and other waters of the Arctic basin against contamination.

In the forthcoming five-year period the party is orienting industry toward expanding the output of highly efficient gas and dust removal systems, water purification equipment, as well as instruments and automatic stations for environmental monitoring.

The science-based formation of a network of national parks, preserves and sanctuaries is continuing in the North. They will facilitate the study of nature systems and the working out of recommendations for the best use of the natural resources of the area.

The Soviet North today is also a very extensive area where indigenous people still hunt fur and sea animals and fish. Huge tracts of tundra and taiga of the European North and northern Siberia are set aside for pasturing reindeer herds numbering many thousands of head. It is still the traditional occupations—hunting and reindeer breeding—that provide employment for most of the 30 indigenous northern peoples. This has to be taken into account by even the grandest plans for industrializing the region because it affects the essential aspects of life of the northern peoples and determines their future.

The traditional occupations of the indigenous peoples of the North will continue to develop. The transition of the remaining nomadic families to a settled way of life will be carried out without infringing upon their customs and lifestyles. ■



This is what the administrative center of Nadym, the gas industry's northern capital, will look like within a few years.

NADYM, a Young City

By Alexander Tropkin

THIS CITY WAS BUILT 1
YEARS AGO IN THE NORT
OF WESTERN SIBERIA DUR
ING THE INTENSIVE DEVE
OPMENT OF GAS DEPOSI
IN THE FAR NORTH. TH
BUILDERS NAMED IT AF
TER THE NADYM RIVER.
NADYM MEANS HAPPINESS
IN THE NENETS LANGUAG

Nadym was built by people who are barely 35 now. They began from scratch—felling the small spruce trees of the Siberian forest tundra and uprooting tree stumps. They claimed meter after meter of land from the swamps. The severe temperatures in winter (minus 45 degrees centigrade) were preferable to the millions of mosquitoes from which there was no escape in summer. However, it was all worth it as gas was already bursting out of the holes bored at the now famous Medvezhye deposit close to the future city.

The builders of Nadym, unlike their predecessors who had built the Siberian cities of Bratsk and Divnogorsk or the farmers who developed the virgin lands of Kazakhstan, did not live in tarpaulin tents. By the beginning of the 1970s the state was able to provide them with far more comfortable dwellings specially designed by architects for northern latitudes.

Balok is the name given here to a cylindrical house made of light, durable metal. It consists of two rooms with built-in furniture, a kitchen, heating and electricity. The fancifully erected multicolored *baloks* determined the direction of the streets and avenues of Nadym. Now they have been replaced by multistory brick and concrete buildings, and *baloks* can be found only on the outskirts of the city. Eventually they will be eliminated altogether, but in the meantime the comfortable and mobile cylindrical houses are a help in dealing with the demographic explosion that has taken place in this area to the north of the sixty-fifth parallel. During the past five to seven years the population of Nadym has increased dozens of times over. Babies born in Nadym make up a fourth of its population.

People who go to Nadym for the first time in spring or summer probably cannot understand the original architectural concept of its development. Entering the residential area of any of the microdistricts, they sometimes feel almost trapped in the vast and almost completely enclosed space.

From an airplane you can see that the multistory houses are all shaped like the letter C. Standing within such a semicircle in autumn, or particularly in winter, when stormy winds rage in Nadym, you immediately appreciate the architects' design. The wind blowing along the streets and avenues does not penetrate here. The kindergartens and nursery schools, tennis courts and sports grounds where the children of Nadym spend the day are safely protected by the tall houses.

Of course it wouldn't occur to a visitor walking around Nadym that the asphalt in the streets or the concrete slabs with which the courtyards are paved are anything extraordinary. Asphalt can be found everywhere now. However, it was very difficult for the builders to cover the perpetually frozen ground with it. You also have to deal with the caprices of permafrost when you build houses and lay pipelines.

In everything else Nadym is like any other city. In the evenings, when the vibrating rhythm of its construction jobs slows down and the streets are free of dump trucks carrying bricks and concrete, when you no longer hear the hum of helicopters, which are as common here as taxis, neon signs draw people to restaurants, cafés, the palace of culture and movie houses.

Nature lovers can find secluded spots, too, in Nadym. A lake framed by tree-covered mountains comes up to the very town. They say that in autumn a 15-minute walk from the central square takes you to a place where you can pick fragrant cloudberries or foxberries, that flocks of wild geese and ducks are still swimming on the lake, and in the thicket of the nearby taiga there are often elks, boars and deer.

The Mayor's Monologue

The average age of a Nadym inhabitant is
Therefore, those who are over 30 jokingly
themselves "old folks." Victor Filatov, the
year-old mayor of Nadym, considers him
such an "old man." Calm, even-tempered, a
phlegmatic at first glance, he told me about
development of one of the youngest cities in
country.

"When I first arrived here seven years ag
said Filatov, "there was only one multistory ho
in town. Of course, we owe the people who
vented and built the *baloks* and brought the
the North a vote of thanks, but a town consis
of such dwellings made the ones who lived
think that they were settling there only tempo
ily. This was probably one of the reasons for
fluctuation in the work force, the young build
of the first gas pipeline and the drillers. T
would leave after working for a couple of ye
Neither high wages nor the romance of
North could hold them. Besides, it was very h
to heat the *baloks* and supply them with wa
If you missed heating them for one day, the te
perature dropped to 10 degrees centigrade,
in the winter it would be even lower. So the s
rounding woods were gradually cut dow
firewood—and this with enough natura
around and to spare. I started my activit
mayor by persuading skeptics that it was
sary to lay gas pipelines for heating and a
a water supply as top priorities. If we ever
museum, I would like to place an inte
exhibit there—a complaint to the mayor o
city. The person who wrote it demanded that
City Soviet reduce the temperature in the he
system because it was too hot in the houses.
can't imagine how happy this complaint made
—it was better than any praise.

n workers off on a hunting trip. Gas
are the main roads across the marshes.
: The first graduates of the city's
chool. They want to be physicists,
gists, chemists, engineers
octors and return to Nadym
k after finishing college.

Snow at the end of spring or even the beginning of summer is not a rare phenomenon in Nadym. But the calendar says it's time to change from skis to bicycles regardless of the weather, and boys will be boys! Facing page, bottom: Forest tundra is only a five-minute trip from the city.

"I thought a great deal about how people got e idea that their city was the best. There are any reasons, but among them there is always a ecial trait of a particular city that cannot be und anywhere else. Nadym must have a look of own, too. We have been helped in this by ningrad architects. They worked out a master an for the development of Nadym in which the ique architecture was combined with the spe- fic features of the climate and the surrounding ndscape. The ability to build fast and well con- derably increased after a prefabricated housing ant appeared in the city. Now Nadym produces inforced-concrete structures not only for its vn needs, but also for the neighboring town of engoi, as well as for Nizhnevartovsk and Surgut, hich is located near the middle reaches of the . You've already seen what's been achieved. ur next job is to complete the building of a edical complex including a hospital, a poly- inic and public health services. Being a Nadym triot, I can boast that you'll have a hard time ding another complex as well equipped with edical and diagnostic apparatus in the Siberian rth.

"The park is another concern of ours. An un- uched part of the taiga has been left for it in e center of the city. It adjoins the lake, and so ere will be a beach, a recreation area and an outdoor sculpture museum. Artists and landscape designers will give it the finishing touches.

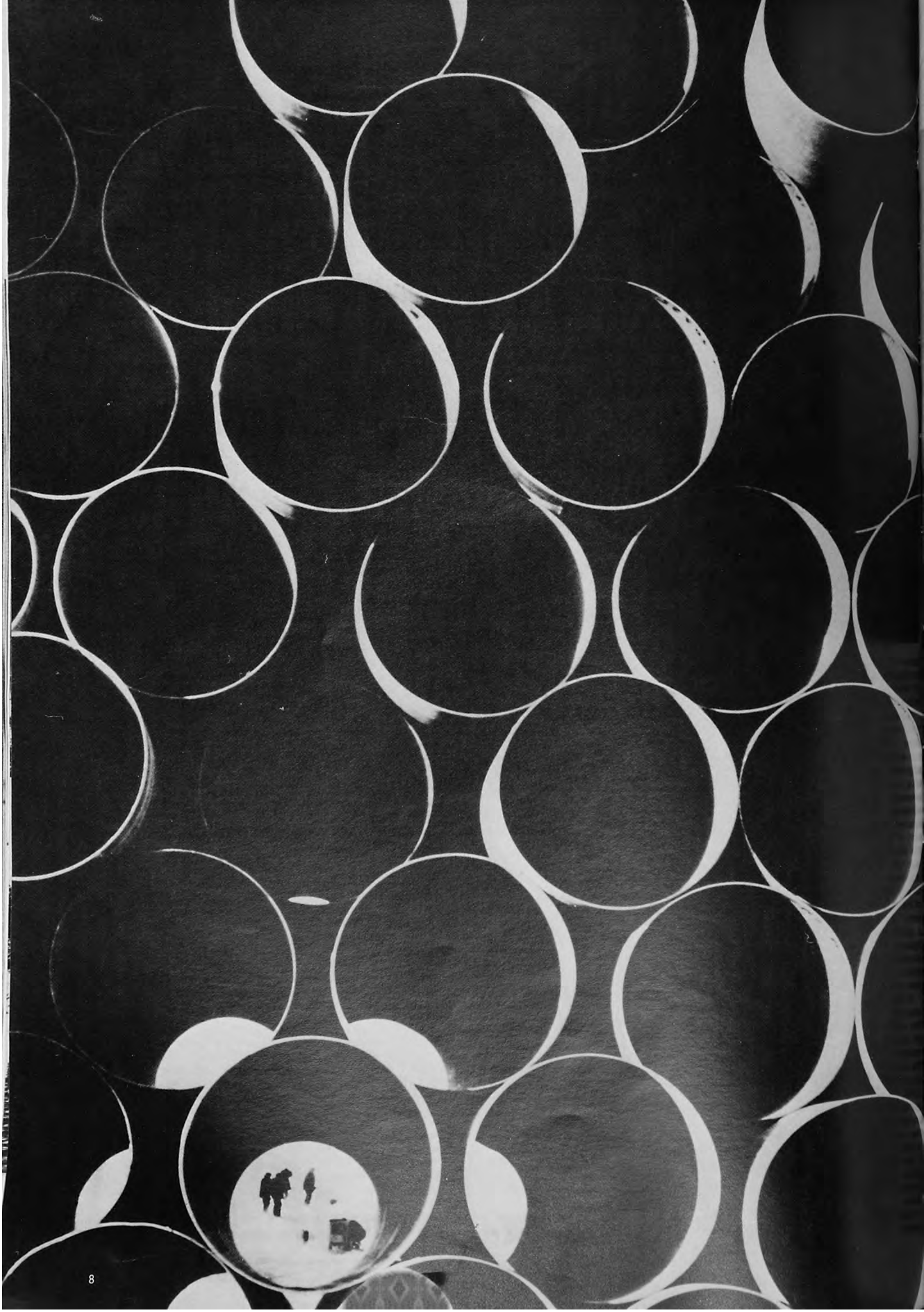
"In two or three years there won't be a single temporary dwelling in Nadym. Though we cannot provide everyone with an apartment in a house made of brick and prefabricated reinforced-concrete parts, we can start building wooden houses. Contemporary architects have been neglecting wood, an excellent building material that has been used in the Siberian North since the olden days. The modern wooden apartment houses are quite different from the old ones both in appearance and in structure. The apartments are spacious and have all the modern conveniences. I must admit, though, that there are people in the City Soviet who don't want to deviate from the plan to build only concrete houses. They would rather have the rate of housing development lag behind the needs of the inhabitants of the city and take 10 years to catch up. What they don't consider is that in 10 years' time there will be no housing problem to solve because the families now living in *baloks* will get tired of waiting for real apartments and simply leave Nadym.

"That is why, in spite of all the criticism, we have decided to build a whole microdistrict of wooden houses which will be the equal of multistory reinforced-concrete buildings in comfort and amenities. We have chosen a picturesque site for the microdistrict in a pine grove on the shore of the lake."

It was difficult to imagine the picture drawn by Victor Filatov. He energetically accompanied everything he was telling me with gestures. There was no sign of the passivity I thought I detected when we first met. Watching him, I thought that this city needed exactly such a mayor. His motivation is not duty but conviction. He truly believes that Nadym is the best city in the world.

Work on an Enormous Scale

The city cannot be separated from the gas fields, which are the reason it was founded. The overwhelming majority of the young inhabitants of Nadym are drillers, engineers and people who work at the gas collectors and lay pipelines in the tundra so that Nadym gas will move in a powerful stream beyond the Urals to the center of the country. With the discovery of new reserves of fuel in the North, Nadym has become the site of big organizations that concentrate on developing the deposits and building gas pipelines. Their turnover amounts to many millions of rubles. The city of Surgut must provide the gas fields of the region with electric power in the near future, while the Surgut-Urengoi Railroad line will help solve the transport problem. This is the division of ▶



Left: These pipes will soon be carrying gas to the Urals and the European part of the USSR. Below: Farid Utyarov is one of the 10,000 gasworkers who volunteered to go to the North and now regard it as their second home. Bottom: Planes deliver food, equipment and mail.

or in the new, rapidly developing territorial duction complex created in the northern part Western Siberia. The complex has very good spects for the future.

However, it is easy to say "must provide" and ll solve." Actually, it will require tremendous ort from people who live in a place where annual fluctuation of temperature is 70 to 80 grees, where distances are measured not in s, but in thousands of kilometers and can be vered only by helicopters and cross-country icles. Academician Mikhail Lavrentyev, who aded the Siberian Branch of the USSR Acady of Sciences for many years, once compared development of the gas deposits of the North h the conquering of space. "Everything here unique," he said, "the reserves of gas, the disces and the volume of pumping, the diameter the pipelines and the capacity of the compresrs." The Medvezhye gas fields near Nadym are good illustration of his words. Here are a few ures: The area of the fields is 2,100 square ometers; the daily well yield reaches several lion cubic meters. And the parameters of the w Urengoi deposit are even more impressive.

At the head office of the Northern Pipeline Conuction Agency, which lays all the pipelines in region, I was shown a diagram of the routes existing and future lines. They branch and ltiply, some moving farther to the North beyond Arctic Circle, others to the southwest, to the y of Chelyabinsk in the Urals. In five years about 00 kilometers of gas mains have been laid ng the tundra and through forests and swamps, ross dozens of rivers and streams and through rocky spurs of the Urals. I was told that this only the beginning.

An armada of machines on treads, wheels and ngs moved to the North in the seventies. The meval Siberian forest tundra is filled with the ise of roaring motors, whirring helicopter ades and buzzing electric saws. Not a single gion of the country had ever experienced such

an offensive. To the usual excavators and heavy-duty dump trucks were added northern versions of powerful tractors, stringers and mobile automatic welding equipment. Dozens of research centers and plants in Central Russia, Siberia and the Far East are working to satisfy the needs of the North, supplying it with the latest models of excavating equipment and testing all kinds of units and structures for durability and safety.

Naturally, the question of whether technology will irreparably harm the natural environment of the North has come up many times. Aware of the antagonism that exists between the builders of gas mains and the ecologists, I asked Pavel Shabanov, head of the Northern Pipeline Construction Agency, what he thinks about it. Shabanov is a rather interesting person. At the age of 40 he is head of one of the biggest agencies in the country. At first glance, his career seems to have advanced rapidly and easily. But the truth of the matter is that for nearly 20 years engineer Shabanov took part in the construction of nearly all the most important gas pipelines in Central Asia, Kazakhstan, Tataria and beyond the Arctic Circle. His experience and erudition make him one of the most prominent gas-industry specialists in the country. That's why he is in Nadym. Northern gas deposits require precisely ▶

the kind of knowledge and energy Shabanov can provide.

"There was a time here in the North when people paid very little attention to ecological considerations," said Shabanov in answer to my question. "The country needs gas. This need multiplies every year. So, we had carte blanche—the gas mains had to be constructed at any cost. The primary goal was to produce fuel in large quantities as quickly as possible. However, the ecologists still gave us a lot of trouble, organizing public opinion against us. Now that a law on environmental protection has been adopted, if we disregard their recommendations, we have to pay fines and bear administrative and even legal responsibility. Sometimes out of habit we make mistakes and pay fines. The deprivation of bonuses and part of their salaries is probably the best teacher for negligent executives. Now the Agency carefully observes the law on environmental protection:

"Cutting of trees for laying pipelines is strictly limited; special routes for the movement of vehicles in winter are mapped out; the ground over the covered trenches is recultivated, and where the pipes are laid on the surface of the tundra, special bridges are built over them for reindeer herds and other animals."

The Gas Main

Vacation season starts at the end of May for the builders of the gas main and consequently for one-third of the inhabitants of Nadym. Young men and women swarm the ticket office of the Nadym airport to get reservations to health resorts on the Black Sea coast, to Moscow, Leningrad and other places. They go to the "mainland," as it is called here. The paid vacation of a Nadym welder or mounter is two or two and a half times longer than the vacation of people working in the developed regions of the country. This is one of the ways in which the state compensates the builders for the difficult conditions of life and work in the North.

Nearly all work on the gas main stops during the summer months. It's impossible for the machinery to do anything in the tundra when the mossy expanses covered with colorful flowers turn into marshes. The pipeline comes to life again only with the first frosts that harden the swamps. Then winter roads are built, trenches are dug and the blue flames of welding at the pipe joints flare up.

When you look at it from the window of a helicopter, the gas main seems almost ideally straight. Neither its beginning nor end is visible—they are lost in the mist on the horizon.

We were flying to one of the settlements near the main where preparations for the next continuous laying of the gas pipeline were being made. Even from the air we could see a gigantic accumulation of pipes. On the ground the stacks turned out to be the size of five-story houses. Bright yellow pipelayers and tractors maneuvered around them, while people, bending a little, walked right through the pipes with a diameter of nearly one and a half meters. From the stacks the pipes are moved to automatic welding lines where

Continued on page 29

Two who have agreed to share the forest tundra. Top: First graders join the commencement celebration. Facing page, top to bottom: A double white rainbow. Fur experts arrive by chopper to buy pelts from local hunters. The tundra is radiant with wildflowers in the summer months.

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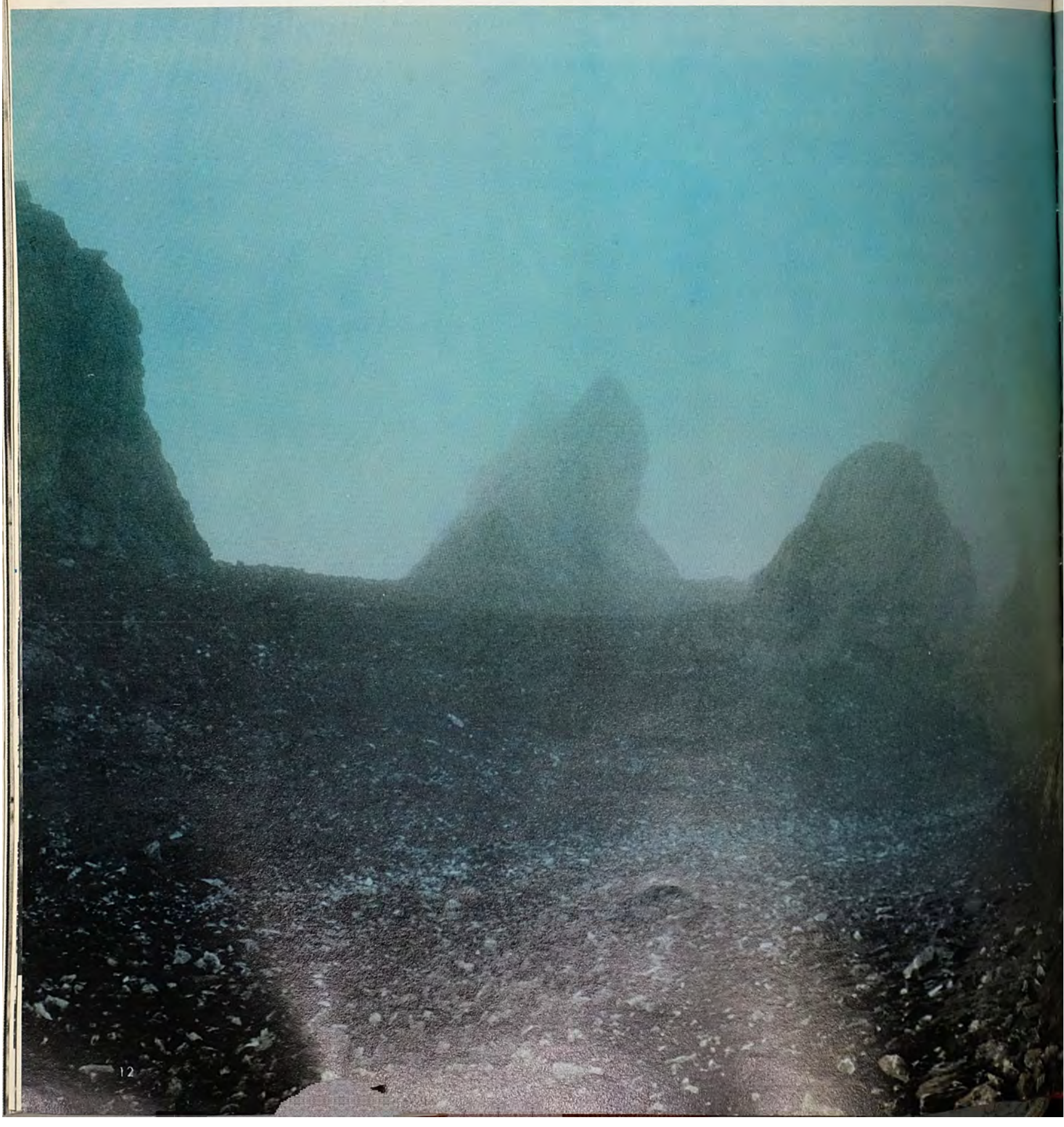
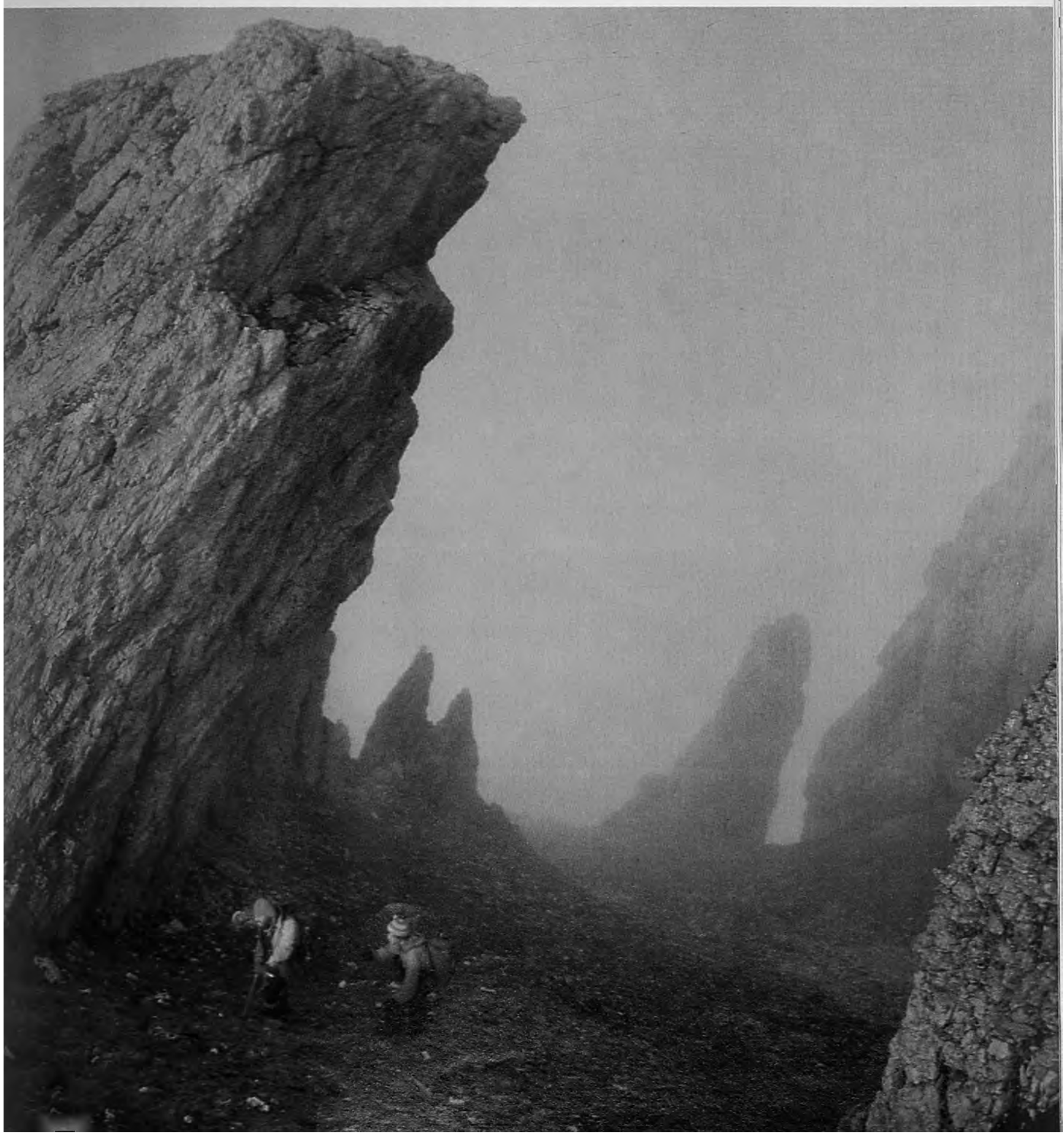


PRESERVATION

THE SOVIET NORTH IS A VAST AREA OF 11 MILLION SQUARE KILOMETERS STRETCHING FROM THE KOLA PENINSULA IN THE WEST TO CHUKOTKA IN THE EAST. IT IS A MAGNIFICENT NATIONAL PARK AND A NO LESS MAGNIFICENT TREASURY OF NATURAL RICHES. BELOW: THE NATURE PRESERVE ON WRANGEL ISLAND. FACING PAGE: THE MAJESTIC PECHORA RIVER.



In Charge of an Entire AREA

By Alexander Dorozhkin

TIKHON SYADEISKY IS ONE OF THE 30,000 NENETS INHABITING THE SOVIET NORTH. AN ENERGETIC, IMPOSING AND SERIOUS MAN OF 50, HE IS CHAIRMAN OF THE EXECUTIVE COMMITTEE OF THE NENETS AUTONOMOUS AREA, WHICH RECENTLY CELEBRATED ITS FIFTIETH ANNIVERSARY.

Tikhon Syadeisky is a good cook. The window box of spring onions, an important part of the northern diet, was his idea. Far right: New hothouses will soon supply Naryan-Mar residents with fresh cucumbers and tomatoes in the wintertime.

The Chairman of the Executive Committee has just arrived from Krasnoye by helicopter and is surrounded by local reindeer breeders who have come to greet him and discuss urgent problems.

o him it seemed like a flight back to his childhood. Tikhon Syadeisky didn't say a word during the whole long helicopter trip to the herders' camp; he just kept looking for something in the monotonous landscape he tundra. When the steel dragonfly finally led beside two conelike tents resembling In- wigwams and we were surrounded by rein- r breeders wearing colorful fur clothes, it ed out that there were many old acquaintances Syadeisky's among them. Everyone smiled, comed the visitors in the Nenets language and ok hands. Syadeisky immediately bombarded herders with questions: Had the calfing gone ight and was the increase great? Had any of calves died? Where was the herd of 2,000 ing now? What food did the herders need? e the newspapers and magazines being de- red to them regularly? The chairman listened everything and memorized it. By the way, I er saw him with a notebook. He keeps hun- ds of figures and names in his head and can whatever is necessary from his remarkable nory at a moment's notice.

strong wind that penetrated to the bone was ving across the boundless expanses of the ra, so it was not very pleasant standing there e open. The hosts invited us to a tent. Three ets women were busy at the hot stove and low le setting out the dishes. My eyes had hardly en used to the semidarkness of the tent when ticed five or six small children. Their smart door fur clothes made them look like awkward y penguins. Syadeisky lifted one of them in arms.

A Herder's Son

I also spent the first seven years of my life in father's tent," he said. "My family roamed und the tundra grazing our small herd and ting. It was not until I was in my teens that I ned there were cities where people lived in ses and rode in automobiles instead of rein- r sleighs."

Watching four-year-old Andryusha leaning tingly on Syadeisky's shoulder, I could ily picture the chairman's childhood as he had cribed it. However, the parallel could be wn only in respect to age, as neither little dryusha nor his mother nor the families of er herders lived in the tents all the time. y had come to the tundra to stay with their ers and husbands for the month or month and alf of their shift there. In the settlement of snoye (about 2,000 inhabitants), which is situ- d some 40 kilometers away from the camp, h family of reindeer breeders has a house and sehold effects of its own. There are shops and otion picture theater there, a kindergarten and rimary school. Gas is supplied from the pipe- to Krasnoye, as it is to other settlements of Kharp (Northern Lights) Reindeer-Breeding llective Farm. There is a forest of television ials on the roofs of the houses.

Everything was different when Tikhon Syadeisky s a boy. The tent was the only shelter from d and frost, and all of the family's simple be- gings—a hanging wooden cradle, a chest with thes and kitchen utensils—were kept there. ns and hundreds of kilometers of tundra sepa- ed the tents from each other. Syadeisky re- mbers that when a member of the family be- me seriously ill, you had to ride for several ys without stopping to fetch the nearest witch ctor and bring him five of the best reindeer in yment for the questionable treatment.

And still, Syadeisky seemed to be in his element in the cozy semidarkness of the tent. Forgetting everything, he inhaled the familiar smells of cooked reindeer meat and salted fish, advised me what to try and touched the reindeer skins of the curtains with his hand as if patting them.

"Now Leningrad and Murmansk architects are designing new mobile dwellings for herders. They say that they will be lighter and more comfortable," said Syadeisky ironically. "But I really have my doubts about how they'll be received. In my opinion, you can't think up anything better and more comfortable than these tents. They have served the Nenets for ages and will go on serving them. Only people who have not lived in them think they are inadequate."

A Man of Deeds

A tent is one thing, but when it comes to approving a plan to build a new district in Naryan-Mar, the capital of the Nenets Autonomous Area, or in Iskateli (Prospectors), a geologists settlement adjoining the capital, Syadeisky is ready to sacrifice tradition. "We have to stop building temporary wooden huts," he tells the architects, "even if bricks, facing materials and stained-glass windows cost more than wood (there is a big woodworking plant in Naryan-Mar). It is important to make the city both modern and unique at the same time."

Syadeisky wants the architects to use as much imagination as possible in their designs. He insists that the facades of the buildings be decorated with Nenets national patterns and mosaic panels. He showed me with unconcealed pride the new bridge built from reinforced-concrete sections over the Pechora River, as well as a new supermarket whose scaffolding had just been removed. I should add to this the new Naryan-Mar Airport, whose field was being leveled by bulldozers, and the stadium, which will open in the center of the capital next year.

All this costs a great deal of money, but Syadeisky knows how to spend it efficiently. For example, the city badly needs a dairy for processing milk. Creamery butter, a very valuable product which is comparatively new beyond the Arctic Circle, is supplied by local dairy farms. Designers from the regional center submitted a proposal for a dairy costing a considerable sum of money. The city authorities would have agreed since the transportation of perishable butter costs much more. But before Syadeisky would approve the project, he discussed the pros and cons with the experts and then rejected it. He considered the butter production technology obsolete and its output limited. It wouldn't suffice for future needs. Syadeisky's chief argument was money. Right now the dairy would save Naryan-Mar and the region unnecessary expenses, but in the near future it would become unprofitable and ▶

Syadeisky chairing a meeting of the Soviet of People's Deputies of the Nenets Autonomous Area. Among the items on the agenda are the protection of reindeer pastures, the work of geological groups in the area and the summer vacations of reindeer breeders' children.

require many millions of rubles for expansion.

The designers were summoned to Naryan-Mar for a serious talk. In the end Syadeisky won them over.

Here is another example. There is a hothouse in Iskateli attached to the offices of the Naryan-Mar geological prospecting expedition. A hothouse is no longer a wonder in the Far North, but it is still impressive to see cucumbers and tomatoes growing beyond the Arctic Circle. So far the hothouse has been supplying these delicacies only to the children at the local kindergarten and nurseries, schoolchildren and drilling workers. However, Syadeisky noticed that the vegetables in the settlement were grown by experienced and efficient people and suggested that the geologists triple the area of the hothouse and sell cucumbers and tomatoes to the city. The prospecting expedition would invest the funds for the construction of new hothouses while the chairman would provide materials and labor. Moreover, on the basis of the geologists' subsidiary farm, Syadeisky is planning to build a big vegetable-growing and pig-breeding state farm which will supply Northerners with vitamins and fresh pork the year round.

However, this is only a small part of Syadeisky's daily involvement in providing the inhabitants of Naryan-Mar with everything they need. His activities take in the whole area, which is bigger than Austria, Holland, Denmark and Luxembourg put together.

A Deputy

The session of the Soviet of People's Deputies of the Nenets Autonomous Area lasted about three hours. The deputies discussed problems connected with the life of the area. Syadeisky chaired the meeting.

Yekaterina Guseva, head of the Education Department, told the deputies how the schoolchildren of the area would spend their summer vacation. She reminded those present that the Executive Committee had allocated 100,000 rubles for this purpose. One-third of it had been spent on the purchase of vouchers to Young Pioneer camps in the southern part of the Russian Federation and in the Ukraine. The reindeer breeders and hunters did not have to pay anything for their children's stay. The remaining money had been spent on vouchers to sports camps, tourists centers, for tourist trips, renting school buildings in the South and at traditional vacation spots of young Northerners, which would be partly paid for by the parents (for instance, a voucher for 48 days totaling 244 rubles would cost the parents only 88 rubles). The vacation facilities for the 2,500 schoolchildren of the area are located all over the country—the Ukraine, Byelorussia and Moscow Region—and include trips to the old Russian cities of Novgorod, Vladimir and Suzdal. Yekaterina Guseva added that vouchers had also been bought for a Young Pioneer camp near Arkhangelsk.

"Our children see too little Sun and should not be sent to the North for their vacations," Syadeisky protested. "Try to get vouchers to the South while there's still time, and let me know how you make out. There's still some additional money in the Executive Committee fund, so don't stint!"

The meeting supported Syadeisky's suggestion.

Every Monday, the day Deputy Syadeisky receives his constituents, the small reception room of the Executive Committee chairman is full of people. And what if a constituent from a remote arctic settlement misses the Monday helicopter? Does he or she have to wait a whole week? No. Syadeisky puts aside other matters and receives the constituent immediately.

And what kind of problems do people come to see him about?

His secretary's record book listed someone who asked for a larger apartment; a young fellow released from jail asking for help in finding a job. Sometimes the court does not grant a couple a divorce, or a worker has been dismissed from a job without sufficient reason. These people also come to their deputy for help. Sometimes Syadeisky is simply unable to solve a problem and has to turn people down, but more often he picks up the telephone and calls the place where they can get help. His prestige is to a great extent due to his effective solutions to everyday problems. However, there are some that concern many people at once, such as building a boarding school in the village of Kotkino in the southern part of the area, or the regular arrival of a ship at a collective farm on the coast of the Barents Sea. Now the ship regularly delivers the necessary cargo to the reindeer breeders and hunters on the island of Vaigach. The collective farmers don't know that Syadeisky had to fly to Moscow twice and meet with the Chairman of the Council of Ministers of the Russian Federation to accomplish this.

What Does Autonomy Mean?

The Nenets Autonomous Area is a composite part of Arkhangelsk Region. It makes reports on its activities to the Arkhangelsk Regional Soviet, and the resolutions adopted by the Soviet are binding on it. But doesn't this make the concept of autonomy paradoxical? Perhaps it is just a formality?

Tikhon Syadeisky patiently answers these questions. "Let's make things clear. We do, of course, have many obligations to the higher body, though I can't say that they are very onerous. Take, for instance, the planned economic assignments agreed on by the governments of the USSR and the RSFSR. Of course, no one demands that we sow corn and wheat beyond the Arctic Circle or produce programmed machine tools instead of high-quality lumber. We work out the basis of the planned assignments ourselves, and the rest are only recommendations.

"Now a few words about our rights. One deputy represents the interests of our area at the Soviet of Nationalities, one of the two chambers of the Supreme Soviet of the USSR, the highest legislative body of the country. At the Arkhangelsk Regional Soviet we have eight deputies, and I assure you that their voices are not drowned out when urgent problems of the Nenets Area are discussed. Moreover, their votes are decisive.

"Special resolutions of the CPSU Central Committee and the USSR Council of Ministers on the economic and social development of the regions of peoples of the North grant the Nenets additional rights. The latest resolution adopted in 1980 provides for the allocation of considerable funds for the more intensive development of such traditional northern occupations as reindeer breeding and hunting and fishing, for housing, better supply of provisions, and things of that nature. The attention of government bodies and important scientific centers has again been drawn to the North and its current problems.

"This means that we don't have to wait for the approval of the regional administration but can go directly to higher state authorities for advice and assistance. As a rule, the administration of Arkhangelsk Region supports us in that.

"Here is an example. In April 1979 I was received by five ministers of the Russian Federation in Moscow, and I asked each of them to help the Nenets Area and particularly the city of Naryan-Mar. The ministers considered it their duty to comply. I am soon going to Moscow again to make a report at a meeting of the Council of Ministers of the Russian Federation on the prospects of developing agriculture and traditional occupations in the Nenets Autonomous Area for the next five-year period. This is a precise example of how our point of view, our wishes and recommendations are taken into account when the plan for the whole Russian Federation is being worked out.

"The fact that the names of outstanding Nenets are now known all over the country also means a great deal. Books translated into dozens of languages of the peoples of the USSR and the world have been written about Tyko Vylko, a talented Nenets artist. I think that the feature film about him being shot by the Mosfilm Studios, the central studio of the Soviet Union, will interest the public. We have quite a number of professional writers and poets, while only half a century ago our people did not even have an alphabet of its own. Several generations of Nenets have already become scientists, educators, doctors and industrial executives.

"All this, to my mind, is part of the concept of autonomy."

Syadeisky's Family

Family life for Tikhon and Raisa Syadeisky began in a small room attached to the school in the settlement of Shoyna on the Kanin Peninsula. It was indeed "paradise in a hut." However, some of the local inhabitants scowled at the happy couple, the principal of the school and the teacher, since there had never been a marriage between a Nenets and a Russian before. But when they sometimes reminisce about those years gone by, they agree that in spite of everything, they were extremely happy at the time.

"A teacher is a prominent figure in a Nenets village," says Raisa Syadeisky, "the first adviser and leader who helps children and adults to understand the world. Tikhon was always surrounded by people who came from the most remote nomad camps for advice. I used to call him a 'shaman' as a joke."

They'll soon be celebrating their silver wedding anniversary, 25 years of life together. The Syadeiskys have two children. Sergei, their son, has a little daughter of his own. He had dreamed of becoming a driver from the time he was a little boy and has fulfilled his wish. The Syadeiskys' daughter Tatyana, on the other hand, is in her third year at the Moscow Cooperatives Institute and does not want to get married yet.

It was a surprise to see Syadeisky put on an apron. It turned out that he was accustomed to cooking and was flattered when his guests praised the chipped frozen reindeer meat (a national Nenets dish) he prepared or his roasted wild goose. Syadeisky has a passion for hunting. A year in which he does not spend several days shooting is a year he considers lost. Hunting guns and trophies hanging on the walls testify to this.

"And this is Tikhon in front of the Parthenon in Athens," said Raisa, showing me some snapshots she took during their recent cruise in the Mediterranean. "We visited 10 countries in Europe, Asia and Africa. It was a fantastic trip!"

"You know," added Tikhon, "people often took me for a Japanese in Europe and were surprised to hear me speak Russian. When I told them that I was a Nenets, they were completely confused—they had never heard of such a nationality."

A SKIER'S PARADISE

SINCE THE INHABITANTS OF THE NORTH ARE FORCED TO SPEND SO MUCH TIME INDOORS BECAUSE OF SUB-ZERO TEMPERATURES, THE STATE PAYS SPECIAL ATTENTION TO IMPROVING CONDITIONS FOR LIVING, WORKING AND PLAYING.

In towns and cities throughout Siberia skiing is the number one sport, followed closely by racing. (The photos here were shot in the town of Norilsk.) For those who don't enjoy a romp in the cold outdoors, there are plenty of diversions at recreation centers built by trade unions and plants. And if you have a special occasion to celebrate or just want a night out on the town, there's The 69th Parallel—Norilsk's most popular restaurant.

PECHORA: the River and the People

By Yuri Shnitnikov

Naryan-Mar, capital of the Nenets Autonomous Area, is at the mouth of the Pechora River.

An observer on the bank of the Pechora River might have suspected our quartermaster of being a bit drunk. The patrol boat would speed up, then suddenly change its course and start whirling around a red buoy, then turn sharply off the navigation channel and hug a steep bank. But I was in the pilothouse at the captain's side, and I can vouch for the soberness of the crew and the necessity of these strange maneuvers. This boat was not scheduled for any river port, and it carried neither passengers nor cargo. Anatoli Zdrogov, who is a qualified river-boat captain and has a crew at his disposal, is a river traffic inspector in charge of navigation safety on the river. And his crew is, in fact, a traffic team. So the route of the traffic boat, like that of a patrolling city traffic police car, depends to a great extent on the traffic situation.

The river is about a kilometer wide here, but Zdrogov was concentrating so hard on what he saw through the windshield of the pilothouse that you might have thought we were following a narrow channel full of rapids. I asked him what was worrying him. As usual, he thought it over for a couple of minutes and then said, "Another sandbar." He pointed out a smooth light-colored spot in the middle of dark ripples.

Zdrogov stopped the boat and used the intercom to ask a crew member on deck, "What's the depth starboard?"

The man dipped the measuring line into the water and marked about a meter.

Zdrogov explained that the day before there had not been a hint of a bar on that spot. The river was so rapid there and the bed's relief so unpredictable, that in one day the navigation channel could shift in any direction by several meters, so a sandbar could appear in an area that used to be passable for boats.

Master Navigator

Anatoli Zdrogov is in charge of a 30-kilometer-long part of the river. The local captains, mentioning it, sigh and say, "It's hardly the answer to prayer." First, it's full of shoals. Secondly, there is a bridge there and navigating the approaches to it is very difficult. If a boat runs aground within the navigation channel, Zdrogov will be reprimanded. Last summer was unusually dry even for the North, and such a situation was not purely theoretical. In many places the depth of the channel didn't exceed 120 centimeters in August. That's the safety limit, and the river was becoming even shallower.

The Pechora's wide riverbed is deceptive and makes you think it's deep enough. During spring rains the fleet can travel 1,655 kilometers upstream; by the end of the summer, the navigation route is 400 kilometers shorter. To make up for the loss, suction dredges annually take out millions of cubic meters of soil from the riverbed. During the navigation season the channel has to be controlled by traffic boats. There are more than 30 of them working on the river.

An hour ago the vigilant Zdrogov suddenly turned the steering wheel sharply and started circling around an ordinary-looking buoy. He was trying to check a dent on its surface, a result of its collision with a ship. What had happened? Had the captain been careless, or had the channel become too narrow for turning? Through his binoculars our detective inspector carefully examined a signpost on the bank. His suspicions were confirmed: The post was partly concealed by an overgrown bush. We had to land and make use of our ax.

The traffic boat crew consists of five young men who treat their 36-year-old captain with profound respect. The men are impressed with the self-confidence and navigating skills of Zdrogov, who is their god and master on board. But that evening they looked at him wistfully, hoping that the day's work had already been done and that they would be free to spend the rest of the evening with their wives and friends.

Once Zdrogov had been one of them, learning the skill of traffic surveillance from the boat deck. He admits that he dreamed of being a captain on the Pechora from the time he was a child. He was so eager to make that dream come true that he chose the longest way to it: At the age of 16 he gave up school and became a member of a traffic-boat crew. He measured the depths of the whole length of the Pechora, from its mouth to its upper reaches, but the pilothouse did not get any closer. He was 27 when he realized this and already had a family by that time. So he enrolled in the correspondence department of a navigation school. As he put it, he made it hard for himself after having had the easy life of a bachelor for years. For four years he had to work, go to school and bring up his children at the same time. At the age of 31 he finally got to the pilothouse. But the years on the traffic boat had not been wasted. He became so familiar with the Pechora channel that once, in an extreme situation, he managed to take a boat through the river unmarked by buoys and signposts, which had been removed for the winter.

Zdrogov does not want the others to repeat his errors on the way to the captainship. He persuaded all the members of his crew to go to navigation school, and every time the opportunity presents itself, he checks their progress by asking them tricky questions. One of the men got his longed-for diploma two months ago. The captain entrusted him with the log, giving him the last order of that day:

"Now head back to port. And check the bridge's signal system."

Zdrogov's crew, as well as the majority of the Pechora River transport workers, live in the town of Pechora, which was named after the river. It has a high bank that is never flooded in the spring and a number of good harbors. However, it was not founded as a river port, but as a railroad center. The river is crossed here by the Moscow-Vorkuta Railroad, and the workers who started building it 40 years ago laid the foundations of the town. Ten years later the new settlement in the taiga was given the status of a town, and it soon became the busiest traffic crossroads in the Komi Autonomous Republic. Now it is a large regional center with its own building and maintenance facilities and a population of 55,000. The town still has two spheres of interest, and a ravine clearly divides its railroad part from the river part.

The construction of a new thermal power station with a prospective capacity of 2.6 million kilowatts has recently been started in the railroad part of the town. It will probably make Pechora the energy capital of the republic. At present it is known as the river capital. The fleet's maintenance base is situated here and also a large shipyard that manufactures tugboats and cargo steamers for river navigation in the North.

Oil and gas deposits have recently been discovered in the Pechora countryside and in many places on the Pechora riverside. This will provide for the future development of a large transport center. The Pechora Town Executive Committee estimates that in the next five to seven years the population of the town will reach 100,000.

Nikolai Khosyainov, a tugboat captain on the river, is thinking of moving to Pechora. At the age of 27 he has become a local celebrity. Last year he towed a unique raft of 11,000 cubic meters of timber down the river without any accidents. It was 82 meters wide, what they call a double raft. He has recently delivered a huge raft the size of three soccer fields to the Pechora lumberyard from the upper reaches of the river. You would expect that the unique dimensions of the raft—12,000 cubic meters of wood, 45 meters wide and 335 meters long—would be too much for the unpredictable Pechora navigation channel and the traction power of the tugboat.

There's a fine view of the river and the port of Pechora from the embankment. Below: Lyra Shakhtarova is a livestock breeder at the local state farm and a deputy to the Supreme Soviet of the Komi Republic. Below left: Tugboat captain Nikolai Khosyainov. He, his wife and son have a house on the Pechora but live on the tugboat during the navigation season.

It is difficult for the river to surprise Pechora navigators. It is an official requirement of their profession to know the channel inside out. But understanding the river's nature, having a sense of its dynamics, is a special talent. Many people think that it is this talent that makes it possible for Khosyainov to take the risks he does when he's towing his rafts.

Khosyainov is a Komi, the grandson of a buoy keeper and the son of a ship's mechanic. He was born on the Pechora's riverside, spent all his life there and cannot imagine himself without the river. The Khosyainovs own a comfortable house with a big garden in a large settlement on the Upper Pechora. They spend the winters there repairing boats for the summer season. But the house is empty for the five months of the navigation season.

While the river is free of ice, the old tugboat becomes a home for the Khosyainovs: Nikolai, his wife Nadya and their five-year-old son Lyoshka. Such family crews are typical of the Pechora. Nadya grew up on board a tugboat, where her father was a mechanic and her mother the pilot. In Nikolai's crew she is a cook, which almost coincides with her profession of pastry chef. Nadya has to cook not only for the three of them, but for all six crew members.

"Of course, it's nice to be at your husband's side all the time," says Nadya. "During the stopovers our family usually goes to the woods to pick berries and mushrooms, and sometimes we go fishing. When we're on the move, the whole crew gets together after work. We have tea and pies that I bake myself, and we feel like one big family. True, there are some shortcomings in our life on the river. Lyoshka is the one who suffers most. He doesn't get much exercise or have many friends his own age. I worry about what we'll do in two years, when he starts school."

The Khosyainovs keep thinking of settling down on shore. Nikolai would continue working on his boat. He likes his profession, and it also pays well. His monthly income consists of a basic wage plus various benefits for working in the extreme weather conditions of the North, for the unsettled mode of existence, for saving time during the stopovers and on the trip, plus the bonuses for towing the record-sized rafts and winning competitions with other tugboat crews.

Nadya and Lyoshka could live on shore. She wouldn't have any trouble finding a job in her field there. But the Khosyainovs don't particularly want to settle down in their house and live apart during the navigation season. They think the solution is moving to Pechora, which is the summer terminal of all the tugboats. It means that Nikolai would often be able to be at home. He told the shipping line administrators about his plans and has their approval. A two-bedroom apartment in a new building has been promised to him.

That day Khosyainov was taking his tugboat up the river, in the direction of home, but he wouldn't be able to reach his settlement. He was going to take two barges with building materials and drilling equipment to the gas-extraction base a hundred kilometers from home. On his way back, he would be towing a raft of Pechora wood

Thirty traffic boats monitor the Pechora's navigation safety. Below: Geologists are moving farther north in the search for oil. They are drilling permafrost near the city of Vuktyl. Below left: Folk festivals have become a tradition on the scenic riverbanks. Facing page, far left: The river abounds in fish. The group here is a herring fishing team of the Lenin Collective Farm.

Timber is the wealth of the Komi Republic, and the Pechora is the natural route for rafting it to the woodworking centers. Below: On warm summer evenings whole families walk down to the river to relax. Bottom: The river is too cold to swim in, even in the summer. But these children can swim any time of the year since there is a pool attached to every kindergarten in the city of Vuktyl.

Albert and Lyra

After having spent a few days in the tiny cabins of river boats surrounded by the hum of their engines, I enjoyed the freedom and quiet of country life. Half an hour ago I was completely relaxed by a hot steam bath in a wooden bathhouse smelling of birch branches, which was graciously offered to me by Albert Shakhtarov, my new acquaintance. Now, thanks to his kindness and hospitality, I was beginning to revive as I sat at the table of his summer cottage.

After a hot bath it was nice to have a drink of cold homemade kvass, a traditional mildly fermented summer drink Russians make from bread and water and sugar. Other northern delicacies were also on the table: pink slices of salmon and a bowl full of ember-colored cloudberries, a juicy marsh berry that looks like a raspberry. The cloudberries had been picked yesterday, and the salmon had been caught that morning.

Albert is a shop assistant in the village of Byzovaya. I stopped there during my tour of the middle reaches of the Pechora River. Yesterday was Sunday, and the house was noisy. Albert's three daughters were spending the weekend with their parents. They graduated from a technical college and are now working in Pechora. The ripe cloudberries were the result of their Sunday walk to the nearby marsh.

It was Monday, and Albert's shop was closed. He planned to do some work in the house but had to open the shop for a while. In the morning a local fish warden's boat docked, and the warden asked Albert to sell the fish he had just confiscated from poachers. According to the regulations, a fish warden is supposed to take the illegally caught fish to a shop to be sold. Albert took the fish, sold it quickly to the village people and bought one salmon for himself.

Amateur fishing in the Pechora is strictly limited by the state. The major salmon spawning areas are situated in the upper reaches of the river. Other valuable and rare species of fish have also chosen the clear waters of the Pechora for their habitat. The Pechora's waters are protected from all kinds of pollution by a number of measures: There are no large industrial enterprises on its banks, wood rafting is strictly limited and the fishing industry operates on a very small scale.

The local fishers are allowed to use only the simplest fishing gear approved by the authorities. Visiting fishers are restricted to the use of only one kind of gear—a fishing rod with one hook—and they are allowed to fish only from the bank. Catching valuable species of fish has been banned. Breaking the regulation means not only the confiscation of the catch and the gear, but a big fine as well. For instance, to catch one salmon illegally means a fine of 75 rubles, which is as much as the round-trip plane fare to Moscow. That's why the salmon from the inspector looked like a gift to us.

Albert likes fishing in his spare time. He has a motorboat with two suspended motors and a wooden rowboat, which he uses for his trips along the riverbank to get hay for his cow and bull. When he was younger, he also liked hunting fur-bearing animals in the taiga, but now that he is over 40 and has become a grandfather, he prefers to stay at home and do carpentry.

You can see that there is a good carpenter around the house. Not only is the warm winter house made of logs, but so is the neat bathhouse and the summer cottage. This year there's a new shed next to the boathouse. It serves as a garage for the Buran snowmobile, which is used for winter trips to town when all the roads are covered with a thick layer of snow.

Albert confesses that he is a sit-by-the-fire man by nature. He is perfectly happy about his wife's being the main wage earner of the family. She is head of a livestock team on the local state farm. He speaks about their division of labor with a smile, but his reasons are serious.

Continued on page 29

AS THE ARTIST SEES IT

A Northern Woman
Top:
Mechanic Sergei Bespalyi
Below right:
Driller Mikhail Marchenko
Below:
Canteen in Vuktyl

VICTOR SKRYLEV, a young Moscow artist, is known mainly for his graphics. Many readers of *Literaturnaya Gazeta* are as attracted to the paper by Skrylev's illustrations as by its literary news.

The editors of SOVIET LIFE learned from the paper that Skrylev had recently returned from a trip along the Pechora. Since we were preparing an issue featuring the river, we invited him to stop by and bring some of his work. Here are four of the hundreds of sketches he showed us.

RIGHTS AND RESPONSIBILITIES

The Country Revises Its Legal Code

Among other problems, the Twenty-sixth Congress of the Communist Party of the Soviet Union discussed questions related to the development of the political system, including those of improving the legal foundations of Soviet democracy. What are the decisions of the congress? And what does it call for in this vitally important field? Correspondent Pavel Sharikov discussed these matters with Vladimir Kudryavtsev, director of the Institute of State and Law. Vladimir Kudryavtsev is a corresponding member of the USSR Academy of Sciences.

QUESTION: October 7 marks the fourth anniversary of the adoption of the new Constitution. Could you please tell our readers how closely the decisions of the Twenty-sixth Congress are linked with the relevant provisions of the body of laws?

ANSWER: Quite closely. The section of the Central Committee's report that deals with matters of socialist democracy is titled: "The Constitution of the USSR and the Further Development of the Soviet Political System." While examining the processes taking place within the political system of society, the congress proceeded from the provisions of the Constitution.

The congress has emphasized the unalterable importance of this historic document. Its adoption marked a new phase in the country's political life and in the work of the Soviets of People's Deputies and public organizations.

QUESTION: The congress mentioned the extensive work required to revise Soviet laws in accordance with the new Constitution. Could you fill us in on the details of this work?

ANSWER: A great deal of work has indeed been done. It was based on the plan adopted at the end of 1977. The plan has been almost completely implemented. A number of significant acts have been passed, including the procedures for the work of the Supreme Soviet, the law relating to the USSR Council of Ministers, the laws on the Supreme Court, the Procurator's Office, the courts, People's Control of the work of administrative bodies and officials, and a few laws on environmental protection. The fundamentals of housing legislation are getting top-priority examination at the moment.

All of these statutes are in keeping with the Constitution and are aimed at strengthening the democratic foundations of our government and enlisting the working people to take a more active role in managing its affairs. I would also like to emphasize that broad sections of the public take part in drafting new laws. Preliminary discussions make it possible to consider public opinion and to produce the best variation of a given law.

QUESTION: The Central Committee's report says that the work of perfecting legislation will continue. What does this mean?

ANSWER: Of all the legislative work to be done in the near future, I would like to single out the drafting and passing of a law on the procedure for holding referendums, something we've never done before in our country. Yet, the new Constitution provides for such a democratic institution. Another law in the making is devoted to the rights of work collectives. It seems to me that we should also develop legislation on civil service.

Speaking in more general terms, however, I can say that what we need are laws that will create the legal basis for implementing the party's plans for the Eleventh Five-Year Plan period and for the period through the eighties.

Legal scholars at our institute have prepared a list of such laws. It includes a number of new statutes on various aspects of the national economy, public services, scientific work and invention. By way of self-criticism, I would say that my colleagues—scholars—used to be too timid in looking ahead. One can apply to them the criticism that the party congress addressed to a number of philosophers who "proved what has already been proved." Although the popularization of new laws is important and honorable work, that's not enough as far as scholars are concerned. It is important that the initiative of writing new laws comes from them.

QUESTION: You mentioned that it's necessary to reform the civil service laws. What prompted this need?

ANSWER: A number of circumstances. The Twenty-sixth Party Congress emphasized the importance of improving guidance in economic management above all else. A lot here depends on the style and work standards of executives and managers as well as their knowledge. Not everything that goes on in this field has been legally substantiated. For example, a worker is given a rating according to his or her skills. There are no problems here. It's difficult, however, to evaluate the competence of a civil servant. This is an area that has no precise yardsticks. Hence there is a need to evaluate civil servants regularly, perhaps with the aid of exams.

There is another equally important aspect of the matter, and that is relations between civil servants and other citizens. In the event that an official violates the rights of citizens, there is a procedure for lodging a complaint. In labor disputes, for example, the practice is to file a grievance with a court of law. But the bulk of complaints goes through administrative channels, which sometimes means that the complaints wind up on the desks of the same officials being charged. The legislative program calls for drafting a statute that has a broader procedure for appealing illegal actions of officials in a court of law as well as the procedure for seeking compensation for damages.

Suggestions are made in the press to institute strict codes that would hold officials responsible for red tape and insensitiveness, in short, for violations of the laws ensuring the rights and interests of citizens.

QUESTION: The party congress called attention to a rise in the Soviet people's political standards. How does this manifest itself?

ANSWER: First of all, Soviet citizens now have a deeper understanding of world events. Their sense of responsibility for the affairs of the country and society has appreciated noticeably. Their legal standards have risen too. As a lawyer and a scholar, I find it most gratifying. For example, the results of a poll conducted recently in Moscow show that more than 57 per cent of those interviewed have a good knowledge of major political acts and legal provisions. Five years ago the figure was 40 per cent. More than 70 per cent of those Moscow residents who were polled by jurists and sociologists have some sort of political and legal literature at home. Nearly 75 per cent of all Muscovites take part in one way or another in running production affairs. The picture on the whole is good.

Can we rest content with this? No, by no means. Let's take public work. It manifests itself in participation in discussions of draft laws, in elections of various bodies, in the functioning of the press, in the work of public organizations and so on. For instance, in the institute that I head there are 17 public organizations—party, trade union, Young Communist League organizations as well as numerous societies, including the International Law Association, the Soviet Lawyers Association, the Society for the Protection of Cultural Monuments, and the like. A similar picture can be observed in other institutions too. Almost all these organizations are active.

But the party strives to ensure that every citizen takes part not only in public affairs, but also in running production affairs. What does this mean? In the first place, it means that the work collective should help solve economic and social questions and help raise labor productivity. In this connection, it must be said that the future law on the rights of the work collective should define the legal foundations for a number of its functions, including questions of training, placing and educating personnel.

QUESTION: If the laws of our country are designed to meet the interests of society and its citizens, how do you explain the fact that not all of the laws are being observed?

ANSWER: The problem of observing laws and implementing them was described at the party congress as a most important one. Delivering the CPSU Central Committee's report, Leonid Brezhnev said: "Any law lives only when everybody everywhere complies with it."

Of course there are people in our society who believe that the law does not apply to them, and so they break the law. Good laws on environmental protection have been enacted in our country. Nevertheless, many managers fail to comply with them. Why? Well, I would say because their short-term economic interests are incorrectly interpreted and sometimes clash with provisions of the law. In order not to pollute the environment it is necessary to modify technology, perhaps even to shut down production for a time. But this would be economically damaging both to the work collective and the executive. Thus, the matter hinges on legal standards, the responsibility of citizens and, indeed, on the economic mechanism, which requires some improvement. We need to make it economically disadvantageous for people to break the law.

QUESTION: Some people say that offenders should be punished more severely, then everything will fall into place and there won't be any more violations. What do you think?

ANSWER: This is a wrong view. Responsibility is, naturally, needed. But it is persuasion, not force, that has always been the party's highest consideration. The method of enforcement was and is secondary. This is fully in keeping with the Leninist principles regarding state management of society.

Questions of law and constitutionality should be solved comprehensively, along with the fulfillment of economic and social tasks. This is the stand taken by the Twenty-sixth Party Congress. And this is a reliable guide to action for anyone who deals with problems of state and law in a society of mature socialism.

By Gennadi Pisarevsky
SOVIET LIFE Commentator

SOVIET ECONOMY: PROBLEMS OF THE EIGHTIES

THE NEXT few months I plan to write about the most urgent problems facing our economy—problems the solution of which determines our ure national progress. I would appreciate it if readers would mention bjects of interest to them in their letters to SOVIET LIFE. Although we e at different sociopolitical poles, we have many common problems. is article is about one of them.

Conserving Labor, Raw Materials and Energy

The Soviet Union now produces more industrial goods than the whole rld did at the beginning of the fifties. World oil and gas condensate oduction, for example, in 1950 topped 521 million tons. In 1980 the ure for the USSR hit 603 million tons. Soviet gas output has been ought up to 435 billion cubic meters—more than two times the total all countries in 1950. The world's electricity output in 1950 amounted 988 billion kilowatt-hours, while the USSR's 1980 production was 1.295 llion kilowatt-hours.

As you can see, the scope of yesterday's world economy has now be-me the scope of one country. In view of dimensions like this, it is easy understand why the efficient use of available resources has made the p-priority list for the eighties. "An economy must be .economical—that dictated by the times," stressed Leonid Brezhnev in the report to the enty-sixth Congress of the Communist Party of the Soviet Union. Each terprise and the nation as a whole should display awareness of this fact. The ultimate goal of the economic strategy for the eighties is to cut e expenditure of labor, raw materials and energy per unit of output, us reducing working hours and increasing free time. Judging from the de discussion now under way in our country on all of these problems, would say that workers, farmers and specialists are dissatisfied with ee things: unwise use of resources and the slow gains made in efficien- and labor productivity.

Reducing the use of raw materials is a global problem. For centuries ilization has developed an easy come, easy go attitude. The ancients' roneous view of the eternal boundlessness of the Earth's resources ll lingers in our consciousness. A rebuilding of the world economy, ned at getting the maximum effect with the minimum expenditure of w materials, has already begun, although a bit too late.

The Soviet Union is approaching this problem in earnest. "Compared th the best indicators in the world, we use more raw materials and ergy per unit of the national income," Leonid Brezhnev told the Twenty-th Congress. The study and adoption of advanced world experience, ile taking into account the distinctions of the socialist mode of pro-ction, and the sharing of Soviet experience with foreign partners (the viet Union has sold 720 pioneering licenses in the last few years alone) e important factors for the growth of international economic ties and e materialization of détente.

During the five years of the current plan (1981-1985), the Soviet Union ends to cut the rates of fuel, energy and material expenditure per unit finished products. Thus, for one thing, we should save 160 to 170 illion tons of fuel, which is equivalent to 110 million tons of oil.

Stabilizing Oil Extraction

The Soviet Union is self-sufficient in resources and exports them to her countries. Our reserves of fuel and raw materials permit us to ex-nd their production, but this requires time and money, and in the long n is unprofitable. We could get much more efficient results by reducing e raw material expenditure per unit of output. This is two to three and en six times cheaper than building up the extracting industries.

Twenty years ago it took two rubles (one ruble is approximately equivalent to 1.40 U.S. dollars at the official rate of exchange) of investments to produce one ruble's worth of raw materials. Now it takes four and will take five or six and more rubles in the future. This in particular explains our policy of stabilizing oil extraction, which is becoming increasingly more costly. The Soviet Union can, without harming its economy, gradually replace oil with gas, coal and nuclear energy, thereby saving considerable sums.

The Soviet Union also has the world's largest base of raw materials. Almost all the resources we use are our own. However, the conversion of raw materials from the extracting to the processing stages of industry, from the viewpoint of today's requirements, is not sufficiently effective. The losses are still great.

The Slowdown in Labor Productivity Growth

Recently experts in just about every country have begun expressing growing concern over the slowdown in the rate of labor productivity growth. In the Soviet Union the urgency of the problem is magnified by demographic reasons. Due to the long-term effects of World War II, our work force in the eighties will sharply dwindle. The only way to make up for the shortage of workers is to speed up the growth of labor productivity. And we can't expect smooth sailing here. Although labor productivity jumped 17 per cent between 1976 and 1980, not a bad index taken alone, it was lower than the target. This seriously worries the Soviet public.

In the 1981-1985 period almost the entire gain of the national income is to be achieved through higher labor productivity. Hence, the main emphasis has to be on the introduction of new machinery and computers, which requires a steady growth in the general professional standards of workers.

In the Soviet Union education, both general and specialized, has always run ahead of the requirements of the economy. This is partly because we have had no budget cuts in the area of social programs. The guiding economic law of Soviet society is to ensure the constant growth of material and cultural values, improved conditions for life, work and recreation and thus creation of the best opportunities for the individual's self-fulfillment.

For the first time in the history of our country, the planned rate of growth for capital investments will be lower than that for the national income. The target for capital investments is 12 to 15 per cent, while the target for the national income is 18 to 20 per cent. This is the key sign of the intensification of an economy. The Twenty-sixth Party Congress even went so far as to liken the current stage of development to the era of industrialization, which resulted in the Soviet Union's becoming one of the leading economic powers.

Planning is the Key

The economic boom in the Soviet Union has been moving along nonstop for more than half a century, since 1928 to be exact, when the first five-year plan was undertaken. Today, too, as the eleventh plan is getting under way, the Soviet economy is continuing to develop stably, along an ascending line. Planning is the main principle of economic management in our country. Although the Soviet Union has amassed tremendous experience and expertise in planning, its potential can still be used rather inadequately and sometimes even badly. I'll discuss the need for improved planning, a very important problem for the eighties, in a coming issue of SOVIET LIFE.

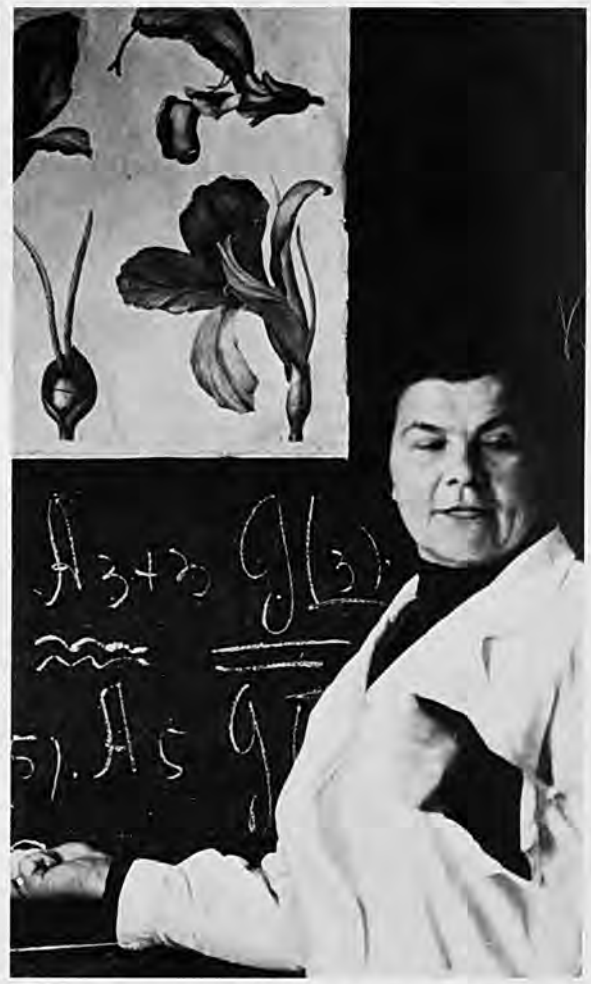
By Professor Valentina Vityazeva
President of Syktyvkar University

Come Back To Our UNIVERSITY!

Below: A student dormitory and a science lab.
Facing page: Professor Boris Brach is head of the university's Chemistry Department.

SYKTYVKAR UNIVERSITY, IN THE CAPITAL OF THE KOMI AUTONOMOUS REPUBLIC, IS THE NORTHERNMOST UNIVERSITY IN THE EUROPEAN PART OF THE SOVIET UNION AND THE FIRST IN THE HISTORY OF THE KOMI NATIONALITY.

Valentina Vityazeva at the construction site of the new campus. Below: English teacher Maria Polskikh is a Nenets by nationality. Below right: Nadezhda Akulshina is head of the Botany Department.



many countries I visited—the United States, Japan, Finland and Canada—my foreign counterparts often asked me: "What is the Komi Republic like? Is it really a godforsaken northern province? What does the local ulation do besides hunting and fishing? Can women of the Komi nationality get an educa-?"

s hard to imagine now that a few decades only one-quarter of the Komi population d read and write. Bourgeois scholars asserted it would take us about 180 years to achieve literacy for men and 280 years for women. er socialism it took us only 20 years.

1930 compulsory primary education was inuced in the Komi Republic as well as in the of the country. Today the transfer to comory secondary education has nearly been pleted. Moreover, in the country as a whole people out of every 1,000 working people a secondary or higher education, but in the i Republic it is 815 out of 1,000. Before the at October Socialist Revolution of 1917 there only 500 teachers in the whole area; now e are over 10,000. There were no higher eduonal institutions. Now we have a state uniity, a teachers institute, an industrial insti- a branch of the Leningrad Mining Institute a branch of the Leningrad Forestry Academy. se higher educational institutions train exs in over 30 professions.

yktyvkar University, founded eight years ago, become the main educational, scientific and hodological center of the republic. The need for it was recognized long ago, when the first geological expeditions were sent to the Komi area on Lenin's initiative. Their search was successful, resulting in the discovery of the Pechora coal deposits and later of what is now known as the Timan-Pechora oil and gas complex. In a short period of time the Komi Republic has become an important industrial region with developed forestry, coal, oil, gas and other industries. We needed not just literate people, but highly qualified experts. That was why higher educational institutions and the Komi Branch of the USSR Academy of Sciences were opened in the republic.

Our university started from scratch. It goes without saying that we received substantial funds for it from the state. But we had neither experience nor tradition to fall back on. In this hard period of establishing the university we were supported by the whole republic, and, moreover, by the whole country. Twenty-two of the union republics' universities gave us nearly half a million books. Twenty-seven Komi industrial enterprises equipped our laboratories free of charge. Well-known Soviet scientists donated their private libraries to our university. Moscow and Leningrad universities supplied us with teachers and helped us compile our curriculums.

Today Syktyvkar University has 3,000 students and five departments: physics and mathematics, chemistry and biology, economics, history and philology. They are training specialists in the sciences, industrial planning, finance and credits, bookkeeping, history, Russian language and literature. Such a choice of subjects meets the needs of the republic. The first lecture delivered to the freshmen students is always dedicated to the development of the Komi Republic and to that of the Soviet Far North. From their first day at the university our students come to realize that in five years they will have to apply their knowledge for the benefit of their republic. Only 20 per cent of our graduates work outside the republic.

We have our own computer center, biology laboratory and botanical gardens. We are proud of our herbarium and our museums of zoology and archeology.

The graduates of Syktyvkar University are specialists with a rounded education. When we were trying to set up our own system of teaching and scientific research, the world was arguing whether university education was out-of-date in our modern, down-to-earth, rational age. Some tried to prove that a broad education was useless and argued in favor of narrow specialization. The opposing arguments seemed just as well-grounded. This discussion is typical of our time, and it will probably continue for years. Our position in this discussion was as follows: A university graduate must acquire fundamental knowledge of a particular science and all related subjects. We took into consideration the needs of our republic and the fact that modern times require progressive ideas and new technologies. All discoveries today are made on the boundaries of various sciences.

Utilizing the experience of the progressive universities of the world, we organize curriculums ▶

Founded only eight years ago, Syktyvkar University is the main educational center of the Komi Republic. The university has five departments and a student enrollment of 3,000.

for our students that include training not only in the latest technologies but also in various aspects of culture. That is why, in addition to our five main departments, we also have a social professions department, which consists of 14 sections: journalism, history of art, history of music, and the like. We do not demand that our students attend those courses; we don't have to. They do it willingly. As a result, they get two diplomas. A physicist, say, can also receive a journalism diploma, and a chemist could also be a certified ballroom dancing teacher.

All the subsidiary sections specialize in the humanities. We think that here we follow the progressive tendencies in higher education of providing experts in the exact sciences with a basic knowledge of the humanities. We are doing this not because we hope to produce our own Lomonosov or da Vinci, though, who knows, perhaps one day our republic will spawn a new genius.

Our students (half of them are Komi) are taught to think and work on their own and avoid orthodox solutions. They have a chance to express themselves at student seminars and in their term and diploma papers. We hope this will train them to take a creative approach to the complicated problems they will encounter after they finish school and get a job.

A creative atmosphere in our university is especially important for the northern areas, where a lot has been achieved, but still more remains to be done. For instance, large oil deposits have been discovered in the Komi Republic. This oil is extracted not by drilling, but by mining, like ore. Only a small percentage of the oil can be extracted this way. Is there a method for increasing production? Shall we go abroad to learn it? But American and West German experts keep coming to Komi to learn from our experience. So we must look for our own solution to the problem. I think that our graduates will contribute to this.

A few years ago the sixth conference of the International University Association was held in Moscow. It discussed the problems of higher education on the eve of the twenty-first century. Its participants argued a lot about the tendency for educational continuity. I support the opinion expressed by Professor Kingman Brewster, Jr., former president of Yale University. Speaking about the results and purposes of higher education, he mentioned first the level of skills, then the level of knowledge, opinions, critical realization and creativity. I like his idea that people with a higher education should go back to their universities many times during their professional careers to learn again. I don't take these words strictly at their face value, though our university is going to have refresher courses at which technical experts working in industry will be able to update their theoretical knowledge. I can also see the symbolic significance of this idea. The acquisition of knowledge must be a process of continuous learning.

It is not just a matter of filling the heads of our students with information. We want them to be able to extract this information from books and to do it on their own. "Come back to your old university! Come back to your books all your life!" I used to say to our first graduates.

These are the principles on which our young and still small university is based.

Do we think our setup is perfect? Of course not. We have already begun to feel that our campus is too small. We don't have enough laboratory space, and we have not been able to open the forestry, agriculture and law departments the republic needs. But we hope to resolve these problems in the near future.

The state has recently allocated 47 million rubles for the university. We have started building a new campus. It will be situated on a high bank of the Vychegda River, on the outskirts of Syktyvkar. Student dormitories, a stadium, lecture halls and laboratories, a boat club, a student café and a social club will be built there. There will also be plenty of room for our university theater, the student choir and rehearsal rooms for bands and groups. Student life would be incomplete without those things.

NADYM, a Young City

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y are welded in threes into so-called lengths. e welding of lengths is of particular importance. e seams must be perfect since the smallest e in the metal, even one the size of a pinhead a tiny cavity, means disaster. That is why after work of the automatic welding machines, the al welding is done by experienced, highly alified welders, while special instruments con- l the quality of the seams. In a few seconds a tal length weighing many tons is ready, lifted o the air as if it were a match and rolled into a v with other lengths. Afterward it is taken care as if it were made of glass, not steel. At first s carefully loaded on a tractor stringer which rries it along an opening to the trench prepared it. There it is welded to the main pipeline, apped in insulation and covered with a con- ete yoke to make it heavier so that it will not be ced to the surface by swamp water. Thus, gth after length, the gas main moves along the ndra.

Up to seven teams work simultaneously day d night and in any weather along 40 to 50 ometers of the gas main. The shifts of welders d mounters relieve each other every eight urs, and the workers rest at the settlement arest the mains. I visited one of them.

Several *baloks* are scattered around a clearing the taiga. There is a canteen there, a club here films are shown every evening, a library of 00 books, a medical center and a shop. The ung men like playing soccer very much, so ere is a small stadium in the middle of the ttlement.

The helicopter that flew me from Nadym ought foodstuffs for the local canteen and shop. ooked into the containers and saw fresh beef, icken, cans of condensed milk, yogurt, cot- ge cheese, bread, cucumbers, tomatoes and en bananas. A full dinner at the canteen costs ly 50 to 70 kopecks. Insignificant deductions om the wages go to pay for clothing, warm foot- ear, heavy sweaters and fur-lined jackets. he monthly wages of an average worker, in- uding all kinds of allowances, vary from 1,000 1,300 rubles. At first there were people among the workers whose sole interest was money. However, as a rule, money is not enough to make you endure the hard work in the cold and wind. It is said that the gas main chooses the proper people itself. And though there is nothing special about them in appearance, they are indeed simplehearted and unpretentious, extremely comradely and optimistic. And the main thing is that they are real experts at their jobs.

The Future of Nadym

That spring day was a festive occasion at the schools of Nadym as it was at all schools in the Soviet Union. It was a noisy, colorful and sadly moving occasion—the school bell ringing for the last time for the graduates.

We were invited to the ceremony at the first 10-year school built in Nadym. Now there are four of them, each with an enrollment of about 700 pupils. The present graduates were the first graders of the then quite young Nadym and remember not only the classes in the splendid building of the present school with all its rooms, assembly hall, gym and conservatory, but also those in the *balok*, where their first teacher taught them to read and write. The boys and girls finishing school now cherish this memory and are proud of having been the first pupils.

The "last bell" celebration was a great success. There were the parting words of the teachers and the words of gratitude of the graduates, and there were smiles and tears. The festival ended with a surprise. The first graders presented the graduates with an enormous cake that required two boys and two girls to carry into the hall.

I remember how the graduates said with humor that they intended to become world-famous astronomers, musicians, actors and athletes. And I think that few teachers and parents in the audience doubted this, so presumingly bold were their charges.

But joking aside, I wanted to ask the young people where they intended to study or work. A group of excited young women and men gathered in the geography classroom. From the lively conversation I learned that two-thirds of the graduates were going to enter institutes and universities in Novosibirsk, Tomsk, Moscow and Leningrad. Hardly any of them intended to study the humanities; they wanted to become physicists, chemists, engineers and doctors. Only one boy wanted to be a photographer.

I was almost sure that they dreamed not only of studying in a big city, but also of living there. However, most of them said that they would return to live and work in Nadym.

"But there is no need for physicists, chemists or photographers in the city. You won't find work in your specialties here."

"There is no need now," they corrected me, "but Nadym has a great future. They write about it in the newspapers and talk about it on radio and TV."

And then, interrupting one another, the young people started telling me how they pictured the future of their city. According to them, a scientific research center for the study of global problems of the North was sure to be founded in Nadym, while the gas would be processed on the spot at a chemical plant. The city would have several theaters and a television studio (then it would be necessary to shoot films for its broadcasts). At the Nadym exhibition hall professional artists would hold showings of their paintings and drawings, while musicians and composers would give concerts at the Nadym philharmonic society.

Frankly speaking, I had expected more fantasy from these youngsters. The picture they drew of Nadym lacked the imagination typical for their age, particularly considering that young people are interested in science fiction and read popular science magazines for youth, both of which are full of all kinds of projects for northern cities of the future, things like transparent roofs enclosing a controlled subtropical climate and streets leading from offices to dwellings.

However, is it so bad, I thought, that these young Northerners do not have visions of a utopia but picture the future of their native city as a place they can use the knowledge, ability and strength they are about to acquire? In my opinion, a generation that thinks in realistic terms is ready for independent living. After all, they are the ones who will build the future Nadym. ■

PECHORA: the River and the People

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First, farm work pays much more than work a shop. Besides, Lyra is a specialist and a od organizer, and has been a team head for a g time. All this affects her salary, which is ch higher than Albert's. Secondly, Lyra has to away from the house more often than her hus- nd, so she relies on him to do numerous usehold chores.

After Lyra had been working on the farm for few years, she felt the lack of a specialty. In ose days she had to look after her first child, t that didn't interfere with her becoming a rrespondence student of an agricultural col- ge. Albert assisted her in every possible ay.

Lyra had to find time for her studies and twice year went to Vologda, where the college was tuated, to take exams. Albert stayed at home d looked after their daughter, then after two aughters and, finally, after three of them. Lyra's mother helped him a lot. That continued for five years, and at last his student wife got her diploma and became a livestock expert.

Lyra's inquisitiveness was not exhausted. She suddenly became a passionate traveler. Albert accompanied her on her trips to Moscow, Leningrad and the Black Sea coast, and then gave up. "The Pechora woods suit me all right. You get your wanderlust from your ancestors." That was his joke about his wife's background. She is a Komi, and her grandparents were nomadic herdspeople. So Lyra toured half the country and even went abroad.

The day I was there, Lyra left work on the state farm twice to see how things were at home. She was full of energy and managed to discuss and do a lot of things during those short visits. It was obvious that she was very active by nature and had a completely different rhythm of life than her sensible and slower-paced husband. You could see that many people besides Albert had noticed this characteristic.

Several years ago the state farm workers elected Lyra a member of the Soviet of People's Deputies. Later on they nominated her a deputy to the Supreme Soviet of the Komi Autonomous Republic. For four years she was a member of the Trade Commission, and her husband unexpectedly became her consultant.

People soon noticed that Lyra was as particular about her government duties as about any other work she did. Her constituents voted for her again in the next election to the Supreme Soviet of the republic, and its deputies elected her a member of the Presidium of the Supreme Soviet of the Komi Autonomous Republic. So Lyra has continued to travel, but now for official, not personal, reasons. She has to attend the presidium meetings and Supreme Soviet sessions in Syktyvkar, the capital of the republic.

"My work on the farm, my duties as a deputy and my housework consume time and energy," says Lyra. "Many people, especially women, ask me how I manage to do it all. I tell them about my husband, who is so supportive. Now our daughters are old enough to help. All of them are now engaged to be married." ■

The Land of the

By Alexander Grigoriev

Lop is the name the ancient Slav inhabitants of Central Russia gave to the Kola Peninsula, which spreads beyond the Arctic Circle to the coast of the cold Barents Sea. In the olden days this land was inhabited by mysterious tribes, the ancestors of the present Saami.

Mikhail Prishvin, a well-known Russian writer who saw the Saami in 1907, wrote in his travel notes: "The Lapps are a tribe forgotten by the whole cultural world." This is no longer true. Let's look at the past 60 years and see what changes Soviet power has made to improve the life of these people.

At the beginning of the 1920s, according to a local newspaper of those years, the impoverishment of the Saami reached its utmost limit. "The debts to the fur profiteers and kulaks were sometimes so big that the poor reindeer breeder had to return home from the market without any gunpowder, flour or salt." The Saami often gave up reindeer breeding, an age-old occupation, because it proved unprofitable and went to work as laborers for the kulaks, who owned big herds of reindeer, or moved to town in search of a living.

Now every family of a Saami reindeer breeder has at least 30 reindeer of its own that graze in the common state farm herd. At the Tundra State Farm, for instance, this herd numbers 30,000 head. The monthly income of a Saami herder employed at a state farm is never less than 300 rubles.

The average life span of a Saami reindeer breeder has increased from the statistical 27 or 28 years in 1921 to 70 years in 1978.

Tuberculosis mortality among the Saami has been reduced by 15 times as compared with the prerevolutionary period, while pneumonia mortality has been reduced by 50 times.

At the beginning of the present century, the inhabitants of the Saami villages were completely illiterate. If a reindeer breeder had to sign his name, he used his individual mark. He would indicate the number of deer he owned and the tax he had to pay with special signs on a plank attached to his belt.

Now all Saami are literate, with the exception of very old people. Ten-year secondary education is as compulsory for the children of reindeer breeders as for any other Soviet schoolchild.

Father Reindeer

Lovozero was the biggest Saami settlement on the Kola Peninsula in the 1920s and 1930s and is now the district center. It is just a small township like any other, with rows of five-story houses along wide streets, shops, a restaurant and a bar.

While Saami herders wait for their reindeer meat to cook and their tea to boil, they listen to the news over a transistor radio.

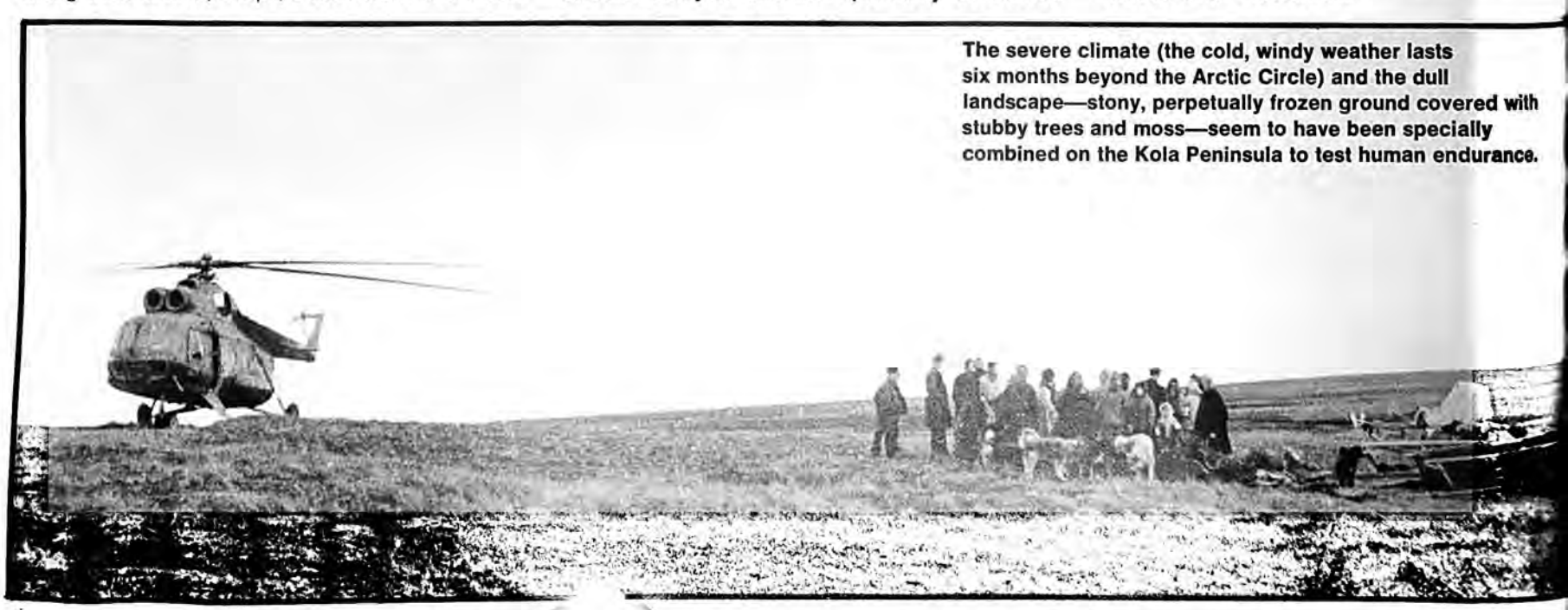
The people wear European clothes, only warmer ones than we would wear during the season. Familiar Moskvich and Lada cars move along the streets, boys ride around like mad on bicycles, while babies sleep peacefully in their carriages.

It turned out at the multinational settlement of Lovozero (in addition to Saami it is also inhabited now by Komi, Nenets, Russians and Ukrainians), that it was simply impossible to distinguish a Saami from a Russian or a Komi, and it was also impossible to find any difference in their mode of life. The herders' families have for over three decades been real town dwellers, enjoying all the benefits of civilization. They have cars, snowmobiles (indispensable for anyone who likes to hunt in the tundra) as well as motorboats (every Saami family owns one).

The office of Tundra, the biggest reindeer-breeding state farm on the peninsula, is also situated in Lovozero. Our conversation with its director Semyon Kravtsov primarily concerned the present needs of the reindeer breeders.

"We are neither plowmen nor scythemen, we are reindeer people," are the words of an old Lapp song. "Father Reindeer is our bread."

"These prophetic words of our ancestors have not lost their meaning to the present day," said the director. "The reindeer here has remained the most profitable agricultural product. Cereals and vegetables can grow here only in hothouses. Potatoes are the exception, but you can understand what a painstaking business it is to gather a good crop of potatoes on our rocky soil during the short summer. The breeding of cows on dairy farms is equally troublesome, though last year the state farm made a good profit—8,000 rubles—from the sale of milk. This is a step forward. The reindeer, however, require neither special fodder nor farms. The herds grazing in the tundra, which is rich in reindeer lichen, require only herders to contain them and provide protection from wolves and wolverines."



The severe climate (the cold, windy weather lasts six months beyond the Arctic Circle) and the dull landscape—stony, perpetually frozen ground covered with stubby trees and moss—seem to have been specially combined on the Kola Peninsula to test human endurance.

SAAMI

NOT SO LONG AGO ETHNOGRAPHERS PREDICTED THAT THE SMALL TRIBE OF 2,000 SAAMI—THEY USED TO BE CALLED LAPPS—INHABITING THE FAR NORTH, WAS THREATENED WITH EXTINCTION. BUT THE HISTORY OF THE PAST 60 YEARS HAS REFUTED THIS FORECAST.

And why has the reindeer herd diminished ewhat compared to past years?"

For one thing, the territory of the tundra at disposal of the farm has been reduced by building of the Serebryansk Reservoir. It is essary to supply the district with drinking r, but the same water has flooded our rein- pastures. In addition, the tundra is cut by and gas pipelines and electric power lines. e things are bad for the pastures. If we were crease the number of animals on a smaller tory, the herd would trample its own food the losses would be much greater. That is we purposely reduced the head of livestock."

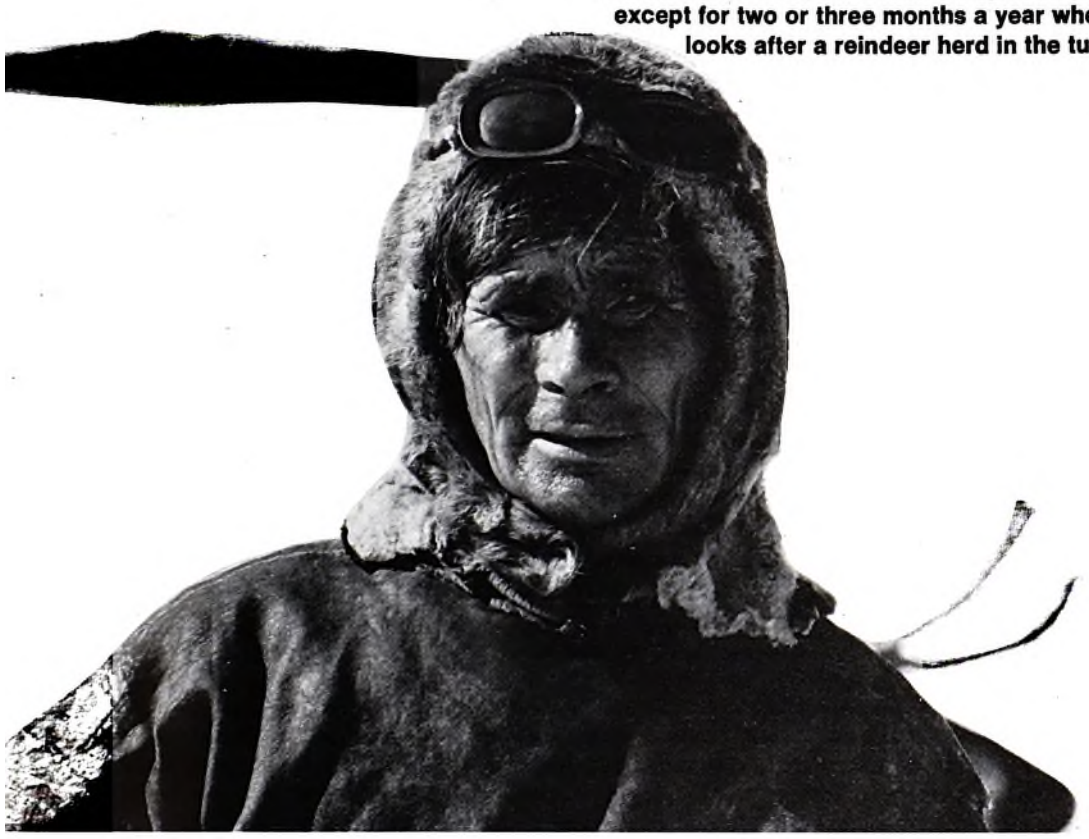
But what is the way out of the situation? The ince of civilization on the tundra is inevitable. this mean that the fate of reindeer breeding branch of agriculture is doomed on the Kola nsula the way it was in some Scandinavian tries and in Canada?"

h, no," said Semyon Kravtsov with a smile. the near future the matter only concerns the lization of the head of livestock of the rein- herds. As for the advance of civilization, does not particularly trouble me. It is important to raise the ecological consciousness of builders and heads of geological expeditions. For them the tundra still remains a wild uncultivated expanse of land. So they cut it with cross-country vehicles and bulldozers for no special reason, destroying the lichen layer. It takes lichen from 10 to 15 years to grow and become the indispensable food for the reindeer that it is. Today this problem worries not only us, but also scientists from the agricultural academy and reindeer-breeding centers. Special ecological recommendations have already been worked out for the ministries and government departments doing large-scale work in the Far North. The recommendations have been approved by the government of the Russian Federation and will soon acquire the force of law."

We met reindeer breeders surrounded by herders in the midst of the May snow of the tundra. Everything was probably just as it had been in the old days. These simple people with tanned weather-beaten faces wore *panitsi* and *taborki,* traditional Saami clothes. The dishes they served us were also traditional Saami: a reindeer leg broiled in the fire, and pine and juniper tea, while several meters away from the fire stood sledges with obedient reindeer. Nearby shaggy huskies were napping cozily.

Everything was like in the old days, and at the same time different. One of the herders was reading a newspaper that had come in the mail delivered that morning, while 18-year-old Ivan Danilov, the youngest reindeer breeder, had turned on a transistor radio, and it was filling the tundra with the sharp dissonance of pop music. The helicopter was a technical miracle against this archaic background, but the machine was as common to the Saami as the distant snow-covered mountains.

Gavriil Danilov lives with his family in Lovozero, except for two or three months a year when he looks after a reindeer herd in the tundra.



The Restive Yuryev

Sitting around the campfire and sipping tea, the herders began to speak openly. Their frankness was rather strange—a mixture of unconcealed pride and the sadness of loss.

"In the olden days when a Saami boy was nine or ten years old, he started learning everything from his father—how to put up a *kuoksu* (light tentlike dwelling), how to repair the harness and how to hunt wolves and wolverines. In a year or two he became a full-fledged herder. And now?" Pyotr Galkin sighed. "Now my younger boy is at a boarding school, and I see him only a few times a year, while my older son Alexei is far away in Naryan-Mar, where he is a student at veterinary school. So I have no one to pass down my trade to."

And still the herders are proud of their children. All of them study, all are well-clothed and fed. Some have gone to Leningrad, entered the Institute of the Peoples of the North and will return home as teachers or doctors. Some dream of becoming captains of nuclear-powered icebreakers, and this dream may possibly come true. However, few Saami wish to continue the work of their fathers and forefathers. They are not tempted either by the good money reindeer breeders earn or by the romantic nature of nomadic life in the tundra. What romance is there in being a herder? A helicopter pilot is a different matter.

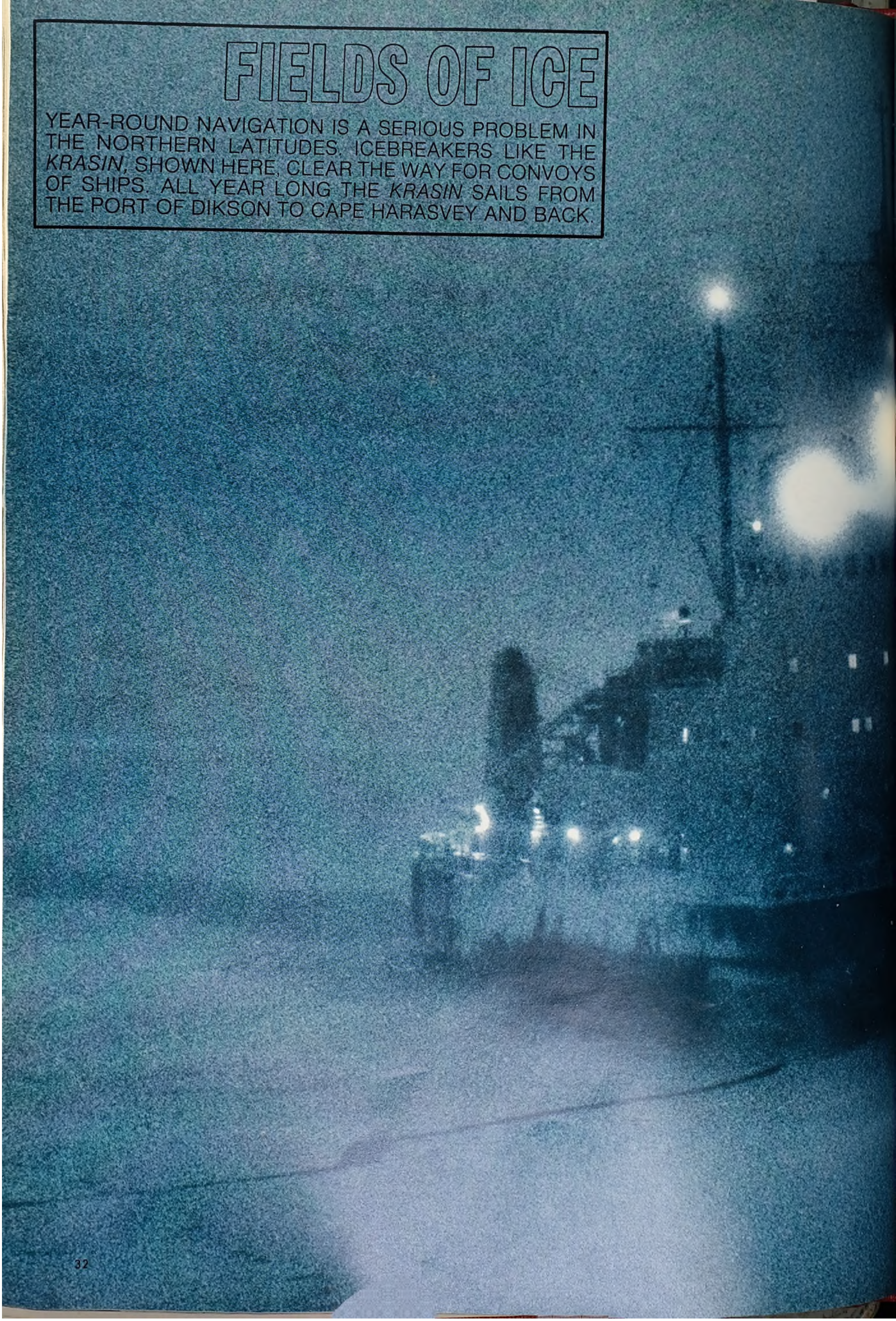
Here, by the campfire, we heard about teacher Pavel Yuryev. The Saami herders said many complimentary things about him—that he was the chief collector of Saami folklore in Lovozero, that he himself wrote tales and parables. They particularly praised him for organizing a circle where he taught children the difficult trade of herder.

Yuryev is 40. After finishing 10 years of school, he drove reindeer herds to the sea for three years, then studied in Leningrad in the Natural

Continued on Inside Back Cover

FIELDS OF ICE

YEAR-ROUND NAVIGATION IS A SERIOUS PROBLEM IN THE NORTHERN LATITUDES. ICEBREAKERS LIKE THE *KRASIN*, SHOWN HERE, CLEAR THE WAY FOR CONVOYS OF SHIPS. ALL YEAR LONG THE *KRASIN* SAILS FROM THE PORT OF DIKSON TO CAPE HARASVEY AND BACK.



THE 300TH ANNIVERSARY OF THE BIRTH OF VITUS BERING IS BEING CELEBRATED THIS MONTH. THE HISTORY OF GREAT EXPLORERS RIGHTLY INCLUDES THE NAME OF THIS RUSSIAN NAVAL OFFICER.

Vitus Bering (1681-1741), the great arctic explorer who discovered the strait between America and Russ

The RUSSIAN COLUM

Vitus Bering started sailing when he was quite young. He made his first voyages on vessels belonging to the East India Company. In 1704, when he was 24, he joined the Baltic Fleet as a sublieutenant and took part in Peter the Great's Azov campaign and the battles in the Baltic. His excellent knowledge of seamanship, his efficiency and honesty attracted the czar's attention, and he was asked to carry out several special missions in the drawn out Northern War. For instance, he safely steered the vessel *Pearl* from Copenhagen to Kronstadt and the vessel *Serafail* (built in Arkhangelsk) from the White Sea around Scandinavia to Revel (Tallinn). Bering was among the captains who steered the first Russian vessels from the Azov ports to the Baltic around Europe and after that took command of the largest vessel in the fleet.

But it was not his service in the Baltic and the Azov Sea or his performance in battle that made Bering famous. He won world renown as the commander of two very large scientific marine expeditions. His mate in these expeditions was the outstanding eighteenth century Russian scholar and seaman Alexei Chirikov. In keeping with Czar Peter's wish, Bering was appointed the leader of the first Kamchatka expedition and later the second Kamchatka expedition and the Great Northern Expedition connected with it.

Each of the expeditions was ambitious in design, scale and results. They have gone down in world history as geographical feats that have no equal. They were scientific undertakings on a scale that surpassed everything thought to be feasible in such a short period of time, covering such a huge territory and with such unsophisticated equipment. They were also important state ventures whose aim was to ascertain the northern and eastern boundaries of the country, to search for sea routes to Japan and America and to plot a correct geographical map and the future North Sea route.

The Russian people had always been noted for their irrepressible love of the sea, but the scheme for a scientific study along the entire route of exploration could take place only at a time when there were people in the navy sufficiently prepared to carry it out. Such men were picked and trained by Peter the Great. It was they who gave the world its new Columbuses. The annals of these heroic endeavors include the voyages of geodesists Fyodor Luzhin and Ivan Yevreinov along the length of the Kuril Islands, the voyages undertaken by Bering and Chirikov followed by those of assistant navigator Ivan Fyodorov and geodesist Mikhail Gvozdev to the strait lying between Asia and America, the expeditions across the Sea of Okhotsk to Japan and from Kamchatka to America via the Pacific Ocean.

During the first Kamchatka expedition (1725-1730) Bering sailed to the western coast of Kamchatka on vessels built by the members of the expedition themselves. After that he crossed the peninsula overland and reached Nizhnekamchatsk, where his men built the *St. Gabriel*, the flagship of the expedition. The voyage lasted for three months of the year 1728. Bering rounded the eastern coast of Kamchatka and the southern and eastern coasts of Chukotka and discovered St. Lawrence Island. As he passed through the Chuckchee Sea and saw that "there was no more land stretching to the north," Bering decided that there actually was a strait between Asia and America and turned back. On the return voyage the expedition discovered another island which it called Diomede (actually it was two islands: Ratmanov and Kruzenshtern). After wintering in Nizhnekamchatsk in 1729, Bering explored the sea and plotted the southern cape of Kamchatka (Lopatka) on the map.

St. Petersburg, however, decided that the results of the expedition were unsatisfactory, and Bering was given new instructions defining the scale and the mission of the second Kamchatka expedition (1733-1743) and the Great Northern Expedition. Bering and his men were to explore the entire northern and eastern coast of Siberia, get acquainted with the shores of America and Japan and finalize the question about the existence of the strait between Asia and America. Bering was the official head of the whole expedition.

In fragile sloops, on foot and on dog sledges, under the blinding, unsetting arctic Sun, in the polar night and the severe frosts, the expedition made its way across the tundra, the fallen wood, through the hummocky ice fields pestered by clouds of midges, plotting the coastline and the most important points along the three continents of Europe, Asia and America. Altogether there were about a score of vessels and no less than a thousand men * taking part in the expedition. Many of the men perished along the way. But in the main they accomplished their mission, and the findings of the surveys were used by cartographers for the following 200 years.

In this huge undertaking, Bering was made personally responsible for the voyage to the shores of America, and Alexei Chirikov and Martyn Spanberg were appointed his assistants. Spanberg led the detachment that made the voyages to Japan and the Kuril Islands. It took the members of the expedition four years to cover the distance from St. Petersburg to Okhotsk over unbroken ground and the Siberian forests and another four years to build packets ** fit to sail the ocean. In September 1740 these vessels—the *St. Peter* (under the command of Vitus Bering) and the *St. Paul* (under the command of Alexei Chirikov)—put out to sea and reached

* Including those occupied in transporting the cargo, their number reached 10,000.

** Double-masted light seagoing vessel carrying mail. Length—24.3 meters, width—6.7 meters, with 12 to 16 guns.

By Anatoli Sadyrev

US

Drawing by Boris Dolya

mchatka. After wintering at Bolsheretsk, they put out to sea again on ne 4, 1741, and headed for the East. On Bering's orders, Chirikov's ssel was the first out. Caught in a storm on the ocean, the vessels parated on June 20 and continued the journey alone.

The *St. Peter* reached the shores of North America on July 20, and the ew made a brief landing on Kayak Island. The flagship's return voyage is full of hardships because of inclement weather. However, in the first nth the expedition made several important discoveries sailing from aska to the eastern part of the Aleutians, the Yevdokeyev Islands, Stefan and and the Shumagin Islands among them. The latter were named in nor of the sailor Nikita Shumagin who died of scurvy and was buried the island. Though their stays in the island bays were brief, naturalist eorg Steller managed to learn a great deal about the islands and the y of life of the islanders. Once on the ocean, the vessel was again buf-ted for about two whole months by a series of storms. Scurvy broke out the ship because of the shortage of water and the same food, consist-g of salt-meat and spoiled fish. Twelve men died after terrible suffering d 34 lay ill with no hope of recovery. The store of moldy biscuits and ale lime water was running out. This is how Sven Vaksel (of Swedish rth), Bering's mate, later described the tragedy that befell the ship's ew: "We saw that severe illness had drained our crew of all strength . . . en . . . there was nobody to steer our vessel because the crew consisted eight men who moved about with the greatest effort and only three of em could climb to the deck while the others lay deathly ill."

During the third month of the voyage, the packet approached an unin-abited island which the men took for Kamchatka and cast anchor. An-her severe storm tore the vessel off its anchor and carried it across the efs into the lagoon. There was no outlet into the sea and so the crew d to go ashore on the island which was later named after Bering. Dur-g the winter many of the men died of scurvy on the island, including ering, who died on December 8, 1741. Only by August of the next year d the surviving members of the crew manage to build a little boat, the *. Peter,* out of the wreckage of the packet and sail to Petropavlovsk un-r the command of Sven Vaksel. Of the crew of 71 who put out to sea, , including Bering himself, did not return to port.

Similar hardships befell the *St. Paul.* Chirikov discovered the American past several days before Bering did (according to the logs of the two ssels). After inspecting the coast and sailing north along it for about 0 kilometers, Chirikov decided to find a suitable mooring place and get supply of fresh water. He sent two rowboats, one after the other, toward ore, but neither of them returned. The loss of 15 men and two boats put e St. *Paul* in a difficult spot. It had to start on its return voyage ahead of ne, but on the way back it discovered several more of the Aleutian Islands. Weathering storms, privation and disease, like the flagship (nine men died of scurvy besides the 15 who perished on America's shores), the *St. Paul* returned to Petropavlovsk, steered the last 20 days by officer-navigator Ivan Yelagin because the rest of the crew lay gravely ill.

After passing a severe winter in the port, Chirikov, despite scurvy and consumption, gallantly set out in search of Bering in 1742. But he had to turn back from the Aleutian Islands because of the crew's extreme exhaustion (there were now 40 instead of 70 men). But bad luck dogged the expedition. Passing south of the Komandor Islands (within sight of them), no one on the *St. Paul* could imagine that their comrades from the flagship were at that very moment suffering there.

That was the end of the heroic saga of the Great Northern and the second Kamchatka expeditions, which had so many achievements to their credit. They discovered North America (south of Alaska), a number of the Aleutian Islands and islands situated near America; opened a sea route to Japan; made a map of the Kuril Islands and plotted the northern coast of Russia, the numerous rivers flowing into the Arctic Ocean and many other things.

Almost two and a half centuries have passed, but people will always remember the feats accomplished by the Russian seamen under the leadership of their commander Vitus Bering. Of course, the best monuments to the heroes are the names of the different geographical points on the map of the world. The sea and the strait (in Alaska) in the north of the Pacific Ocean have been named after Bering, also a cape in the Sea of Okhotsk, an island among the Komandor Islands and the Komandor Islands themselves, which bear the name of Bering's rank in the navy. Three capes and an island in the same part of the Pacific Ocean bear Chirikov's name.

In addition to the geographical memorials, there are other monuments and memorial complexes in the Soviet Union dedicated to the expeditions, among them the Central Naval Museum and the Museum of the Order of the Red Banner Pacific Ocean Fleet. Still another tribute to the heroic crews are the two films describing the feats of the seamen under the command of Bering and Chirikov—*The Commander's Feat* and *The Ballad of Bering and His Mates.* The Kamchatka expeditions have always stirred the imagination of seamen, scientists, writers and journalists. More than 600 studies have been written on the subject to date. However, there is more being written about the expeditions all the time. Three hundred years since Bering's birth and 240 years since his death, the Soviet people are preparing commemorative celebrations. A large expedition will set out (for the umpteenth time!) for the island that has been named for the commander to search for the spot where Bering and his 18 companions were buried as well as other traces of the ill-fated expedition.

Russian Enlighteners in the NORTH

By Isai Belenkin
Senior Associate
of the USSR Central Museum
of the Revolution

THE NAMES OF GREAT RUSSIAN EXPLORERS ARE KNOWN TO THE WHOLE WORLD. THE CONTRIBUTION OF RUSSIANS TO THE EDUCATION OF THE INDIGENOUS PEOPLES OF THE NORTH IS NO LESS SIGNIFICANT.

The indigenous peoples of Chukotka, Alaska and the Aleutian Islands called Father Veniaminov "the Apostle of Alaska," as a tribute of deep gratitude and respect for his activities on their behalf. He brought them culture, systematized their language and taught them many useful occupations. The above photograph was taken in the midnineteenth century, when he was Metropolitan of Moscow. Right: Alexander Khabarov's graduation diploma. The young physician left for work in the Arctic without picking it up. In the top right-hand corner it is inscribed: "Died while performing his duty." Khabarov froze to death in a blizzard while returning home after treating Eskimos in Sireniki.

The first ABC book for the Saami, a small ethnic group in the Far North, compiled by Vladimir Bogoraz (right).

Several years ago the prominent Soviet archeologist Academician Alexei Okladnikov received a package from the United States. It contained the book *Elements of Aleutian Grammar*, which had been published in America in 1944. Professor William Laflin sent it from his private library as a token of thanks for the warm reception he was given when he visited Khabarovsk and Novosibirsk. Some time later Okladnikov wrote an article in which he pointed out that the "elements" of grammar of the ethnic group living in the Far North set forth in the book were based on the book *Experiments in the Grammar of the Aleutian-Lisyevsky Language* written by the priest Ivan Veniaminov almost 150 years ago. The academician noted with satisfaction that the classical grammar of Veniaminov had gained a new life in America.

The Apostle of Alaska

Who was Father Veniaminov and how did he happen to be in the faraway Aleutians?

A photograph taken in the last century shows a dignified man wearing the white cowl with a diamond cross of the Moscow Metropolitan. Metropolitan Innokenty and Father Veniaminov are the same man. He is at the zenith of his church career in the photograph.

Father Veniaminov's secular name was Ivan Popov. It's as typical among Russians as his childhood was. Ivan was the son of a poor sexton in a little Siberian village on the Lena. At first he trained to become a monk, doing all the hard work without a murmur. Then he entered the Irkutsk seminary, which in itself was a good fortune despite the austere and meager livelihood of the seminarians. "I was a good student," Veniaminov recalled, "but I did not taste bread without chaff until I graduated." He was actually brilliant at his studies and soon attracted the attention of the seminary heads. He studied theology, philosophy and oratory with diligence and literally "swallowed" the books in the seminary's big library. After graduating, Ivan was first made a deacon and then ordained a priest and given the name Father Veniaminov. He got one of the more well-to-do parishes of Irkutsk and started to live a good life. But it did not last long.

In 1823 a decree was received in Irkutsk from the Synod about the need for a priest in the Aleutian Islands. The Archbishop found himself in a quandry; none of the priests in the town was eager to go to that distant place. Quite unexpectedly the priest of the Church of the Annunciation, 25-year-old Ivan Veniaminov, expressed a desire to go to "the end of the world." He did not explain the reason for his decision. Undoubtedly, love of people, the most unfortunate people, lay at the bottom of it.

Veniaminov's whole family went with him: his mother, his wife, his small son and his brother. The long trip to the Aleutians ended on the shores of Unalaska Island. About 500 Aleutians, Creoles and Russians lived in the 10 settlements scattered around the island. The Orthodox mission was also situated there. When the Russians first arrived on the island in the eighteenth century, the Aleutians were still using stone implements and living in clans. Naturally, the young missionary sought to introduce them to civilization by spreading Christianity. At the same time, he felt it was his duty to bring culture, a modern economy and a new way of life to the Aleutians.

Father Veniaminov started by building a church in Unalaska. Practically the entire population of the island took part in the project. The priest taught the Aleutians carpentry and cabinetmaking, and the most capable, to be fitters and blacksmiths. He also taught them brickmaking and masonry. Under his guidance construction started not only on Unalaska but on the other islands as well. Veniaminov traveled all over his parish studying the way of life, the language, the social structure and the beliefs of his fold. He calculated the natural wealth of the Aleutian Islands and worked out practical measures for their rational utilization. Incidentally, on Unalaska he planted the first and only (to this day) grove of trees on the archipelago. But the missionary regarded the enlightenment of the Aleutians as his major concern. He opened several schools in which instruction was carried on in the mother tongue of the indigenous population. In order to do that, he not only studied their language but wrote the first scientifically grounded grammar. Besides the grammar, Veniaminov wrote a major work, an encyclopedia of the Aleutians titled *Notes on the Unalaska Group of Islands,* which came out in three volumes in 1840. By this time Veniaminov's fame had spread beyond the boundaries of Russia. Eminent ethnographers corresponded with him, and his opinion carried weight with the administrators of the Russian-American Company and other prominent industrialists. After his famous book was published, Veniaminov was appointed Bishop of Kamchatka and the Kuril and Aleutian Islands. The "Apostle of Alaska" personally participated in all important diplomatic negotiations.

In 1868 he became the Metropolitan of Moscow. He was called Metropolitan Innokenty. The destinies of the other unbelievably backward ethnic minorities scattered around the expanses of the Russian Empire worried the wise old man who stood at the head of the Orthodox Church. He was quite ill and almost blind by that time. Metropolitan Innokenty set Orthodox missionaries the task of teaching the backward peoples in their mother tongue. He appealed to them to write textbooks and translate the Bible and prayers into the native languages. He set up a print shop in Kazan for the publication of books in the languages of the peoples of the Far North. A few books did come out—in the Saami and several other languages. A new generation of men who arrived in the North in the late nineteenth century was destined to carry on Veniaminov's work.

A late nineteenth century engraving of a ritual dance of Chukchi shamans.

"Veip," the Man Who Writes

A police officer gave his last instructions to Vladimir Bogoraz, a man sentenced to 10 years of exile:

"We know nothing about Srednekolymsk," he said, "except that you can't live there! That's why we are sending you over!"

The Narodnik merely shrugged his shoulders in answer. He had known solitary confinement in a Moscow prison, and then he had been locked up in the Petropavlovsk Fortress in St. Petersburg. He had paced tiny cells for three whole years, and now he was facing exile to the remote and completely unknown Kolyma. However, Vladimir no longer cared.

Bogoraz had devoted about 10 years of his life to the struggle against autocracy, though it is true he did not share all the principles of the revolutionary organization Narodnaya Volya (People's Will) of which he was a member. He was against terrorism. He expressed all his fervor in journalism, in newspaper articles, and czarism severely punished all those who rose in protest against the rotten regime.

A blizzard blew over the boundless tundra, and gusts of snow struck relentlessly at the walls of the *yarangas* (Eskimo dwellings). It seemed that the wild wind wished to sweep them off the face of the Earth. But the blizzard was unable to destroy what had been made by capable human hands. Each *yaranga* was held down by huge stones which pressed the sloping animal-hide domes firmly to the ground.

Inside the *yaranga* several women with fur skins lowered from their shoulders bustled about the hearth. They were hurrying to finish their work and get into their *yurongas* with their men. The *yuronga* looked very much like a large chest lined with skins. People laid in it pressing close together. In this way the inhabitants of the *yaranga* managed to clear a small space to accommodate the shaman, who had stripped himself to the waist and taken off his footwear because it was so hot. The people looked at him with a mixture of fear and hope. He had been called to purge a young man of the evil spirit that had entered his body. The youth lay on a deerskin near the shaman and was breathing heavily. The small lamps that lighted the interior of the dwelling were taken out because the witchcraft had to be performed in complete darkness.

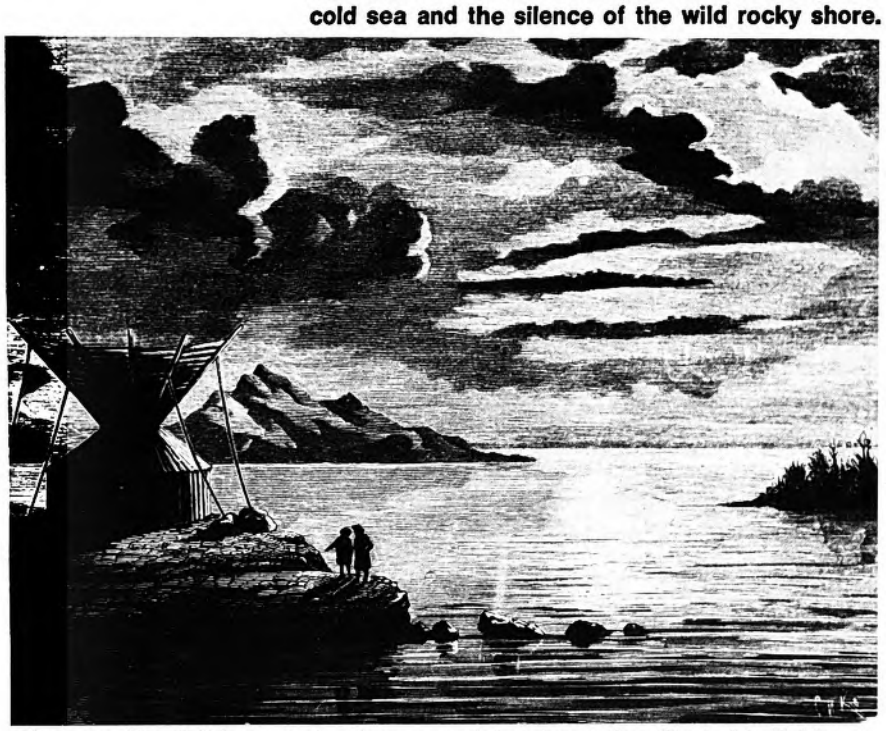
The shaman's voice was heard here, there and everywhere. He called on the evil spirit to leave the body of the sick man. A smothered unfamiliar voice demanded a fantastic number of reindeer in exchange. The shaman bargained until he cut the number down to three. The people were dumbfounded on hearing the voice of the mysterious spirit. The shaman ventriloquist continued to beat his tambourine for a long time and dash about the close dwelling. Finally, he fell down unconscious, foaming at the mouth. The witchcraft was over and the people brought in the lamp.

In the morning the young man's father meekly turned over three of his best reindeer to the shaman as he had promised.

The ritual had been observed by a guest, a bearded stranger. When the shaman left, he carefully wrote down everything that he had seen and heard. The Chukchi were very friendly and respectful toward him. "It is a *veip*," they whispered meaningfully to each other without taking their eyes off the briskly moving hand of the Russian stranger. The *veip* wrote in deer blood for lack of ink. The man was the political exile Vladimir Bogoraz.

When he arrived in Kolyma, Vladimir began to collect material about the life of the northern peoples of this remote Russian territory. With growing enthusiasm, he penetrated into the interior of the tundra to the Chukchi and learned their language. He roamed with the reindeer breeders and hunted sea animals with the Chukchi who lived on the coast. He endured the hardships and privations of his first independent journey which covered the length of the wild Chukchi Peninsula. During his wanderings he collected ▶

This old engraving shows the lone tent of a hunter's or herder's family surrounded by the cold sea and the silence of the wild rocky shore.



ethnographic, folklore and other materials about the Chukchi, Eskimos, Evenks, Chuvants and Russians who had settled there a long time ago. He spent eight years in exile and was allowed to return to St. Petersburg in 1898 on the petition of the Russian Academy of Sciences. Soon he published his first work on the Chukchi language and many colorful long and short stories about the peoples of the North. However, the czarist government continued to harass him on political grounds, and the young scholar was obliged to go to the United States to continue his research. There he was invited to participate in the Jessup North Pacific Expedition to the Chukchi Peninsula organized by an American businessman for the American Museum of Natural History. That is how he came to travel in the Chukchi tundra a second time, in 1900 and 1901. Meanwhile, the local authorities received orders from St. Petersburg to hinder his research in every way. Once again he was forced to continue his work in the United States.

Before the First World War Bogoraz had already prepared for publication a detailed grammar of the Chukchi language based on Ivan Veniaminov's methodology. He had also completed a large ethnographic survey in two volumes titled *The Chukchee* and *The Chukchee Mythology,* which were published by E. J. Brill, Ltd., and G. E. Steckert in 1904-1909 and 1910 and were recently reprinted by the American Museum of Natural History.

After the 1917 October Revolution Professor Bogoraz organized the Committee of the North under the Presidium of the All-Union Central Executive Committee and the Institute of the Peoples of the North. The institute was founded for the purpose of giving representatives of the indigenous peoples of the North a higher education. In the closing years of his life Bogoraz considered the elaboration of an alphabet his major task, viewing it as the foundation for publishing books and newspapers in the languages of the national minorities. He created an alphabet for 14 different languages and wrote and published in 1932 a primer that came out in 10,000 copies. For five years Bogoraz's primer was used without any alterations in Chukchi schools. Specialists regarded it, with its 106 drawings and colorful cover, a model for primers for other ethnic groups.

"I Can't Miss Such a Chance!"

When I visited Provideniya Bay in 1947, it already had a large seaport that serviced the Northern Sea Route. Near the road that stretched the length of the port buildings, there was a post with a plaque that read:

> Alexander Gerasimovich Khabarov,
> born 1908, a physician, perished during
> a snowstorm while returning from sick calls
> on January 11, 1934

Later I collected a number of interesting documents: the letters and diaries of the young physician and records of his talks with his family and friends. Almost half a century has passed since the death of Khabarov, and suddenly writers and film makers have become interested in his life story. His personal belongings and documents are displayed today in Moscow in the USSR Central Museum of the Revolution. What is the explanation of this sudden interest? After all, Khabarov had managed to do very little in his short life. The thing is that the image of the young physician has turned into a symbol of the generation which went to build a new life in the Far North in the turbulent years of the first Soviet five-year plan periods.

An artist's idealized version of the life of the Saami on the Kola Peninsula. In reality they lived in dugouts and were on the verge of extinction until the 1920s.

The Eskimos in the Sireniki settlement remember Khabarov to this day.

For me Dr. Khabarov's life story began with my getting to know his patient, the Eskimo Napaun, a well-known hunter in the forties and a deputy of the local Soviet. Here is what Napaun told me about events that occurred 50 years ago.

"I had hurt my leg badly, and I couldn't very well tell anybody what had happened—that I, an experienced hunter, had fallen into my own trap! The shaman Yarasi beat his tambourine for many days and kept repeating: 'Napaun, give me your reindeer sleigh!' But I had already heard of a Russian shaman who lived in Provideniya and treated the sick free of charge. Yarasi seemed to guess my thoughts and warned me: 'The Russian who has settled in Provideniya is a cheat! He has come in order to kill all the Eskimos and Chukchi with his conjuring!' My leg hurt so much that I set out for Provideniya anyhow.

"The doctor's small house stood all alone on the deserted shore since they were only starting to build the port. The Russian shaman turned out to be a young and cheerful fellow. After examining my leg, he gave me a good talking to for not having done anything about it for such a long time. He said I could have lost my leg altogether. Khabarov put me up in his house and treated me for 10 days. Then he said, 'Now you can go on hunting sea animals as much as you like!' When I said good-by, I wanted to give him a couple of polar fox pelts. 'Take them, you are a great shaman!' But Khabarov answered: 'Put them away, Napaun! You insult me. I am a doctor, and it is my duty to help you!' "

It was not long after that the people living in the small Eskimo settlement of Sireniki, where Napaun lived, needed Dr. Khabarov's help.

The waves had washed ashore a dead whale, and the happy Eskimos ate their fill of its meat. Several hours later they were all poisoned. The first to feel sick were the hunters, then the unfamiliar sickness spread from *yaranga* to *yaranga,* and panic started in the settlement. They decided to send for Khabarov, though the shaman Yarasi stubbornly repeated that the Russian doctor was to blame for the disease.

Dr. Khabarov set to work the minute he arrived. For many years the people in the settlement on the Bering Strait remembered the young Russian doctor who came to Sireniki and in a single day managed to save many Eskimos from death. Toward evening the doctor got ready to return to his home. A storm was brewing, and the Eskimos tried to talk Khabarov out of the return journey. The doctor insisted, however, because he had to prepare some medicine for the sick Eskimos. Finally, the sleigh driver Ova consented to take him back.

They left, and an unusually heavy blizzard, even for these parts, started. Several hours later Ova returned to the settlement. He explained that the dogs had lost their way, but the doctor did not want to return and walked on alone.

Two days later they found Khabarov frozen. He had not managed to cover the last kilometer to his house.

Ending his tale, Napaun added that many people in the settlement believed that the shaman Yarasi was to blame for the doctor's death. They said it was he who had persuaded Ova to abandon Khabarov in the blizzard and steal his magic "black ear," the stethoscope. Napaun was terribly sorry that he had not been at the settlement at the time. He would never have left the doctor alone in such trouble.

Khabarov left behind a pile of letters. I would like to quote a paragraph from the last one, which was addressed to his sister in Taganrog, in the southern part of Russia. It sheds light on the fate of the young man and explains his desire to dedicate himself to the noble work of physician.

"To be quite frank, I am happy, very happy indeed, to go to the Arctic, and not just because the institute is sending me there. I need that experience as much as the air I breathe. It is a school that will be the last stage in my development. I have to finish working at my self-education, and I think the Arctic will help me to do that. I need to work on my own, without any prompting, without any assistance, with full realization of my responsibility, which means that I will pass the examination for the right to live on the Earth. It is taking me years to do that in the customary environment so, you understand, I cannot miss such a chance."

On Alexander Khabarov's graduation diploma, which he had not picked up before he left, we read the words: "Died while performing his duty." The Information Bulletin of the State Institute of Communal Sanitation and Hygiene gave the following report:

"Alexander Khabarov, postgraduate of the transport sanitation sector, was included in a polar expedition in the spring of 1933. He was assigned to work on a number of problems connected with sailing in the Arctic. Khabarov met a tragic end during the expedition. He managed to fulfill part of his assignment, however. The institute will be able to work out rules of hygiene for sailing in the Arctic on the basis of the material he obtained."

The young physician had managed to make a contribution to science.

I recall the words of the polar captain Mikhail Gotsky, who remembered Khabarov. He said:

"Many have perished in the Arctic. They went there of their own free will and perished. But this did not stop others from following in their footsteps." ■

geologists

THE GEOLOGISTS WHO WORK IN THE NORTH RISK THE WILDS OF THE TAIGA AND THE BOGS OF THE TUNDRA. THE REWARD FOR THE DANGER AND DISCOMFORT OF THEIR JOB IS THE DISCOVERY OF THE LEGENDARY RICHES OF THE NORTH'S SUBTERRANEAN STORES: OIL, GAS, COAL, GOLD, DIAMONDS.

Yuvan Shestalov was born in 1937 and grew up in the Mansi village of Kamratka in Western Siberia. In 1978 he won the Gorky State Prize for his poetry.

"I DIDN'T BECOME A SHAMAN — BUT I HAVE NEVER FORGOTTEN MY GRANDFATHER, HIS TALES AND LEGENDS, FOR THEY ARE THE STOREHOUSE OF THE . . . WISDOM OF THE MANSI. . . ."

I Am a MANSI

By Yuvan Shestalov

ay dawned, and the light came through the window. A piece of ice served as glass. It let the light through quite well, and when it was covered over with hoarfrost, we scraped it off. There was no fire ıe *chuval* (hearth) and it was cold. But I knew Grandmother Anekva would get up soon, ıle the fire and it would be warm.

randfather had promised to take me to the r where he had set his traps, and in the eve- ı we would sit around the fire eating soup le from the fish taken out of the traps under ice and listen to Grandfather's tales, which e mostly about the struggle with cold and ger.

ut Grandfather was weak and frail. And he seemed so strong not long ago. He used to ke fishing nets while he told his tales.

low Grandfather Asioika lay on the worn hides ı his feet close to the fire. Grandmother and it in front of the fire with our dog Hansi beside The animal lay with its head on its paws king at Grandfather.

ısioika spoke in a low voice:

Did you hear the voice of the white wind? It come to fetch me. I suppose the time has ne for me to go. Torum (a Mansi god) is call- me and I must go. You'll have to finish making nets for me.

'You're a big boy now, Grandson," Asioika be- ı again in a hoarse voice. "You will soon go to forest to follow the animal trails and set traps. wherever you like, Son, but never forget the h of your ancestors. Remember, there are rits everywhere, and they follow your every p."

thought he was talking more to himself than me. I listened to him, and it seemed to me it it was the wind and the taiga speaking.

'I am dying, but you will remain," continued andfather. "What are you going to be? I was a aman, a witch doctor. You, too, must become shaman. People always come to the shaman king the gods about their fate, bringing prayers d presents. It is not easy to become a shaman. w times bring new laws and customs. But do t laugh at our old laws of the taiga. They have ed with us for many summers and snowy win- s, and you must not laugh at them."

I didn't become a shaman as my grandfather ped I would, I became a writer. But I have ver forgotten my grandfather, his tales and gends, for they are the storehouse of the age- d wisdom of the Mansi, a small people living the North, of their hardships and hopes, their ith in the sacred flame that would warm our icy nd.

Leningrad

Leningrad, where I was sent to study by the strict committee of the Communist Party, oked familiar. It seemed to me that I had al- ady been there and seen the granite embank- ents, the bridges over the Neva, the Admiralty ire, the Hermitage and the mute stone sphinxes.

I became a student. For a long time the word udent sounded strange to the people of the rth. Even my parents could not understand it first because the Mansi were all illiterate. My ther never had the opportunity to go to school. ere was nowhere he could study in his youth. e worked for a rich man—my grandfather had st at cards, and he had nothing to pay with so e hired his son out. Later, my father helped or- anize the first collective farms in the Khanty- ansi North.

In Leningrad I got to know a Nanaian, an Eski- o, a Selkup, a Chukchi, a Tungus and a Saami. made many friends, and we all lived and studied one building. Leningrad was the first center in ıe history of the world to train specialists from mong the ethnic groups of the Far North. A pecial institute, the Institute of the Peoples of ıe North, was founded in 1930. There, uneduated hunters, reindeer breeders, fishers and arine animal hunters studied literature, art and cience.

Today there are representatives of the ethnic roups of the North working side by side with Russian scholars at the Leningrad Branch of the Institute of Linguistic Studies of the Academy of Sciences of the USSR. Among them are Candidates of Science Nikolai Tereshkin, a Khanty; Pyotr Inenlikei, a Chukchi; and Ivan Taksami, a Nivkh who works at the Institute of Ethnography. The dean of Peoples of the North Department at the Herzen Pedagogical Institute is Maria Bormich, a Nenets.

When I read Pushkin and Blok, Lermontov and Yesenin at the institute library, it seemed to me that it was I and not they who meditated and suffered, loved and rejoiced. Perhaps that was when I started to think of how to express my thoughts and feelings on paper.

But the question was what language I should use. I had never heard verses like the Russian, with rhyme and rhythm, in my mother tongue. Supposing the language of my people was so poor that it could not express the complicated world that surrounded me?

At the institute I listened to lectures on the Mansi language delivered by Alexei Balandin. Although he was a Russian, he knew the language of the northern hunters like his own. A specialist in Mansi, a compiler of textbooks and the editor of many books, he was an enthusiastic student of the North. When I wrote my first verses in Mansi, I found the necessary rhymes because it turned out that every language abounds in them. The important thing was to have feelings and thoughts, then any language, even that of the smallest nationality, will acquire strength and power of expression. In Leningrad, far from home, I learned to understand and feel the beauty and the possibilities of the language of my small people. Today I think and write in two languages, in Russian and Mansi, both of which I consider to be my mother tongue.

New Life for the North

My father is a practical man and doesn't care for tales. However, like every Mansi, he sings. He sang folk melodies in our singsong tongue about a life of work, about the curses of the shamans and the bullets of the rich, about the collective farms that he had set up on our land, about the settlements that he built together with the fishers and the hunters. He did not make anything up, he simply composed a song that was his own life story.

I, too, had witnessed the changes that he sang about. I remember the very first new house with glass panes in the windows, the first furrow on the collective farm field and the first motorboat with my father standing proudly in the stern.

I also remember my grandfather's dwelling. The walls were hung with bows, arrows, quivers, birch-bark masks, bear claws, and in the corner a bear's head, the spirit that the Mansi worshiped. I had seen the Mansi offering sacrifices near the magic tree before the sacred flame, and I had heard and seen the ritual dances of the shamans. My father's house, not new any longer, did not look like my grandfather's hut. Its windows had glass instead of blocks of ice or fish skin. There was a gas stove instead of a *chuval,* and blankets and carpets instead of animal skins on wooden boards. There was a transistor radio and a tape recorder instead of the tambourine. And next to the house, in front of the windows, there was a TV tower instead of the sacred barn on four poles.

The Khanty-Mansi North, which a mere 30 years ago still retained noticeable traces of the traditional northern way of life, had taken a gigantic step into modern times.

A year ago I visited the land of my grandfather's tales and had many unforgettable encounters. This is what Antonina Grigorieva, chairwoman of the Executive Committee of the Khanty-Mansi National Area, told me:

"The production of oil and gas and the vigorous growth of the entire economy of the region has brought about substantial changes in the social development of the region. Judge for yourself. There were only 35 elementary schools with 600 students in the entire Ob region of the North prior to the October Revolution. There was not a single indigenous student in these schools. Today there are 198 schools (of these, 88 are secondary schools) in our area alone. They have 78,000 students among whom there are almost 6,000 Khanty, Mansi, Nenets and Komi students. They are maintained entirely at government expense. There are pedagogical, medical, trade and cooperative and music schools, an oil technical secondary school, three vocational schools and a drivers school.

Many changes have taken place in recent years even in Vanzetur, the settlement where my father lives. The place now has a new club, a nursery and kindergarten and a boarding school. Mansi workers, my old acquaintances, live in comfortable new multistory buildings. The Vanzetur State Farm provides the gasworkers and builders of the Nadym-Center Gas Pipeline, which is being constructed nearby, with milk, sour cream and meat products.

I remember Yuri Monin, the chairman of the Village Soviet, from the time he was a boy. Monin started out as an electrician. He worked both at large construction projects and in small villages and studied by correspondence while he worked. About two years ago his fellow villagers elected him chairman of the Village Soviet.

Somewhere in Samotlor, where large oil fields have been discovered, the team led by Yuri Kartin is probably erecting a new derrick at this moment. Kartin is a Mansi by nationality. A hunter and fisher, he developed a passion for machines from childhood. As soon as he left school, he learned to drive a tractor. However, he did not work long. His parents were teachers and wanted their son to follow in their footsteps because in the North a teacher always enjoys the greatest respect. Complying with the wishes of his parents, Kartin graduated from a teachers institute. He was a good teacher and was even appointed principal of a school. Nevertheless, when oil was discovered in our region, he went off to the oil fields. Today Kartin is the leader of a team which is known to all the oilworkers of Samotlor.

Valentin Olzin, a Khanty, returned to his native parts after army service and started working as an operator of a gas collector. Yuri Sigilyetov, the son of a hunter from the upper reaches of the Vakh River, became an oil driller after finishing secondary school.

Many Mansi and Khanty are presently mastering modern professions. There are engineers and technicians, industrial workers and teachers, scientists and linguists among them.

I could say a great deal about the Mansi Anatoli Saratin, a mechanic at the Igrim power station, or about Gavriil Vyngiliv, a geophysicist who searches for new oil and gas fields in the North.

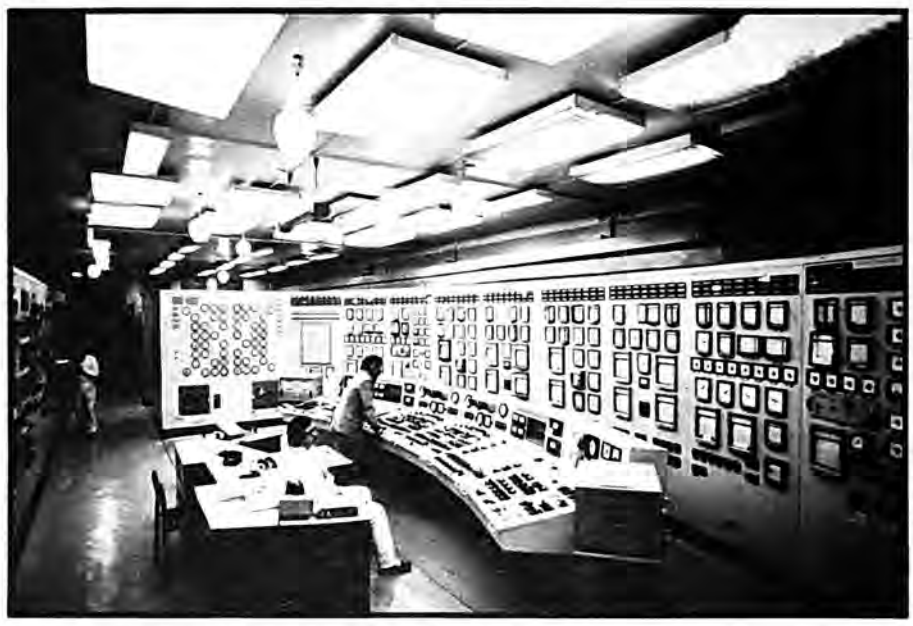
I remember an international congress of Ugro-Finnish scholars in Budapest two years ago. One of the speakers was the Mansi Yevdokia Rombandeyeva. She has a candidate of science degree in philology and is an associate worker at the Institute of Linguistic Studies at the Academy of Sciences of the USSR. To the astonishment of some of the congress participants, she spoke of her work on the Mansi language not only in Russian but in Hungarian as well. The fundamental dictionary of the Mansi language on which she has been working for 20 years and her numerous articles point to the fact that the people of the North wish to participate in the construction of a new life on an equal footing with the other peoples of the country.

Here is what I, the son of a small people called the Mansi, am thinking about today. There are about 7,000 Mansi living on our big Earth while the total circulation of my books alone is already pushing seven million copies. Only last year they came out in the Ukrainian, Tuvin and Finnish languages in addition to the Russian. For such a thing to happen required the historical turn toward socialism accomplished by the 1917 October Revolution. It was the Revolution that enabled the people of the Far North to speak out, to straighten their shoulders and cast off their centuries-old backwardness. ■

Chukchi writer Yuri Rytkheu, author of this story. Below: In nineteenth century engravings Chukotka was portrayed as an exotic wilderness.

Here's to Good Weather In the BERING STRAIT!

By Yuri Rytkheu



The Bilibino Nuclear Power Plant in Chukotka supplies heat and light to local residents.

YURI RYTKHEU: "FIRMLY ESTABLISHED TIES EXIST BETWEEN THE INHABITANTS OF CHUKOTKA AND ALASKA. THESE TIES SERVE AS AN EXAMPLE OF FRIENDLY RELATIONS AND COOPERATION, BOTH OF WHICH ARE SO VITAL TODAY."

Dwight Mylygrok's house on the American island of Little Diomede faces Ratmanov, the Russian name for Big Diomede, the Soviet island. The distance between the two is 2.5 miles, or 4 kilometers 160 meters, the marker on the Soviet shore indicates.

On a snowy February day in 1978 Dwight and I watched the red wind indicator on the ice-bound landing field in the strait through a blinding sheet of snow. The indicator is situated exactly on the International Date Line. We remembered the time when this distance was not as insurmountable as it has become. The inhabitants of the Soviet settlement of Uelen did not have to make a round-the-world trip in order to visit a friend on Little Diomede because there was an agreement on reciprocal visits of local inhabitants between our two countries. This ancient custom of the peoples inhabiting the coast of the Bering Strait was strictly observed by the Soviet side until the very moment that the Cold War started.

"This is the only place on the planet that our countries approach one another so closely," said Dwight. He is an artist, a talented bonecarver, a singer and performer of ancient dances who is well known far beyond his island.

"The thawing of relations between our two countries was felt even in as cold a place as the Bering Strait. Many of the local papers spoke of my arrival on the American side on the invitation of Alaska University as a good omen."

The people of the North are accustomed to sudden changes in the weather. It may start snowing in June or even July, when it is the middle of summer by the calendar, reminding us that we live in a severe climate and may expect bad weather in any season of the year. Well, there is nothing we can do about it—that's the Bering Strait! And that is why the people of both coasts cherish all the more the atmosphere of friendship and cooperation established thousands of years ago.

It is easy to understand the hopes of the native Alaskans that rose in the years when our two countries mapped roads for the establishment of truly good-neighborly and mutually beneficial relations.

"I dream of the day when together with my kinsmen I will arrive in a kayak at the ancient settlement of Uelen, and once again we shall sing the songs that we remember," said Dwight. "If our countries have conquered outer space and joined hands at an unimaginable altitude above the planet, isn't it realistic for us to be friends across this natural boundary between our two countries?"

Dwight has seen a lot in his life. During World War II he worked at the army airport in Nome from which American planes took off for the Western Front in order to participate in our joint struggle against fascism. He visited our coast in the prewar years when a new life was being established on the Chukchi Peninsula. His thoughts and words coincide with the words and reasoning of Americans whom I have had occasion to meet in the past few years.

Vera Uvi, a teacher on St. Lawrence Island, has been working for several years on a textbook of the mother tongue of the inhabitants of the island settlements of Gambell and Sivunga. The language of the islanders is exactly the same as the language of the inhabitants of the Soviet Eskimo villages Novo-Chaplino and Sireniki. The alphabet on our side of the strait was created in the early thirties. The inhabitants of St. Lawrence Island are familiar with the name of the Russian teacher Yekaterina Rubtsova. The system of the written language that she created (adapted for the Latin alphabet) is now being introduced in Alaskan schools.

"How I should like to meet Lyudmila Ainana and Vera Analkvasak," Vera Uvi told me.

Primers in the mother tongue written by Lyudmila Ainana and Vera Analkvasak and published in Leningrad stand on the bookshelves of many Eskimo teachers in Alaska.

It is easy to understand the desire of the people inhabiting the coasts of the Bering Strait to renew ancient ties and, as far as I know, much is being done in that respect.

However, as Vasili Nanok, my Eskimo friend from Novo-Chaplino, aptly put it: "It is impossible to be friends in one place and confront each other in other places. We Soviet people are a united nation, and we would like to see good relations between our countries on a nationwide scale and not only in the Bering Strait."

There is a geographical coordinate on our planet that circles the globe. It is the Arctic Circle. Around it live tribes and ethnic groups united in the hard struggle with nature that have created a civilization all their own in the icy wastes and almost barren tundra.

The peoples of the North have been friends since ancient times, and this friendship is still alive in their hearts.

Several years ago the representatives of the arctic peoples of the world met in UNESCO so that within the framework of this prestigious international organization they could find ways of preserving their unique arctic culture in the face

A long summer day. Many factors determine the Arctic's climate, but the main one is the relationship of the Sun to the Earth. Above: A caravan of ocean-going vessels is moored near Chukotsk. The ships delivered supplies to the fishers, geologists and inhabitants of the Chukotsk, Eskimo and Chuvan communities. Below: The Soviet Union's largest herds of walruses live on islands near Chukotsk. The walrus is now protected by the state. The hunting of these animals has been banned for anyone but the natives of the area, who are permitted to shoot them according to their needs.

"THERE IS ONLY A NARROW STRIP OF WATER TWO MILES WIDE DIVIDING US, AND YET WE SOMETIMES HAVE SO MANY OBSTACLES TO OVERCOME IN ORDER TO MEET AND FIND WAYS FOR ORDINARY HUMAN COOPERATION."

The Bay of Provideniya

he intense industrialization of the Far North. he American side is also taking a very active in UNESCO's arctic project. In 1979, at a ference of experts in Kautokeino, Norway, I Thomas Richards, Jr., the publisher of the *dra Times*, a popular Alaskan paper. The " goes very well with Thomas' youthful ap- rance. An Eskimo born on the coast of the ıkchi Sea, Thomas is very much concerned ı the problems facing the people living around Arctic Circle.

le submitted a note stating with bitterness that industrial enterprises going up in the Ameri- North were doing great damage to the envi- ment and threatened the existence of the tra- onal forms of the economy of the indigenous ɔulation that had no other sources of sub- tence than hunting and fishing.

told Thomas about the laws adopted by the SR Supreme Soviet on the protection of the ra and fauna of the tundra.

'We could cooperate with you in this," Thomas d. "We also have experience in protecting the tundra accumulated during the construction of the Trans-Alaskan oil pipeline."

Alaska is our country's closest neighbor. I am keeping as a memento a souvenir ticket issued by Joy Gallagher, the owner and manager of the oldest Alaskan airline company, Munz Airlines, along the Nome-Little Diomede-Uelen-Little Diomede-Nome route. A similar ticket was presented to Senator Ted Stevens of Alaska. He and I studied the future route on a map and calculated that even in a Cessna the flight one way would take no more than two hours.

Soon after I returned to my country, I received a letter from the National Geographic Society asking me to write an article about the life of the peoples of the Soviet North today so that Dean Conger, the well-known photographer, could illustrate it.

I must admit that the proposal was interesting and highly flattering. It is true that in my reply I said I was not sure whether such cooperation would be possible and that at the moment I was going to Chukotka.

One morning the phone rang in my apartment on Provideniya Bay, and the sleepy voice of the telephone operator told me that Washington was on the line. The call was from Conger. He told me that he was flying to the Soviet Union at the end of February and hoped to see me in Moscow.

We set out from Murmansk in a small helicopter during a heavy snowfall. Below us stretched the forest tundra covered with a thick coat of snow. It was hard to imagine that an animal could find anything to eat in such a place.

Our first stop was the settlement of Lovozero on the Kola Peninsula where the Saami live. The people of this northern ethnic group are the most ancient reindeer breeders in Europe.

On arrival, we found ourselves among a herd of reindeer. The snow, dug up by thousands of hoofs (the animals had to reach down to the yagel moss), was so soft that without special skis we sank into it up to our waist.

The herders worked without paying any attention to us. That was exactly what Conger wanted. The main thing for him is naturalness. After that ▶

we had lunch in a tundra dwelling which the Saami call *kuvakoa,* very much like the *choom,* yurt or *yaranga* found in the Chukchi tundra. There was tender reindeer meat broiling on the hot coals of a big bonfire, and a soot-covered kettle spewed boiling water on the fire.

The herders asked Conger a lot of questions about the inhabitants of North America. They wanted to know if there were any reindeer in Alaska and how the tundra people lived.

While we were still in Moscow, Conger had some misgivings about how Soviet people in remote areas like the North would receive him. I must say that on more than one occasion people told Conger they knew that in the West the press gave a distorted picture of the Soviet land and the people. "But we are faithful to our peaceful course and continue to establish relations of mutual understanding no matter how difficult it is to do," they said.

From the Kola Peninsula, Murmansk Region, we headed east.

From Arkhangelsk, unusually sunny and spring-like though it was only early March, we flew to the town of Naryan-Mar, the center of the Nenets Autonomous Area.

Naryan-Mar is undergoing radical changes and reorganization since industry has come to these cold parts. The whole town has turned into a construction site. Tikhon Syadeisky, chairman of the District Soviet, had been a fellow student of mine when I was studying in Leningrad. One of his deputies, Mikhail Istomin, shared a room with me in a student dormitory for many years. They represent the younger generation of northern intellectuals, well-educated, with a strong sense of responsibility for the preservation of the original cultures of the peoples of the North.

And though Conger's chief "instrument of production" was a camera, he was not satisfied with only photographing people. Very often, the usual "business" talk turned into an interesting dialogue between the American photographer and the Soviet people.

I think that the number of trips Conger made to this country has broken a record. He has crossed the border of the Soviet Union almost 30 times. He has visited different parts of the country and knows our people both at work and at play. At the same time he is a typical American and an ardent patriot of his country. Once I asked him: "Which dialect of American English is considered typical and who may be considered a typical American?" to which he answered, "It's me and the language I speak!"

Not so long ago I sailed with some hunters from the Chukchi village of Yanrakynnot through the Senyavin Strait to the Chaplin Cape, which is called Indian Point on the American maps. Not far off lies Arakamchechen Island, once famous for its excellent walrus-breeding ground. The walrus herd of the Bering Strait has since time immemorial served the Chukchis and Eskimos on both the Russian and the American coasts as a source of food and livelihood.

For some decades rapacious hunting has threatened the walrus herd with extinction. The governments of the United States and the Soviet Union took energetic joint measures to preserve the walrus and other animals of vital importance for the inhabitants of these regions.

Today the walrus has returned to Arakamchechen Island, and the Greenland whale and polar bear population has increased considerably.

All these measures have had a beneficial effect on the well-being of the indigenous population of Alaska and the Chukchi Peninsula.

I told Conger about it and together we dreamed of the time when *National Geographic* would write about a great holiday commemorating the meeting of the inhabitants of Alaska and Chukotka. Perhaps the celebration might take place in Uelen, my native town, where people remember how the young Dwight Mylygrok of Little Diomede Island and his friends, the famous Atyk of Uelen and Nutetein of Naukan, performed the ancient dances of the Bering Sea around the Sacred Stones.

On the other hand, why couldn't the holiday take place on the pebble beach of ancient Sivuk on St. Lawrence Island, where the long-time rivals, the people of the Soviet Eskimo settlement in Novo-Chaplino and the American Eskimos, could meet?

There is only a narrow strip of water two miles wide dividing us, and yet we sometimes have so many obstacles to overcome in order to meet and find ways for ordinary human cooperation.

The people of the Bering Strait used to visit each other in good weather. No one dared brave a choppy misty sea in a leather kayak. But people always knew that sooner or later the mist would clear, the Sun would appear, the wind would die and they would see each other again. ■

Yuri Kaigigun performs an Eskimo folk dance to the accompaniment of tambourines and singing. Top left: Eskimo hunter sets out to sea.

TALES ABOUT THE LOCH NESS MONSTER HAVE BEEN EXCITING PEOPLE IN ALL PARTS OF THE WORLD FOR DECADES. NOW "NESSIE" HAS A SISTER MONSTER LIVING IN A LAKE IN YAKUTIYA.

WHAT ABOUT A LABYNKYR "NESSIE"?

By Anatoli Pankov
Drawing by Boris Dolya

One sunny July morning in 1953 geologist Victor Tverdokhlebov and his companion were walking along the high and rocky shore of Lake Labynkyr in Eastern Yakutiya. Tverdokhlebov noticed a white spot on the water. It disappeared in a minute, however, and the geologist decided that it was simply the rays of the Sun playing on the water. Then suddenly his companion cried, "Look! What's that?"

Something white was clearly visible some 300 to 400 meters away in the water. It swam with considerable speed toward the two men. There was no doubt it was a living creature since it moved in jerks, now rising, now falling into the water. The two could discern a huge massive body, and only a small part of it, a dark gray oval spot, was visible above the water. They could see two symmetrically placed light-colored spots that looked very much like eyes. Something that resembled a fin stuck out on the back of the body. About a hundred meters from the shore the animal turned completely around and swam off, raising waves that beat against the shore. For a time the geologists were hypnotized by what they had seen, and only when there was no longer any trace of the waves did they remember their cameras.

When the geologists turned in the report of their field work, they included a description of what they had seen. The chief of the expedition did not pay any attention to it, and the friends of the two men had a laugh at their expense.

The sensational report could have been lost in the geological archives had some scientists from Yakutsk not come across it several years later. It was from them that the journalists learned of the monster. Soon Tverdokhlebov himself published a number of articles in the leading magazines. The report of the monster in the lake agitated the scientific, and especially the unscientific, world. Oymyakon in Yakutiya, considered the pole of cold on the Northern Hemisphere (in the wintertime the temperature there drops to minus 71 degrees centigrade), became a magnetic pole in the sixties for adventure seekers and those who loved unusual things.

The mysterious creature was said to live in the lakes (on the Sordonnokh Plateau), the largest of which is Labynkyr: 15 kilometers long, 4 kilometers wide and more than 50 meters deep. Expeditions of scientists and tourist groups made their way from all parts of the Soviet Union to the austere shores of the lake. They had a long way to go—it's more than 6,000 kilometers from Moscow to Yakutsk and then another 800 to Oymyakon. The last hundred or so kilometers had to be traversed by foot along mountain paths that go through uninhabited territory.

Day and night, in storm and calm, enthusiasts watched the surface of the water to see if the Labynkyr Nessie would surface. Some researchers even brought along aqualungs and underwater cameras. Either frightened by such a great number of people or simply too lazy to pose for a picture, the monster showed neither head nor tail. There was not a single splash of water, not a single shadow or silhouette.

Disappointed, the sensation seekers left the mysterious lake. But some of them could not give up the hope of seeing the monster and visited the place again. Labynkyr, however, frustrated all attemps to divine its mystery with truly northern cold-heartedness.

Perhaps there hadn't been any monster after all? Perhaps the geologist Tverdokhlebov simply imagined it? But then, why were there so many legends about this particular lake? Other people —hunters, fishers and geologists—speak of what they saw there.

The local hunters have noticed for a long time that when a duck they have shot falls into the lake, it very often disappears into the water, never to be seen again. When their dogs swim out for the game, they do not return either. Some have seen a swimming deer suddenly pulled down into the water and disappear.

Tverdokhlebov believes that the animal he saw looks very much like a gladiator dolphin. But how could such a creature live in a freshwater lake far from any ocean and at an altitude of a thousand meters above sea level? Perhaps the mountains in the area rose from the ocean bed so suddenly that marine fauna have remained and survived in them to our times? That is hardly probable. "One thing is certain," says Tverdokhlebov, "the existence of the mysterious monster is directly connected with the mystery of the origin of the plateau."

Yakut scientist Fyodor Kirillov, who has a doctor of science degree in biology, was among the men attracted to the shore of the mysterious lake by the rumors. He knows the basin of the Indigirka River, which is connected with Labynkyr, and the other large neighboring lakes. Ichthyologists studied the lake for a whole summer without success. They could not discover any trace of the mysterious creature.

"Not a single known animal can remain underwater for 24 hours without coming up for air," the scientist told me.

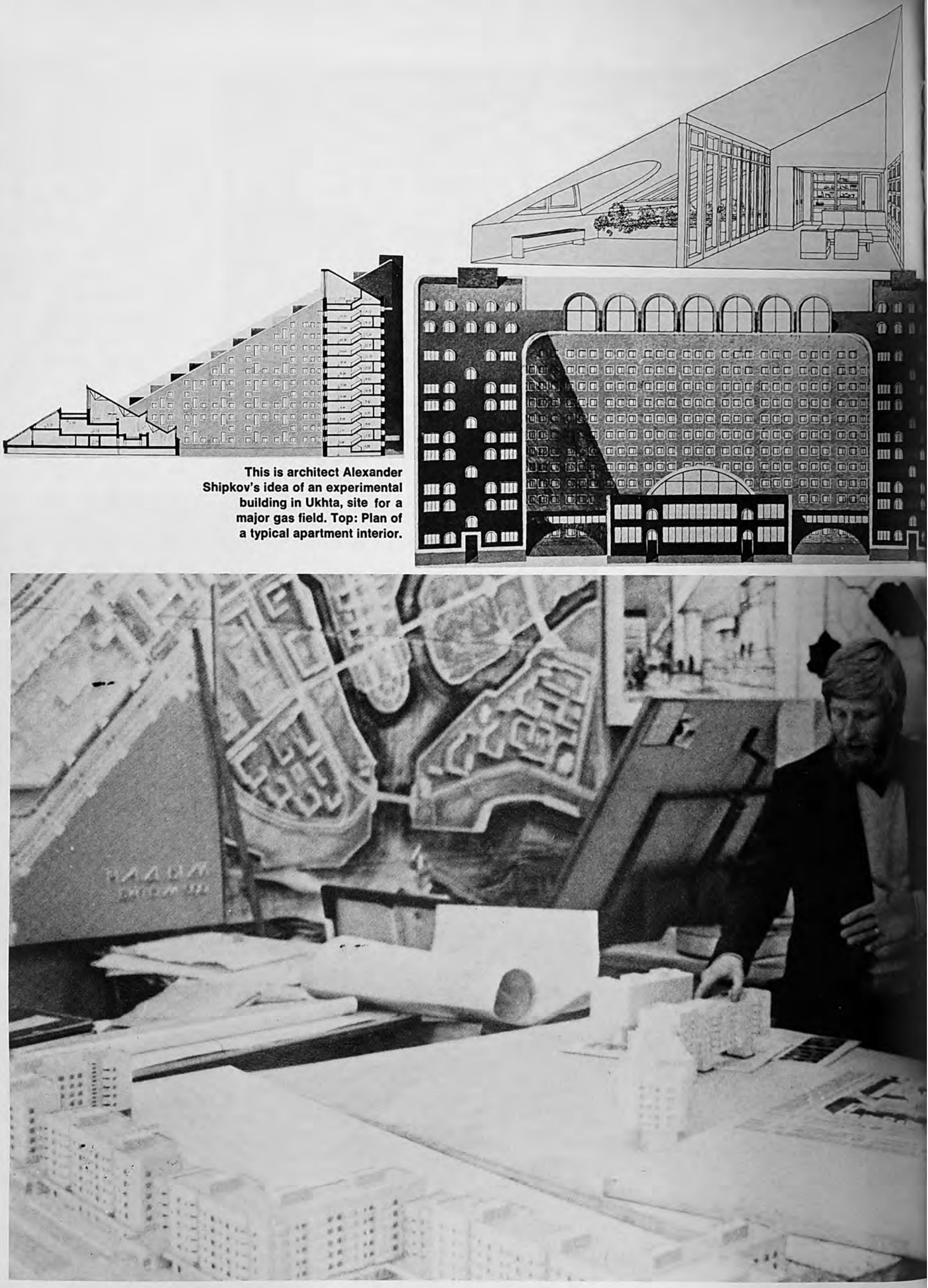
A pike could have given rise to the legends. Since olden times huge pikes are known to live in the Indigirka. Incidentally, the name of the plateau—Sordonnokh—means pike in the Yakut language. Gerhard Maidel, a nineteenth century explorer, wrote that the local inhabitants were afraid of rowing across the large lakes because very often the pikes attacked the people sitting in the boat. Not so long ago a very trustworthy man told me he had shot a pike four meters long.

"Well, I'll add fuel to the fire," Kirillov smiled and told us another legend about Lake Labynkyr.

"Once a huge pike dragged a fisherman into the water. His wife, a shaman, decided to take revenge. She bent the bone of a whale into a ring, covered it with dough and threw it into the water. The fish swallowed the bait and died when the bone uncoiled in its stomach. The water washed the fish ashore. Some time later, men found a bone from the skull of the fish so large that a man on a reindeer could pass under it.

"I heard the legend from the Yakutiyan who served as a guide for Tverdokhlebov's team," added the scientist. "Nevertheless, I am of the opinion that pikes cannot be that big. The largest specimens known to science are two meters long. On the other hand, if the fish is not a pike and not a gladiator dolphin, what is it? After all, aren't scientists making discoveries to this day? I found myself in the same situation as Tverdokhlebov. On the shore of Labynkyr, incidentally a most picturesque lake, I discovered a plant that blossoms underwater. The botanists do not believe me. They say there can be no such plant."

Many, many years have gone by, and still the unsolved riddle of Lake Labynkyr stirs the imagination of people, and they travel to the distant spot in the hope of seeing the Labynkyr Nessie. ■



This is architect Alexander Shipkov's idea of an experimental building in Ukhta, site for a major gas field. Top: Plan of a typical apartment interior.

BUILDING in the North: New Trends

Vasili Sudakov, director of the Leningrad Zonal Research Institute of Experimental Design, which develops new types of housing for the North, talks to SOVIET LIFE correspondent Neonilla Yampolskaya. Sudakov has a candidate of science degree in technology and has for many years worked on the problems of building in the North. He is a member of the joint Soviet-American commission for cooperation in house building and other types of construction in areas with severe climatic and geological conditions.

Sudakov, director of ıningrad Zonal Research ıte of Experimental n, is a member of the -USA commission on ruction in the North.

QUESTION: Your institute specializes in architectural and engineering designs for northern regions. What sort of construction does it recommend for that area?

ANSWER: Our institute has worked on the problem of research and design for northern regions for more than 16 years. Today we design new types of dwellings and public buildings, child-care facilities, schools, vocational training centers, movie houses, hotels—in all, 80 types of public buildings and about 100 types of homes and prefab models. The institute pays special attention to the development of new materials and original construction for northern latitudes. Besides, our institute works on planning the construction of new towns in oil- and gas-bearing areas of Western Siberia—Surgut, Nadym, Novy Urengoi, and others.

QUESTION: What are the specific features of your designs? Do you have to deal with such factors as the climate, the permafrost or the national peculiarities and traditions of indigenous inhabitants of the North?

ANSWER: In view of the vigorous industrialization of the North and the birth of new towns there, our institute is satisfied that the best results can be obtained by building only fully prefabricated (large-panel or modular) houses in the region.

Our methods of construction on permanently frozen ground and the insulation of buildings against low temperatures, which reach minus 50 to 65 degrees centigrade here in winter, are the result of 10 years of experience. Our designs take into account the characteristics of the climate and of human life in rigorous northern conditions and, above all, the long periods of confinement indoors.

The apartments must be really comfortable and have excellent ventilation as well as air humidifying equipment. When we design a kindergarten, for example, we include verandahs for walks, solariums and swimming pools. Our schools have spacious recreation rooms, premises for extracurricular activity, gymnasiums and swimming pools.

As applied to the way of life of reindeer breeders, hunters and fishers, a scientifically substantiated system of base settlements, seasonal stations and mobile dwellings has been worked out. Comfortable urban-type buildings are normally erected in the base settlements. For reindeer-breeding teams of three and four members who usually move with their herds and often change their campsites, we have designed modern cozy little houses on sledges or wheels.

QUESTION: What designs, from your point of view, have been used successfully?

ANSWER: One of our indisputable successes is the construction of residential areas in the gas industry town of Nadym in northwestern Siberia. Apart from purely engineering and architectural ideas, we solved the problem of how to fully protect the residential zone, children's facilities and sports grounds from wind and snowdrifts.

Whole complexes and individual buildings have already been constructed on the Arctic coast utilizing aluminum structural elements and effective synthetic insulation recommended by the institute. A permafrost laboratory in Amderma and 48 apartment houses in Dikson and Chersk, where aluminum sandwich-type panels were used for outer walls, are among the most successful and promising designs. A large plant that will produce prefabricated houses is being built in Krasnoyarsk Territory. Following our recommendations, it will produce three-story dwellings and public buildings that are easy to assemble and disassemble.

In addition, many large buildings have already been constructed or are under construction in northern areas: a 19-story hotel with accommodations for 1,014 people in Murmansk, a covered skating rink with stands for 1,500 viewers in Olenegorsk, hotels that accommodate 500 people in Petrozavodsk and Irkutsk, and many others.

QUESTION: What is the institute working on at the present time?

ANSWER: Our architects and engineers are working on standard-type designs for a new generation of dwellings and public buildings which will be introduced into mass-scale construction after 1985. The special feature of the housing facilities is that they will incorporate vending-machine halls, recreation premises for adults and children and receiving points for all kinds of everyday-service centers.

The outward appearance of buildings—wall and window finish and color decoration—will also change. In addition, we are concentrating on how to blend our construction with the surrounding northern landscape.

We have solid experience in designing and building houses with large roofs, such as the concert and sports complex with a membrane roof 160 meters in diameter and the 10,000-seat Yubileyny Palace with a rope roof 96 meters in diameter in Leningrad. I believe that this experience will be useful in northern regions in the near future.

QUESTION: What provisions are made for the institute in the recent decisions on the North of the Central Committee of the Communist Party and the USSR Council of Ministers?

ANSWER: The decisions of the Communist Party's Central Committee and the USSR Council of Ministers provide for larger capital investments for constructing towns and settlements in the North.

This applies primarily to the oil- and gas-bearing regions of Western Siberia, the zone adjacent to the Baikal-Amur Mainline railroad now under construction and the towns and settlements inhabited by the peoples of the North. Naturally, the range of problems facing us will also increase. Now we shall not only prepare specific designs, but also direct and coordinate the activity of dozens of special institutes located in northern cities and Moscow and Leningrad.

There is no question that modern industrialized construction will accelerate building in the northern region. Sixteen prefabricated housing plants that will produce large-panel buildings designed by our institute are currently under reconstruction, expansion or construction. This will make it possible to raise the volume of northern construction by 10 times in the next five to seven years or to 45,000 to 50,000 apartments annually. ■

Only the Rugged REMAIN

By Victor Rudenko

PRESERVING THE UNIQUE PLANTS AND ANIMALS OF THE SOVIET NORTH HAS BECOME A TASK OF NATIONWIDE IMPORTANCE. PRACTICALLY ALL THE ANIMALS IN THE REGION ARE PROTECTED BY LAW.

The tundra beyond the Arctic Circle is a proving ground where life demonstrates its power in the face of nearly cosmic cold. This is the last zoogeographic region next to the ice cap of our planet that stretches along the coast of the Arctic Ocean.

Winter lasts six months here. The Sun disappears for many months, but from time to time flashes of the aurora borealis light up the darkness of the polar night. The temperature sometimes drops to minus 50 degrees centigrade, and hurricane winds and snowstorms often turn the tundra into a howling hell. Hard icy snowflakes quickly put an end to any plant that may have the temerity to sprout. That is why dwarf birch trees spread in a zigzag pattern along the ground in the tundra.

Not many animals are capable of surviving the tortures of the polar winter prepared by nature. Lemmings dig passages in the thick snow in search of the plants they hid in summer. Polar foxes, whose fur turns blue at this time of the year, hunt the lemmings. If there are none, the foxes die of starvation.

The polar bear combats the extreme climatic conditions on equal terms. The adult males, the biggest beasts of prey on our planet, weigh up to 700 kilograms. They are hardened by nature from the moment they arrive into the world in ice dens, the first and last shelters in their lives. Unlike their brown relatives that live in more southern regions, polar bears do not hibernate. Eternal wanderers, they remind the personnel of polar scientific stations that the Arctic is subjugated not only by people. The bears keep close to holes in the ice made by seals in the autumn, when the ice is not very thick. The seals inhabiting this not very hospitable ocean preserve the holes throughout the winter in order to be able to breathe. This complicates their life but makes it easier for the bears, providing them with food.

The intensive development of the Far North begun in the thirties has considerably reduced the number of polar bears. Their valuable skin and tasty meat, the tempting opportunity and sometimes necessity of supplementing the reserves of food from local resources have earned the polar bear a place in the Red Data Book of endangered species.

Hunting this animal is forbidden, while catching it for zoos is now restricted. The bear is no longer afraid of man, and though it may seem strange, this has made its protection more complicated. Attracted by the smell of food, a bear sometimes attacks a human dwelling and pays no attention to the fact that there are people nearby. It's hard to blame people in this situation for firing at the animal and not into the air. There's no guarantee that a beast of prey will get frightened and run away. Nevertheless, each shooting of a bear is considered extraordinary.

In summer, which lasts six to eight weeks beyond the Arctic Circle, the flora and fauna of the tundra become much richer. The Sun never leaves the sky. Its light is unbearable at night, and people unaccustomed to it cannot sleep.

The snow melts, but the brief arctic heat cannot melt the soil for more than a few centimeters. The permafrost that lies under it keeps the melted snow from penetrating the soil, turning the tundra into endless kilometers of marshland.

The marshes, quickly covered with different grasses and reindeer lichen, become a huge pasture for reindeer, which come here from the taiga to feed. The reindeer are followed by wolves.

The sky is concealed by clouds of bloodsucking gnats. Because of the abundance of food, the coast of the Arctic Ocean becomes the habitat of larks, wagtails and warblers, which usually live in temperate latitudes.

Nowhere in the Soviet Union can you find so enormous colonies of birds as on the rocky shores of the Arctic Ocean. Eiders, auks, gulls—including the rare pink variety—and guillemots form communities on the rocks and fill the air with their cries around the clock. Any hole fit for a nest. Sometimes it is in a place with easy access. It may seem a paradise for predatory animals, but even such a potential thief as the polar fox behaves like a coward here—not wanting to feel the desperate beating of thousands of birds' beaks on its skin.

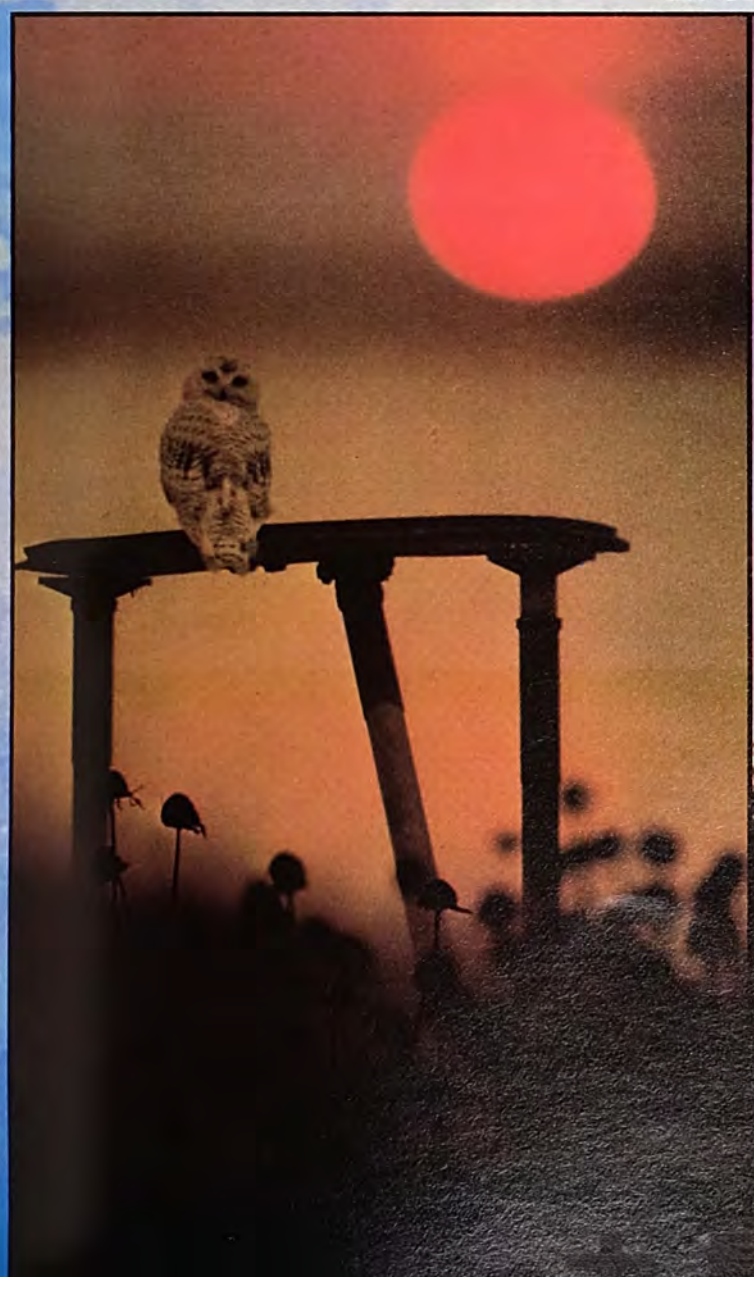
Swans, geese and ducks breed their offspring on numerous lakes with ice-cold water. The breeding sites of birds that inhabit the region beyond the Arctic Circle in summer can be found more to the south too. However, there are among them such patriots of the tundra as the polar auk, the tundra swan, the polar and pink sea gull. Only here can you find the nests of the red-breasted barnacle goose. This beautiful small goose, which looks as though nature had created it with the motifs of Japanese paintings on silk for a model, cannot be found anywhere outside the USSR. It winters in Lenkoran, Azerbaijan, in the subtropics of the Caspian coast.

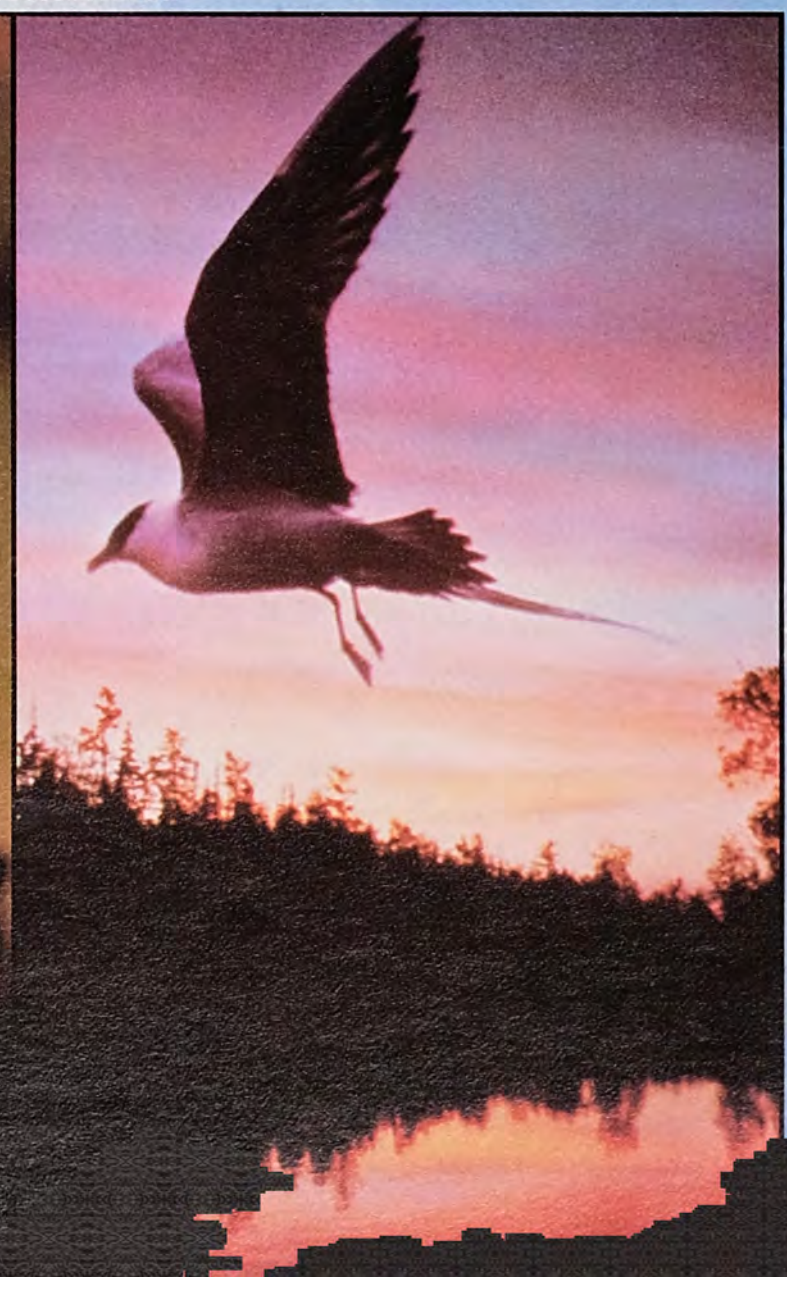
Summer days pass quickly in the Arctic. At the end of August the marshes are already beginning to freeze at night. Broods of fledglings which have learned to fly make their way south, and you can no longer hear the cry of the birds. The region beyond the Arctic Circle becomes lifeless.

The reindeer move away from the snowstorm and barren ground to the taiga. Even the white polar owl, which doesn't mind the cold, flies to where it is light and bewilders its victims by hunting in daytime.

Only the most rugged inhabitants of the Arctic remain, and they had no say in choosing their native land.

Under the warm rays of the spring Sun an arctic seal stretches out for a tan. Bottom left: A white owl patiently waits for the time to hunt. Bottom right: A rare pink sea gull wings its way over the marshes. Facing page: One of the thousands of wild reindeer that wander in herds over the vast expanses of the Soviet North.





ALIVE

WHAT AT FIRST GLANCE SEEMS LIKE A HARSH AND BARREN LAND IS ACTUALLY SURPRISINGLY DIVERSE, WITH ITS FLOWERING TUNDRAS, HUGE COLONIES OF SCREECHING BIRDS, WALRUSES AND SEALS. ITS BEAUTY DESERVES TO BE IMMORTALIZED BY THE ARTS.

Ornithologists, botanists and zoologists are studying the unique flora and fauna of the North. Facing page, left to right: The arctic foxes on Wrangel Island are really quite tame; the tundra becomes a carpet of many colors in spring; the polar bear has a standing invitation to drop in at the research station whenever it is hungry.

Details from *Picture of the Island*, a mural created by young children of the Nenets school on Kolguyev Island. Top: *Two Girls and Two Puppies.* Center: *Girl Wearing the Sun for a Cap.* Bottom: *Wolf and Cub with a Goldfish in the Net.* Facing page: Eight-year-old Alyoshka in front of his painting.

CHILDREN show their island

By Ada Rybachuk
Artist

HOW UKRAINIAN ARTISTS ADA RYBACHUK AND VLADIMIR MELCHENKO INTRODUCED NENETS CHILDREN TO MURAL ART.

Kolguyev is an island in the cold Barents Sea. Even though it has no trees or bright flowers, only small fluffy white flowers, cloudberries and moss, it is a very beautiful island.

There is a little township on it which has a school. The drawings you see here were done by its students. They have drawn their island and the sea, the *chooms* (tents made of animal skin), deer and a helicopter. The picture is unusually large, and the original is hanging in the school. What I want to write about here is how the picture was painted.

We entered the classroom during recess, and the children showed us the horses, tigers, lions and pelicans they had copied out of books.

"Children, can you draw animals yourselves? Not copy them out of books, but draw them from life?" I asked.

They hesitantly answered that they thought they could.

"Then today you will draw all the animals and birds that you have seen with your own eyes. All the *living* things you have seen in the tundra, in the sea or on the lake."

"May I draw a deer?" asked a little girl in a whisper.

The lesson lasted for two and a half hours. The children drew a whole herd of seals, different fish, a deer and sea gull, a swan, a goose with goslings, a loon, a partridge and a helicopter.

From that day on, Vladimir and I started going to the school for two or three hours three times a week. And sometime later, in the evenings, we looked at the pile of pictures. Besides the Big Bad Wolf, the children had drawn the familiar hills and camps, running deer, lakes with geese on them, the shores of the island, a countless number of Suns shining brightly in the sky, and the same countless number of their reflections in the blue sea. They had practically stopped using colored pencils which, in my opinion, are very inconvenient, but preferred soft coal and pastels. Moreover, our big albums suited their temperament better, but even they could not reflect the countless number of Suns. The youngsters developed a taste for drawing large images, and we had to think of something.

The next morning we asked the principal of the school to get all the white wallpaper he could find on the island. To our regret, there wasn't very much of it. He led us into an empty classroom and allowed six of the best artists to skip classes in order to draw.

We asked the children to get as many basins as they could from the school kitchen and a bucket of hot water. And we brought, with some difficulty, it is true, our blue box of tempera and all our largest brushes.

The brushes sent the youngsters into ecstasies, and the sight of our tubes of paint dumbfounded them because till then they had seen only boxes of water colors.

"Children, let's draw our island!"

There was silence.

"Let's draw the sea, the island, the lake, the *chooms* and the deer."

"But the island is so big," a voice said timidly.

We felt relieved.

"So we'll draw a very big picture."

"As big as a window?"

"As big as a wall, and even bigger! Everyone will draw whatever they want to, and then we'll paste everything together."

We laid the wallpaper on the floor and cut it into large pieces two or three meters long. Then we squeezed out whole tubes of paint without stinting.

All we heard was loud breathing. Our artists were either squatting down or lying on the floor.

Vladimir and I were very excited; we had suddenly released a force whose existence we had not even suspected. The little islanders pressed the brushes generously covered with paint on the white paper with surprising assurance and drew their pictures in complete silence.

"I need a little brush to draw the whiskers on my seal," we heard a voice say. Vladimir went back to the house and got a small brush.

There were many children who were eager to draw with large brushes so the next day we decided to get another group of painters. The ones who had painted the day before, with the exception of two especially gifted ones, went off to mold masks out of the clay that Vladimir had raked up on the frozen shore the night before.

There was an unpleasant surprise in store for us in the classroom—the wet drawings had frozen to the floor during the night. The children helped us thaw them with kerosene lamps and an iron.

At first the principal, underestimating the abilities of his students, had some reservations about our venture. Nevertheless, he approved of the youngsters' enthusiasm. The pile of deer on the floor and on the benches grew, and we already had quite a number of *chooms* and lakes.

Lyuba, a first grader, drew her younger brother with painstaking love. He was dressed in a *malitsa* (a fur coat worn by the Nenets) that looked just like hers. Then she drew her sister. After that, the youngsters' relatives began to appear in their pictures one by one. It was very cold in the room, the wind had changed so that it blew straight into the windows, and the children worked in their coats. The felt hats bobbed up and down over the drawings. The artists duplicated the same hats on the paper.

"I have a feeling we won't be able to find room for all the relatives," Vladimir said in an excited whisper.

The children finally finished working on the big picture.

One evening we entered the silent and empty school. We did not turn on the light, and in the dusk with the weak light reflected by the snow, we distinguished the vague outline of a dark sea, a herd of deer, the Sun with its powerful rays and human figures. It was the first time that we could examine in peace and quiet what had been done. We sat on the floor for a long time.

In the silence and the faint light, the unsophisticated and expressive pictures looked even better, and it seemed a pity to us that we sat admiring such beauty alone. There was something in the pictures that we felt had to survive a long time. We at least wanted to show them to our friends. That is when the idea of reproducing the drawings occurred to us. It would be impossible to copy everything, but we could duplicate some of the best fragments of the picture.

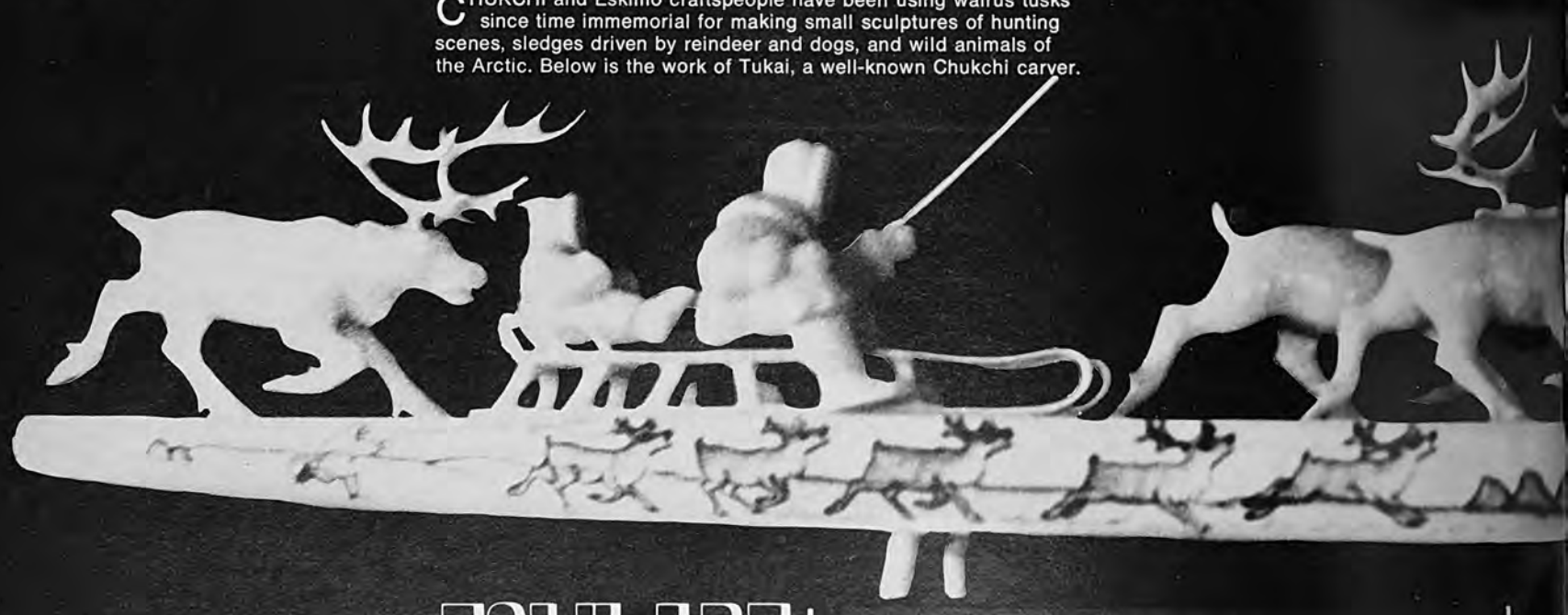
Vladimir stayed in the school from morning until night copying what the children had drawn. He wanted to give a faithful portrayal of the proportions and the peculiarities of the brush strokes.

That is how *Picture of the Island* came to the mainland. ■

Things cultural

NORTHERN STYLE

CHUKCHI and Eskimo craftspeople have been using walrus tusks since time immemorial for making small sculptures of hunting scenes, sledges driven by reindeer and dogs, and wild animals of the Arctic. Below is the work of Tukai, a well-known Chukchi carver.



FOLK ART

THESE colorful articles (top of page) made by the folk craftspeople living beyond the Arctic Circle are prized by tourists: round fur rugs embroidered with beads, smart chamois handbags, decorative appliqué work depicting traditional hunting scenes and figurines dressed in national costumes. They are no longer produced by individual artisans but by collectives of the best masters of folk art. But in spite of mass-scale production, they have not lost their uniqueness.

The people of the Komi Autonomous Republic (northern part of the Russian Federation) still make all kinds of kitchen utensils out of pine and fir. A recent exhibition of wooden articles (photo on right is one of the displays) marking the 200th anniversary of Syktyvkar, the republic's capital, shows how carefully ancient folk traditions are preserved by the people.

MOSCOW

LENINGRAD

TASHKENT

TALLINN

VILNIUS

SAMARKAND

SOVIET LIFE Magazine

Dear Subscriber:

You may remember our Lucky 100 Olympic Sweepstakes last year. Certainly the two Grand Prize Winners, who attended the Olympic Games in the USSR at our expense, will never forget it!

Because that sweepstakes was so popular with our subscribers, we are pleased to announce another even more exciting sweepstakes to commemorate SOVIET LIFE'S *SILVER ANNIVERSARY* — 25 years of continuous publication in the United States.

This year, if you are one of our two Grand Prize Winners, you will not only receive an all-expense-paid, 10-day tri p to the USSR, but you will be able to choose from several fascinating itineraries.

If you win, you might wish to travel across Siberia to magnificent Lake Baikal and to the ancient Russian city of Irkutsk. Or, if you especially enjoyed our May issue, you might wish to personally explore fascinating Tbilisi, capital of Soviet Georgia, or to visit modern Tashkent, capital of Uzbekistan, or old Samarkand, or to see the Gothic architecture of Tallinn and Vilnius, the capitals of two Soviet Baltic republics. Of course, there is beautiful Leningrad with its incomparable Hermitage Museum and Moscow with its majestic Kremlin. The choices will be yours if you win!

But you cannot win without entering. And to enter, all you need do is fill in and return the 25*th* Silver Anniversary Sweepstakes Entry Card below. Enter now!

Good Luck!

G. Isachenko

Georgi Isachenko
Editor

25th Silver Anniversary Sweepstakes

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SOVIET LIFE

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B. All prizes will be awarded. Winners need not be present at the drawing to be held on August 20, 1981. Shortly after the drawing, winners will be notified by telephone or mail.

C. Winners of the Grand Prize 10-Day Trips to the USSR are responsible for transportation to and from their homes to Washington, D.C.'s Dulles International Airport. Trips must be taken by December 31, 1981. Trips are not refundable or transferable, but if a Grand Prize Winner is unable to take a trip because of health or other reasons, *Soviet Life* will award a consolation prize.

D. Duplicate entries will be void. All entries will become the property of *Soviet Life*, and the decision of the editors will be final.

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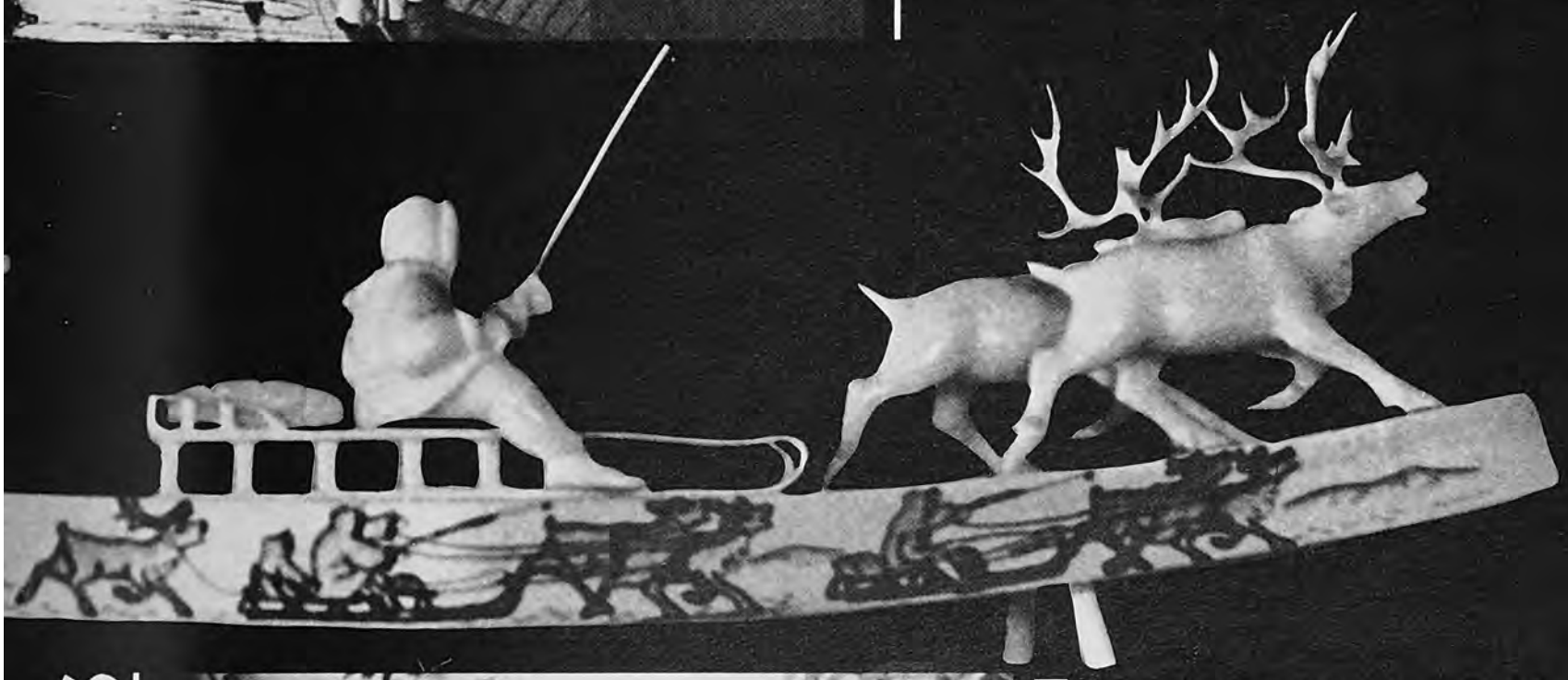
Good Luck!

the arts

INHABITANTS of the city of Norilsk beyond the Arctic Circle are used to new buildings. Every year dozens of multistory houses, shops, indoor pools and children's schools and clubs are built here on permafrost. However, the appearance of a new cultural center is an important event in the city. It was waited for impatiently by ice hockey fans and lovers of poetry alike. Its all-purpose hall, which seats 20,000, can be used for sports and concerts. Well-known ensembles from different republics, Moscow variety stars, not to mention local amateur dancers, singers and poets have already performed there. In the photo: A Ukrainian rock group in the new Norilsk sports and concert hall.

FESTIVALS

THE traditional Festival of the North is held every year in Murmansk at the beginning of spring. This is a vivid spectacle which attracts a large audience from various areas beyond the Arctic Circle. Athletes display their skill in races on sledges pulled by reindeer, in marathon ski races and other northern sports. Audiences enjoy the performances of Nenets and Evenki actors, singers and dancers, choral groups from the Russian regions of the North and the renditions of Saami folk songs. In the photo: A women's dance group from the old Russian city of Arkhangelsk at a Murmansk concert hall.



BOOKS

THE overwhelming majority of the peoples of the Far North had no written language until Soviet times. Now newspapers are published in the autonomous areas in the languages of the biggest local nationalities. Newspapers are also published in Russian. Radio and television programs are broadcast in both the national languages and Russian. Schools for Chukchi, Nenets and Eskimo children are conducted in their native languages. They use ABC books and textbooks compiled by specialists from the ranks of national intellectuals. Among the northern writers whose books have become widely popular both in the USSR and abroad are Yuri Rytkheu (author of the article on page 42) whose works have been translated into 43 languages of the peoples of the USSR and into foreign languages.
In the photo: Candidate of Science Lyudmila Ainana, author of a new Eskimo ABC book. She has translated many Russian and foreign works of classical literature into the Eskimo language.

In a Small AMERICAN TOWN

By Ninel Novikova

Weather
Through Thursday
Cloudy, Warm

THE SAGINAW NE

Russian Ship's Crew Visits City of Saginaw

Russian Captain Praises Summit As He Entertains Aboard Ship

BY JEFFREY MUNZINGER
News Staff Writer

Sitting in the Saginaw River by the

months as captain.

He had praise for the recent Brezhnev-Nixon summit talks in Washington and said the agreements between the two were

Before his guests left, Pronkin se
Polish vodka in the manner Russians
known to drink vodka — with n
added.

Shore Leave Begins

half of the crew toured th
officers said th
able

ican Jazz for The Russian Crew

t a Carrollton High School Jazz Band per-
naw formed for them from the banks of the
the Saginaw River. The group is shown play-
ing
several
the

Alexander Pronkin and Colonel Kenn, a U.S. Customs officer, got to be good friends when Pronkin's ship docked in Saginaw.

"I'D FIND IT DIFFICULT TO NAME A PORT I HAVEN'T BEEN IN," SAYS ALEXANDER PRONKIN, CAPTAIN OF THE SOVIET FREIGHTER *OLENEGORSK*. "BUT I CAN TELL YOU WITH NO HESITATION THAT SAGINAW MADE THE DEEPEST IMPRESSION ON ME."

The familiar strains of the Russian song "Katyusha" burst into the cabin with the first rays of the early summer Sun, awakening Alexander Pronkin, captain of the Soviet freighter *Olenegorsk*. While he lay king for a moment trying to figure out where song came from, it had already blended into azz improvisation of Louis Armstrong. Five utes later the captain was on deck.

he music came from shore or, to be more ct, from a group of young musicians standing it at the edge of the pier, 200 or so meters n the ship. Peering through his field glasses, captain could clearly make out smiling faces l hands waving to the crew assembled on the k. He caught himself thinking: "What day is Can it be some national American holiday I've gotten about? I'll have to send a message of etings to the authorities, especially since the malities will take more than a day or two, and n all 39 members of the crew, who've been out the high seas for two long weeks, will be able go ashore."

The reason for the orchestra was explained ckly enough—as soon as Colonel Kenn of al customs came on board.

'You mean you couldn't guess, Captain?" the erican exclaimed, highly pleased. "Just wait d see what's coming next! I bet you won't for- t Saginaw in a hurry!" Noticing the captain's wildered look, he went on, "I've heard the ssians are known for their hospitality, but I sure you American hearts are just as open."

"Does that mean. . ."

"Yes, exactly—that student orchestra is play- for you," Colonel Kenn confirmed the cap- n's surmise. "And, by the way, it was their own ea."

"In that case, music should be a permanent ature of your port," Pronkin said, smiling. ships drop anchor here all the time, don't they?"

"You're right, we do get plenty of ships," the olonel answered. "But no Russian ones. The enegorsk is the first Soviet ship we've had. And tell you the truth, the people of Saginaw are ally interested in your visit. Many of them are ger to go aboard. Our TV people have done an cellent job. The *Olenegorsk* was the highlight last night's news, so you'd better expect ests."

His words were confirmed the very next day. e shoreline was literally filled with people. To ake a long story short, 5,000 Americans came oard the *Olenegorsk* in the five days it was in rt. People arrived not only from nearby towns d settlements, but from places 300 and 400 iles away. Only three men on the ship knew nglish well enough to speak—the captain him- lf, the first mate and the radio operator—and ey sure had their job cut out for them! All the st, however, managed to communicate, too— ith their eyes, with smiles, handshakes, souvenirs.

When the formalities were finally over, Saginaw pened its arms to its guests. It was a truly festive d joyful event, utterly devoid of the prim eti- uette that usually inhibits people. And the biquitous TV people once again followed every ep the Russians took, showing the mayor's ddress of welcome, the souvenir he presented the captain—the badge of the People to People rganization—the crew's excursion around town with a visit to the botanical gardens and the zoo. It was Igor Shiryayev, the radio operator, who insisted on the trip to the zoo—everyone has his own hobby.

"For the first time in all these years I lost all control of the crew," Pronkin said, laughing. "Frankly speaking, I lost control of myself, too, in the endless whirl of visits and meetings."

That was Captain Pronkin's recollection of his ship's stay in Saginaw in the summer of 1973 and his talks with Colonel Kenn.

The war was at its height when Pronkin was 12 years old and entered a vocational school. At 14 he began work at a machine-tool plant. The entire team was made up of boys just like him who had taken the places of their fathers who were fighting at the front. They were producing a communications cable.

Pronkin dreamed of the sea even then, but he never said a word about it to anyone except two of his closest friends who had similar ambitions. All three finally made up their minds to enter a maritime school, ran away from home and went to Arkhangelsk.

After graduating from school, Captain Pronkin sailed all over the world, but the major part of his life was devoted to the North.

Scientific stations have been functioning in the Arctic Ocean for over 40 years now, closely following and studying the elements. The station personnel regularly replace each other, but every new group waits just as impatiently for the messenger from the mainland—the ships that bring all the necessities, from building materials and fuel to foodstuffs and letters. The stations lie hundreds of miles apart, and the ship's hold is packed—very neatly, in the order of unloading, from the nearest station to the farthest—with everything the polar expeditions might need. The Arctic Ocean, however, will never miss the chance to test a seaman's steadfastness. Incidentally, steadfastness alone is far from all a captain needs under these circumstances. Another must for him is the ability to immediately find his bearings in a situation, or, to put it in a nutshell, intuition, as the old sea dogs call it.

You can never tell what will happen on the perfidious Arctic Ocean, where the swift changes of wind are so unexpected that they can make a shambles of even the most exact calculations. That's exactly what happened one unforgettable time. At first everything went as it should—the ship approached the first polar station in the Yugor Strait, which separates Vaigach Island from the Yugor Peninsula. The anchor was cast, the pontoons and the launch that pulls them to shore were lowered, and unloading began. Suddenly, at the peak of the work, the wind changed direction. It didn't take long before you could see through a pair of field glasses that the far-off ice fields, which had for a time been swept away by the southern winds, were visibly moving in from the horizon.

All set rules dictated the necessity of preparing to leave—it takes an hour to raise the pontoons and the launch and to weigh anchor. It's safer to set sail immediately, when the moving ice fields are about a kilometer away. But there's another way, involving risk, which the captain alone can decide to take and for which, if the ship does get caught in the ice, he will have to bear grave responsibility. That risk entails waiting until the very last minute, when there's no more than a hundred meters between the ship and the ice. Captain Pronkin decided to wait. To wait, never for a minute leaving the bridge. To wait, constantly watching the ice and calculating every hundred meters left between it and his ship.

The operation of unloading proceeded without stop around the clock. Two pontoons moved continuously like shuttles to shore and back, and two teams—practically the entire crew—loaded and unloaded the freight. All the physical and moral strength of every person was focused on just one thing—to finish in time. The two hours they wrested from the ocean proved to be decisive—the station personnel did get their collapsible houses and fresh vegetables. Everything seemed to be all right, and the ship could go on its charted course. Yet from the station on Cape Menshikov—the next stop on the navigator's chart—came the report that the north wind was raging there. The captain had every right to cast anchor and wait for a change of wind—the next layer in the ship's hold was to be delivered to that station. Yet this time, too, Captain Pronkin made a risky decision—to radio for a report on the ice situation, find out where the sea was free from ice fields and sail there. That meant lengthening the route, making unloading more difficult and, as I said, once again taking a risk. . . .

"But mind you, that wasn't a reckless risk; it was justified, deliberate, if you like," said Alexander Pronkin.

However, the most difficult of all his trips in the past 25 years, according to Pronkin, was one connected with the Atlantic Ocean, not the Arctic.

On January 6, 1974, after leaving its cargo in Rotterdam, the *Olenegorsk* put out to sea. Its destination was the Canadian port of Saint John's. The Atlantic greeted the sailors with a big storm. The two eternal enemies, the warm Gulf Stream from the Gulf of Mexico and the cold Labrador current from the North, grappled once again in deadly struggle, raising a cyclone that swept away everything it encountered on its way. It pounced on the ship during the night. The men woke up, literally thrown out of their bunks. Huge waves moving at a velocity of 20 meters a second crashed down on the vessel, threatening to overturn it. One blow followed another, the air reverberating with the boom of the water and the roar of the wind. The danger was even greater because the ship was empty. It's screw, designed to work at a depth of seven meters, was so near the surface that at times it was caught midair. At any second the diesel could fail. There were moments when the ship was almost perpendicular to the waves, listing by 55 degrees and almost losing control. And when the pilot managed to straighten it out again, to head its prow windward, it was pulled back at a tremendous speed. Instead of traveling 300 miles a day, the ship made no more than five. Yet the captain was on the watch, always calm and confident, though at times, when the ship's prow dived deep into the abyss, he fought the feeling that it would never be able to right itself again.

There wasn't much sleeping aboard the ship for 12 days and nights. The crew fought the elements all that time. And the 12 days that it normally took to reach Saint John's stretched to 24.

But they defeated the ocean. In a restaurant at the Canadian port, which the Soviet sailors dropped into one day, the people paid tribute to their courage by giving them a standing ovation.

I would like to end my short account of the Russian captain as he himself asked me to.

Alexander Pronkin showed me a gift he'd received in Saginaw—an ashtray with the inscription: "On the move . . . to serve you better." ■

THE NORTH: a new sta

THE OUTLOOK FOR MINERAL DEPOSITS

By Vasili Burkhanov, Doctor of Science (Economics)

In the Eleventh Five-Year Plan (1981-1985) as well as in the years up to 1990, the North of the Soviet Union will be playing an increasingly greater part in the country's economy. The reason for this is mostly related to the presence of various natural resources in the area. For example, at the moment the North accounts for an overwhelming part of the country's production of nickel, many rare and trace metals, tin, tungsten, mica and phosphate ore. Diamonds and gold are extracted here, too.

The natural resources of the North are particularly valuable because they are concentrated in relatively small areas and have a high content of the primary component. For many years now the possibilities of the North's fuel and energy resources have been widely discussed throughout the world.

In Western Siberia alone, the aggregate area of prospective oil and gas fields exceeds two million square kilometers. The Timan-Pechora oil- and gas-bearing province in the North of the European USSR is one-third smaller. Experts attach equally great hopes to the oil and gas prospects of Eastern Siberia, Yakutiya, Chukotka and other areas.

The reserves of the coal deposits in the North largely exceed those of all other coal basins of the country. Hence, mining holds the dominant place in the North's industries. In addition to this, the area accounts for about half of the national timber reserves. It also has tremendous reserves of fresh water and hydro- and wind-power resources.

The oil and gas industry, whose development began at particularly dramatic rates in the midsixties, when commercial oil production was started in Western Siberia, is doubtlessly the most important among these industries. At that time the Soviet Union was producing half as much oil as the United States. However, by 1974 oil output in the USSR surpassed output in the United States, and now the Soviet Union holds indisputable first place in the world.

Nonferrous metallurgy ought to be put second in significance among the North's industries. The major center of this industry is the city of Norilsk, which has become a symbol of the North's development. In spite of the severe conditions of the tundra, the people built a city with a population of 200,000 and a major mining and dressing mill, where the local polymetallic ore is smelted to obtain over 25 different rare metals.

To provide for the needs of the city and the mill, the country's northernmost hydroelectric power station, the Khantaiskaya, was built here. Several central heating and power plants that use the natural gas of the Messoyakh gas fields were also built. A railroad has been laid across the tundra to the port of Dudinka, which is regarded as "nonfreezing" despite its wintertime two-meter-thick ice; icebreakers lead ship caravans here all year round.

Most of the factories in the vast wastes of Yakutiya, Chukotka and the Kolyma basin are in one way or another related to nonferrous metallurgy. In recent years the rapid development of the North's mining and processing industries was accompanied by the construction of mechanical engineering plants. This is one of the means of streamlining the economy.

In the cities of the European North this construction mainly refers to shipbuilding and repair works, the production of tractors for the lumber industry and of papermaking machines. There are a number of mechanical engineering plants that are mainly repair plants in the Asian part of the country, too. The latter are mostly involved in overhauling or manufacturing construction, mining and oil-production equipment.

And yet, the dominance of mining will remain a characteristic feature of northern industries. Experts are unanimous in the opinion that one of the major conditions for raising the efficiency of the North's economy is the modernization of transport and of the whole road network, which would bring the remote northern areas closer to the economically advanced regions of the country.

The primary part in the new transportation system for the northern regions is assigned to the railroads. They have indisputable advantages: They operate in all kinds of weather, are reliable and can carry a variety of goods. Railroad building started in northern Siberia in the sixties. The over-all length of the lines is still relatively small. The network, however, is definitely going to be expanded.

The Tyumen-Surgut Railroad was built with an eye to promoting the development of the oil and lumber industries of Western Siberia. Surgut is to become the principal railroad junction in Western Siberia. Access roads to the North toward the Urengoi gas fields have already been constructed from there. It is possible that the railroad will eventually extend further—from Urengoi to Norilsk.

> FOR THE NEXT TEN YEARS THE USSR PLANS TO CONCENTRATE ON DEVELOPING THE FAR EAST AND THE NORTH. BUT WE MUST ALSO SERIOUSLY THINK ABOUT THE PROBLEMS THAT MAY CONFRONT US IN THE MORE DISTANT FUTURE.

Plans are now under consideration for another extension of the railroad—from Surgut to the East, to the Yenisei River. Eventually these extensions may form a unified north Siberian railroad with an over-all length of more than 5,000 kilometers. Another plan provides for the construction of a railroad link between the Baikal-Amur Mainline railroad and Yakutsk, where it would split: One line would go to Chukotka, the other to Magadan.

Experts keep studying the proposals for the construction of access roads to the Arctic coast for linking sea transport with railroads. One of these links is expected to pass across the northeastern part of the European USSR to the future port of Indiga on the Barents Sea. These roads will further promote the reliability of the northernmost link of the Northern Sea Route transportation network, whose western section already operates practically the year round.

Experts believe that along with rail and sea transport, an increasingly greater part is going to be played by pipeline transport of the North's oil and gas. Pipelines are expected to be built from the North of Western Siberia to the South and the East. Eastern Siberia is to have a pipeline network of its own: from the gas fields of Yakutiya to the Maritime Territory and Magadan.

The new transportation network will also incorporate highways, which are now largely underdeveloped. In Yakutiya and Magadan Region, motor transport accounts for nearly two-thirds of all freight and passenger traffic. This is a point in favor of the development of highway transportation in the North. Parallel with this, the high cost of road construction on permafrost forces the experts to design new transportation facilities better suited to the North, such as amphibious trucks, aerosleighs and air-cushion and cross-country vehicles. The latter have already proved their high efficiency and cost effectiveness under the off-road conditions of the oil and gas fields of Western Siberia. ■

# of its development

NATURE PRESERVE OR ANOTHER KLONDIKE?

By Grigori Agranat, Doctor of Science (Geography)

The development of the North is a difficult and, to a certain extent, contradictory problem. This becomes clear when you start thinking about the long-term prospects of the development of the North, about its future.

First of all you have to keep in mind that the North is not only a major source of raw materials, fuel, energy and fresh water, but also the last and the biggest reserve of open territory and unpolluted natural environment. The significance of this reserve for the future, especially the distant future, may turn out to be much greater and wider than can be anticipated from the present role of the North. It is difficult to predict now how it will be used by the end of this century and after the year 2000.

To begin with, the increasingly intensified use of the territory and the environment of the developed areas may make it necessary to redistribute industry and, perhaps, even the population for ecological reasons, to move them to areas that have never been settled. This idea is already under consideration. Our scientists and experts are seriously discussing the expediency of building superpowerful complexes—nuclear power stations with a capacity of many million kilowatts—in the sparsely populated areas of the North to supply electricity to the central part of the USSR. No matter how rigid safety standards are, it is better to build nuclear power stations far away from cities and populated areas.

The criteria for the choice of residence change with the growth of cities, with the increasing density of production facilities and population in developed areas and with the inevitable deterioration of the environment, or, as they now say, with the deterioration of the "quality of life." Clean air, comparatively untouched nature, closeness to it and the absence of overpopulation may serve as major stimuli for resettlement in the northern regions. This is suggested by polls that have been conducted among people moving to the North both in our country and in Canada and the United States.

The role of the North as an area for recreation and tourism will grow rapidly in the future for the same reason. This is already clear—it is becoming virtually the only area where city people can see unspoiled nature.

So there's no question that the North will be used more extensively. On the other hand, as I already noted, the North is the largest open territory still in existence, and the natural environment of the tundra, the forest tundra and the northern part of the taiga (the belts that make up the North) is exceedingly sensitive to human activity. It is very easy to damage it. This makes it necessary to show special concern for the protection of nature in that region and for the rational use of its territory and resources.

We must preserve the North for ourselves and for future generations. This is not easy, considering that we need its enormous mineral wealth. However, we must exercise care in how we use this wealth because nature in the North is not as resistant to the onslaught of technology as nature in the Temperate Zone. The air, water, soil and vegetation of the northern regions are comparatively less capable of self-regeneration and self-purification. That is why, if we take two rivers with the same cross-section and two sites with the same area in the North and in the Temperate Zone, a much smaller pulp-and-paper plant, mining complex or town should be built in the North if its natural environment is not to be irreparably damaged. The technological and economic efficiency of large industrial plants and territorial production complexes is limited by the area's comparatively low economic capacity. In some cases it will be necessary to scatter projects, to build processing plants a distance from the raw material source, and population centers away from the industrial plants.

We have to give serious thought to how we can extend the protected territories of our North—the preserves, reservations and national parks. To this end we are studying with keen interest the experience of Alaska, where nature conservation areas are well developed.

It must also be added that the boundless North is an element of paramount importance in maintaining the biochemical equilibrium of a great part of the Northern Hemisphere. The polluted air from the industrial urbanized areas of Europe and America is cleaned as it passes over the globe's northern periphery in the course of the general circulation of the atmosphere. The mighty rivers of Siberia and the North stabilize the water systems of vast territories. This is another major factor which makes conservation of the North's nature a crucial problem.

I have already touched on the development of the northern areas and their long-term destinies. We see that it is a difficult matter because we have to combine aims and tasks, possibilities and needs, which are not easy to reconcile.

The problem of choosing ways and means for short-term development of the North is also complicated and contradictory. For the time being, the North is mainly a raw-materials-producing area. In most cases, the establishment of manufacturing industries, such as machine building and chemicals, is unprofitable in the context of today. But we have to consider the future and give thought to how we are going to deal with areas whose economy is now based on mining. Resources, above all mineral resources, become exhausted sooner or later. So what will happen to these regions? Is it necessary to search for new Klondikes? This is hardly feasible socially and absolutely does not pay economically. These regions contain engineering facilities, transport routes, power stations and populated areas, i.e., production and social infrastructure that can provide a stable foundation for new sectors of the economy. It is high time to give thought to this and to allocate funds for more comprehensive economic development.

A special approach to the methods and forms of populating the northern areas is necessary. More thought must be given to the development of the North and the setting up of multipurpose townships and cities there. To be sure, there is no need now to build them everywhere. For the time being, in many remote areas, such as the far north of Western Siberia, it is better to make do with the so-called team-rotation settlements. But you must always be mindful of the fact that the North is a territory with a tremendous and insufficiently studied potential and with possibilities that are difficult to forecast. Even in the places where there is nothing except oil and gas derricks at present, centers of new activity will emerge in the years to come.

Examples from the distant and recent past of Siberia and the North prove this. Some 20 or 25 years ago no one could imagine that Western Siberia would become the Soviet Union's largest oil- and gas-producing area. Construction of transport routes, power facilities and settlements was based on a much smaller scale of production. Later on, a lot had to be rebuilt. More fundamental development of the territory from the very beginning would have cost less.

We are aware that in many cases a broader approach to developing new territories requires additional investments. But it is obviously true of all large-scale, long-term economic, scientific and technical tasks and programs that they require a special economic approach and specific standards.

It is a good time to recall here the history of the settling of these new lands. Years ago, at the end of the nineteenth and the beginning of the twentieth century, when the Trans-Siberian Railroad was being built, Russian economists said that large-scale pioneering economic development could not be measured by a "ruble yardstick," that is to say, the effect of these beginnings could not be measured by rigid calculations and expediency.

The development of the North is a difficult task which requires a comprehensive approach. Soviet scientists and experts continue to search for the most rational ways to accomplish it, taking into account both the present and the future. ■

Murmansk's Festival of the North lures thousands of cross-country skiers every year. The crowning event of the winter holiday, though, is the reindeer racing.

SPORTS IN THE NORTH HAVE THEIR O
SPECIAL FLAVOR. COLD AND SNO
ARE NO PROBLEM. THE FESTIV
OF THE NORTH IS A TRADITIONA
PARADE OF THE STRONG, T
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SPORTS in the Arctic

By Vladimir Kirillyuk

In the USSR every winter the sports season is crowned with the annual Festival of the North which is held in Murmansk, the biggest Soviet city beyond the Arctic Circle. In March, when spring has not yet arrived in those parts, the best representatives of the national sports of the Soviet North, leading Soviet skiers and, in the past few years, foreign athletes come to Murmansk. The participation of top-class foreign skiers imparts special importance and scope to the winter festival. The local skiers get a chance to see them in action and to get an idea of their technique and training methods.

Great interest is aroused by the races of reindeer and dog teams and lassoing, which are very popular among hunters and reindeer breeders. ▶

Only the best athletes—winners of local, district, regional and territorial contests—compete in Murmansk.

But today the Far North is populated not only by hunters and reindeer breeders. Industry has been developing rapidly, and such cities as Murmansk, Norilsk, Dudinka and Inta have sprung up. Among the sports the local clubs cultivate are speed skating, skiing, ice hockey, soccer, track and field, weightlifting, boxing, wrestling, gymnastics and swimming. This is not easy because of the severe climate and the polar night, which lasts for several months.

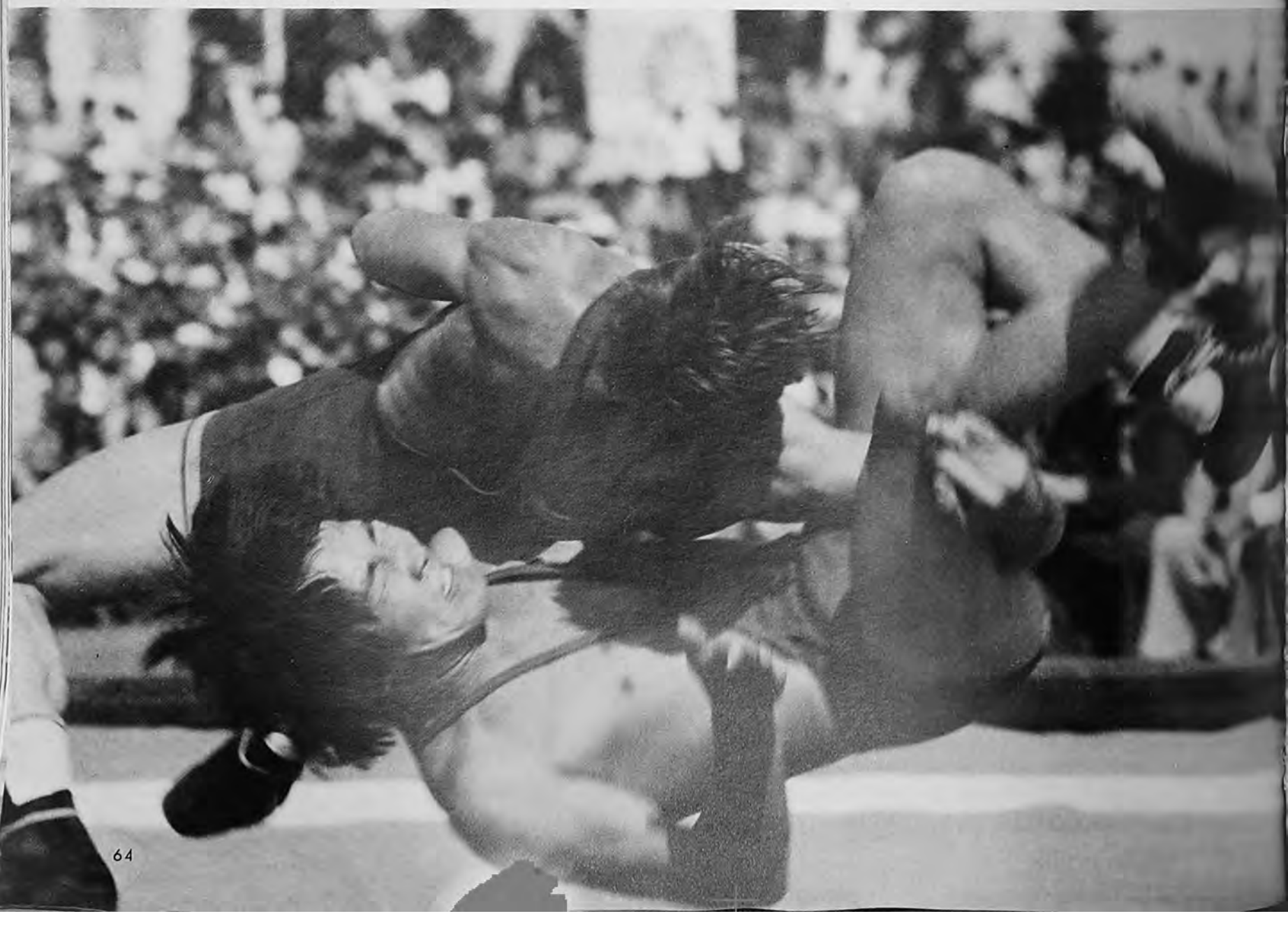
The Zapolyarnik Sports Club in Norilsk is a graphic illustration of how the local organizations overcome these difficulties. A mining and metal-smelting complex at which many thousands of people work is the hub of the city. These industrial plants, which are not only huge but also rich, have allocated millions of rubles for the construction of a fine sports center. It has two stadiums, a swimming pool, an indoor tarmac-surfaced track and field stadium and a big sports palace with a complex of arenas for ice hockey and figure skating (on artificial ice), gymnastics, boxing, weightlifting and wrestling. It also has a skiing center with 2,500 pairs of skis, two shooting ranges, three indoor skating rinks, an alpine skiing center, out-of-town recreational centers, and after-work health resorts functioning right at the complex.

Zapolyarnik, the center of the sports and recreational activities in Norilsk, has 45 branches. These are small sports clubs that organize mass competitions in 37 sports. Zapolyarnik runs a sports school for adolescents that provides training in several sports, a specialized figure-skating school and an ice hockey school.

A favorable artificial climate has been created for the development of physical education and recreational activities in Norilsk. Normal sports life continues there even during the months when it is dark around the clock.

The decision the USSR Sports Committee adopted two years ago on the development of physical education and sports in the Far North will make the pacesetting experience of Murmansk and Norilsk a common thing. ■

The Zapolyarnik Sports
Norilsk (Zapolyarnik means o
lives beyond the polar circle)
everything from speed skati
skiing to gymnastics and swimming (in
of course). Sports like archer
freestyle wrestling are especially p



nd Of the SAAMI

from page 31

Department at the Institute of the of the North. After graduation he became phy teacher at the Lovozero boarding uryev is one of the 50 Saami who have a higher education.

I was in Leningrad," Yuryev said, "I od for the first time the importance of Russian culture for our small people. I reat deal, visited museums and simply round the streets. I tried to absorb every- that I could pass it on afterward to my Leningrad I understood another impor- g, how little people actually knew about ry and unique culture of the Saami.

k that our oral legends are as impor- the Russian epics, or the well-known epic, *The Kalevala*. I remembered them childhood and considered it my duty to em down. However, I began with folk remember many tales my mother and other told me. They are included in a thin first published work."

v is not the first to pay close attention to treasures of Saami folklore. Even before ober Revolution and particularly in Soviet any ethnographic expeditions were sent ola Peninsula; well-known Soviet philolo- ote down songs, folk tales and legends i settlements. Their works with detailed taries have been published under the the USSR Academy of Sciences and the cademy of Pedagogical Sciences.

ver, Yuryev must be given his due; he irst Saami to have made the wise, sad, d poetic Saami tales available to a wide f Soviet readers, chiefly children.

how did the idea of organizing a circle g reindeer breeders come about?"

can't manage without good sports train- ne herder's trade. Just try to lasso a rein- nning at full speed! Or hold on to a sledge g at the speed of an automobile! But our ere not being taught these things. That's ce, during the holidays, I took 20 of my o the herders in the tundra. The children elighted. Then, at my request, the state lotted our Young Pioneers Club several r, sledges, all the necessary equipment, es and clothing. We built our own corral reindeer not far from the settlement, and r nine years we have been stormed by ters who want to take care of the reindeer, r with the motor sledge and repair the har- The project has proved very useful—more of my charges are already working inde- tly in the tundra as herders. However, the lea in creating the circle was for the chil- get to know something of their heritage. agine them busy with the reindeer in the osty air all day long, then building a fire, ng soup and tea, and sitting around the talking. I tell them old Saami legends, sing old and modern songs. Their hearts d with respect for the history of our small and pride in being a Saami."

Northern Patterns

e are at least 12 big rooms in the Lovozero Pioneers Club. In one, with mirrors on the ittle girls in tights were balancing on their another a nine-year-old boy was singing t very strong voice to the accompaniment ano. In the next room something wonderful ing on. A group of teenage girls was sit- ound a long table and intently threading, and cutting. They were working with bits pieces of reindeer skin and beads. Finished were on display on stands along the round pendants with different patterns of chamois and beads and trimmed with fox and reindeer fur; soft patchwork and er-fur rugs, large and small; adult and chil- dren's footwear made of the strongest fur from reindeer legs; and a great many other beautiful things.

"The idea of organizing a circle for traditional crafts at the Young Pioneers Club," explained its supervisor Maria Popova, "was dictated by necessity. As Saami women grew old and died, their secrets of making unique fur clothing that cannot be bought in shops were dying with them. Warm and comfortable, these clothes are indispensable for the herders. So who will replace the famous seamstresses?

"Of course not all of my 60 pupils will become professional sewers," said Maria Popova, "but they will be able to sew for themselves and their families. This skill is always useful. But just look at the enthusiasm with which they create patterns from beads and choose bits of chamois to match! They are beginning to understand beauty, and this makes me very happy."

An ABC Book for the Saami

The attempt to create an alphabet for the Saami ended in failure twice. The first attempt made by Russian volunteer teachers at the end of the nineteenth century could not be taken seriously. The second failure, in the early 1930s, was far more painful. Many philologists from Moscow, Leningrad and Murmansk took part in the difficult work of compiling an alphabet, an ABC book and other textbooks for the peoples of the Far North, including the Saami, which had been sanctioned by the government of Soviet Russia.

However, neither the new alphabet nor the ABC book took hold at the local schools, and the teachers complained that both adults and children had great difficulty in learning them.

Alexandra Antonova told us what was wrong. Not long ago she was a teacher of the Saami language at the Lovozero boarding school, and she is now a junior researcher at the Scientific Research Institute of National Schools. This is what she said:

"I experienced the imperfection of our first textbooks myself when I was in school. Their authors had created characters on the basis of Latin letters, even though the Russian language and Russian characters were much closer and easier to understand for the Saami. Actually the whole people spoke Russian, and Russian literature has become part of our culture. There were also other faults. For example, the spelling of a word did not coincide with its pronunciation, and this overburdened the pupils' memory and confused them when they were reading. Now we have a new Saami ABC book!

"These are the rough copies, all the preparatory work, while the ABC book itself has already been sent to the printers and will be published this year. It will be followed by readers for the elementary school, and then . . . then we'll see."

In front of us was the manuscript of a Saami ABC book that will have a long life. This is not only our opinion and even not only that of the author. For over two years the book has been used at schools in several Saami settlements. It has been read and reread by teachers and scholars and also by reindeer breeders and fishers. They know about the previous failures and are particularly critical in their reading. According to Antonova, this thin book had taken a quarter of her life to prepare. But it also brought her joy when everyone without exception, and what is most important, children, expressed their gratitude to her.

It was extremely difficult work. A brilliant scholar of Saami dialects, Antonova weighed each word, selecting the most typical and colloquial, striving to achieve a complete matching of spelling and pronunciation. The end result is an alphabet of 43 letters. In Russian there are 33. The extra 10 letters reflect the subtleties of Saami pronunciation.

Now Alexandra Antonova dreams of translating the best works of Russian literature and poetry into Saami. ■

25th ANNIVERSARY ISSUE

YESTERDAY, TODAY AND TOMORROW

A Look at USSR-U.S. Relations

Since the very first issue of SOVIET LIFE magazine, relationships between our two countries have witnessed many positive changes of direction and many important events. Regrettably, the international situation has deteriorated. Next month commentator Gennadi Gerasimov examines the history of Soviet-American ties. Memorable photos of history-making events have been pulled from our files for this special issue.

BORN IN 1956

Portraits of Two Soviet Women

Natalia Chekhovskaya (above), a ballerina from Krasnoyarsk, Siberia, and Altyn Kaliyeva, a textile worker from Kustanai, Kazakhstan, are the same age as our magazine. Both talented young women combine careers with public service. Chekhovskaya is a deputy to the Krasnoyarsk Territory Soviet of People's Deputies, and Kaliyeva was a delegate to the 26th CPSU Congress.

A LOOK AT THE PAST

A Quarter Century in the Making

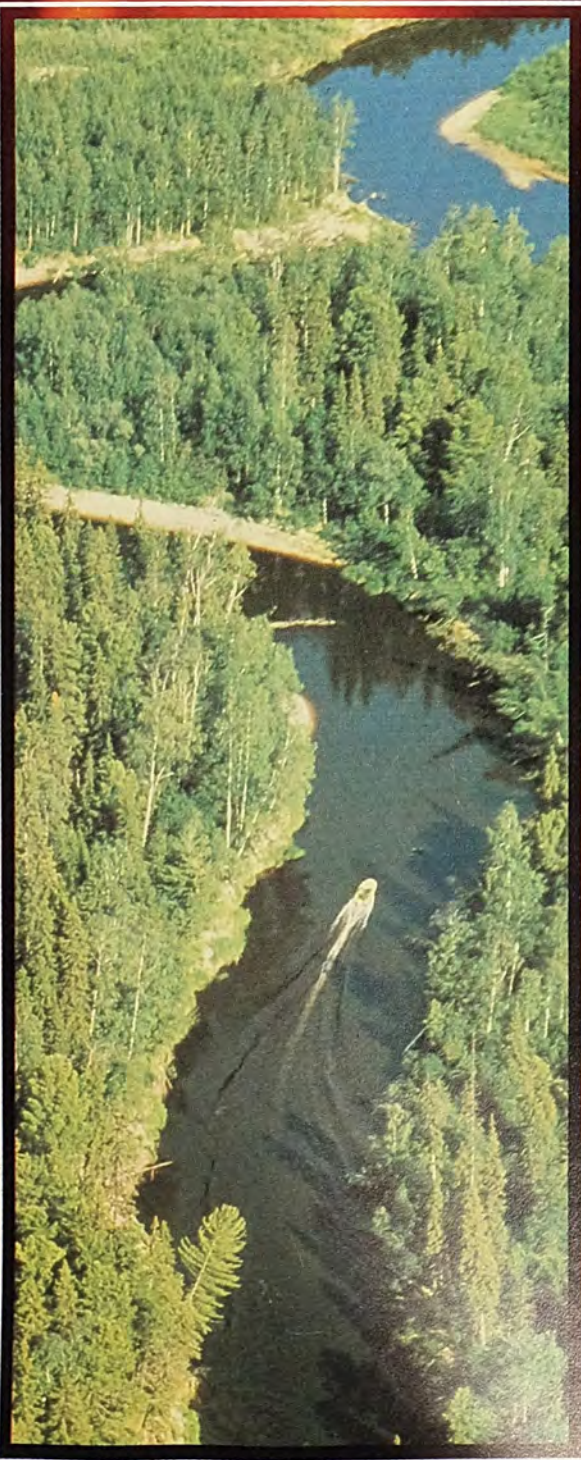
Staff writers and editors look back and explain how the magazine SOVIET LIFE was founded.

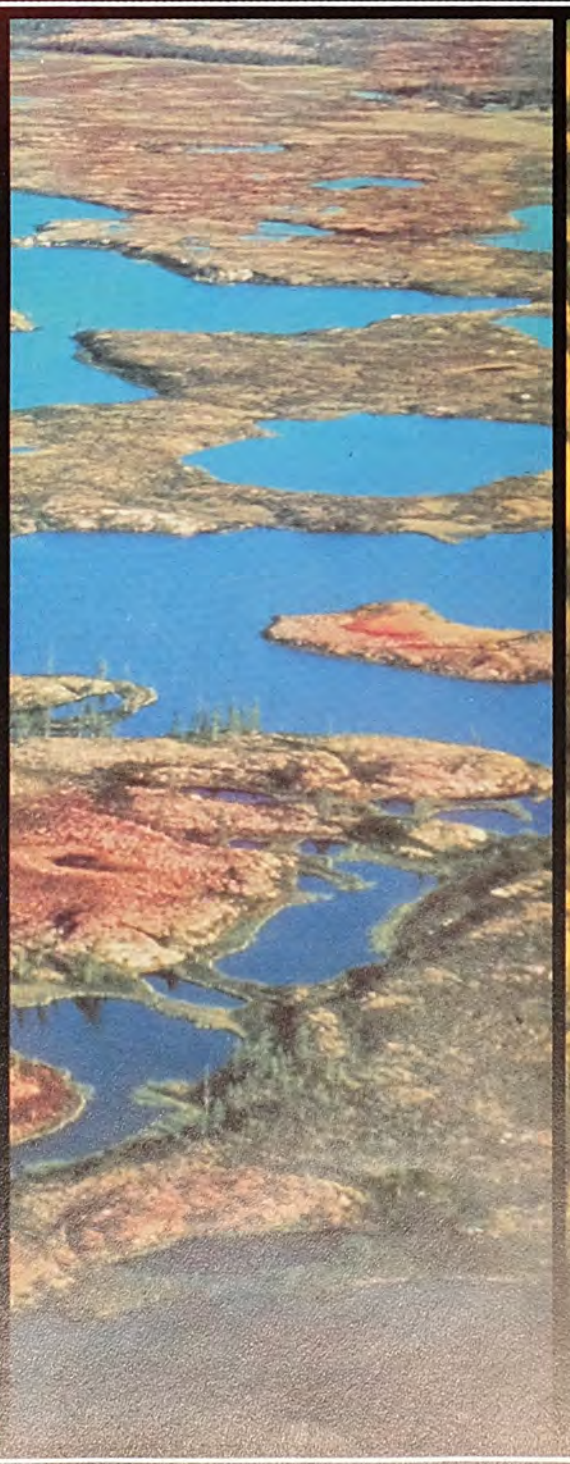
COMING SOON

How Soviet Women Put Their Equal Rights Into Action

THE LAND OF THE MIDNIGHT SUN IS A LAND OF PHENOMENAL NATURAL BEAUTY AND WEALTH. HERE THE RIVERS RUN FREE, AND THE TAIGA AND TUNDRA STRETCH AS FAR AS THE EYE CAN SEE.

THE SOVIET NORTH





SOVIET LIFE

SILVER
ANNIVERSARY
ISSUE

September 1981 • $1.25

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To the Readers of SOVIET LIFE

Dear American Readers,

For a quarter of a century now SOVIET LIFE magazine has been telling Americans about the everyday life of our country, its successes and problems, about the hopes and expectations of the Soviet people.

It is justly said that a better knowledge of each other promotes mutual understanding. Authentic information is especially important now that the international situation has deteriorated and Soviet-American relations are being put to a severe test.

The Soviet Union and the United States of America are the two major powers of our time, and the political climate of the globe depends to a great degree on their relations. A dialogue is needed at present more than ever before. As for the Soviet side, it has always shown its willingness to work for a negotiated and peaceful settlement of all complex and disputed problems. This fundamental policy was confirmed once again at the recent Twenty-sixth Congress of the Soviet Communist Party, where a wide-ranging program of practical measures to improve the international situation and strengthen trust among nations was advanced. The Soviet Union will pursue this policy perseveringly and consistently.

This, of course, applies also to our relations with the United States. We have already repeatedly stressed, publicly and otherwise, that we do not seek confrontation with the United States, nor do we encroach on the legitimate interests of your country. The Soviet Union wants peace, cooperation and normal relations between our countries based on mutual trust. For this reason we offer to the United States honest and constructive talks, a search for mutually acceptable solutions to practically all major issues existing between us.

It is our conviction that humanity can and should live without constant anxiety, can and should be rid of the ruinous expense of armaments and—most important—preserve peace for the present and coming generations. Allow me to assure you that everything possible will be done by the Soviet side toward this and to wish the American people happiness and prosperity.

Leonid Brezhnev

September 1981, No. 9 (300)

SOVIET LIFE

The magazine SOVIET LIFE is published by reciprocal agreement between the governments of the United States and the Soviet Union. The agreement provides for the publication and circulation of the magazine SOVIET LIFE in the United States and the magazine AMERICA in the Soviet Union.

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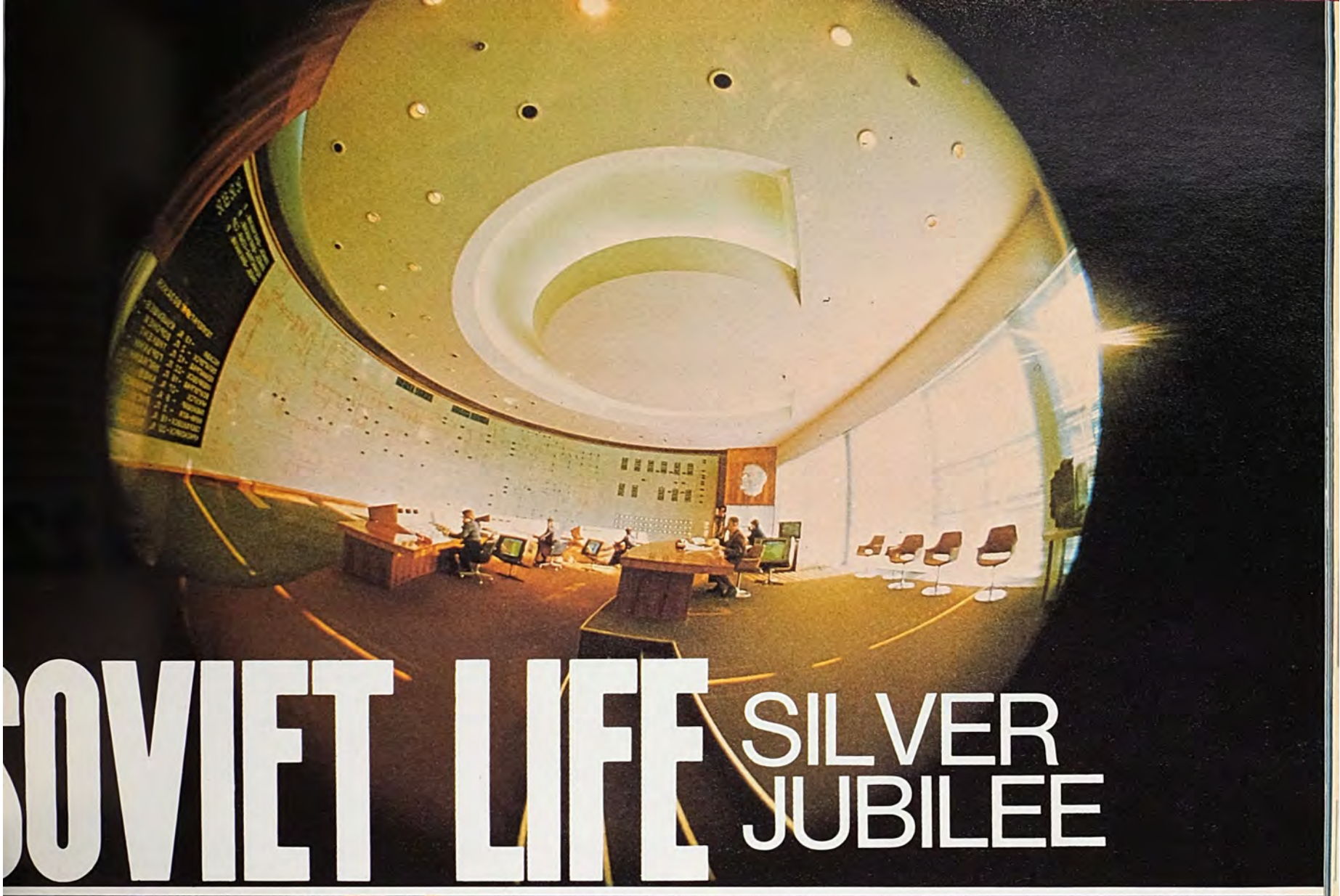
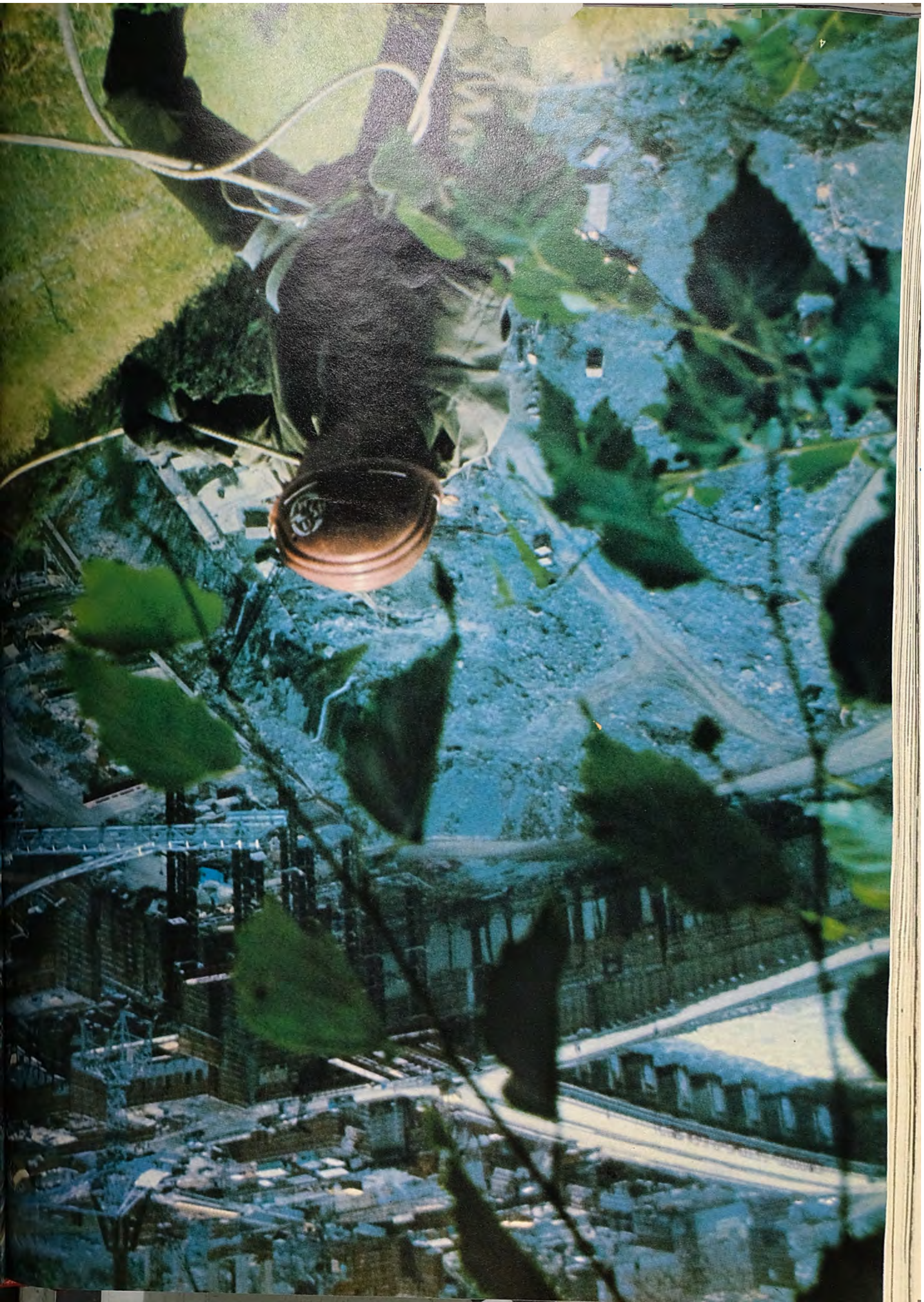
Vladimir Vatutin tells us how the USSR Research Institute of Physical Education is able to predict sports records.



SOVIET LIFE

SILVER JUBILEE

The twenty-fifth anniversary of our magazine coincides with the first year of the USSR's Eleventh Five-Year Plan period. The Soviet economy is becoming more efficient while retaining its inherent positive features—stability, mic growth, full employment and the absence of inflation. Over the next 10 years, the country will emphasize increasing the production of steel, oil and gas, machine tools, and the like, but only insofar as it raises the standard of living and helps solve the entire spectrum of social ms.



Although the output of electricity in the USSR has increased more than seven times over in the past 25 years, construction of hydroelectric stations like the Sayano-Shushenskaya on the Yenesei River in Eastern Siberia continues on as broad a scale as ever.

The USSR annually produces more than 600 million metric tons of oil, including gas condensate, surpassing all other countries in the world.
Below: Scientists at the Institute of High Temperatures of the USSR Academy of Sciences in Moscow test the magnetohydrodynamic (MHD) generator.

ECONOMIC STABILITY GUARANTEES CONFIDENCE IN THE FUTURE

Alexander Guber

The 25 years since the first issue of SOVIET LIFE appeared have been a time of radical transformation of the economic and social face of the Soviet Union. I recall the year 1956, the first year of the Sixth Five-Year Plan period, with mixed feelings.

Eleven years had passed since the victorious conclusion of World r II, and the life of the Soviet people was steadily changing for better. Housing construction on a truly mass scale had begun in the ntry: In 1956 more than two million apartments, or twice as many as the preceding year, were built. The virgin lands plan put into effect in zakhstan and Siberia ensured a growth in the average annual grain tput in the Sixth Five-Year Plan period. And the world's first nuclear wer plant at Obninsk, near Moscow, had been in operation for two years. n 1956 the first international flight of the TU-104, the Soviet passenger took place. The commander of the plane was Boris Bugayev, who is w the USSR Minister of Civil Aviation. However, it was still a year before first artificial Earth satellite was launched in 1957, and five years be- e Yuri Gagarin's memorable flight.

Also at about the same time the large-scale development of Western berian oil and gas deposits began, an event that was to turn that region o the main fuel supplier of the country.

Besides the successes in our economy, there were also difficulties, any of which struck the then rare visitors from the West. The over- elming majority of our city dwellers lived in so-called communal apart- ents (one or two rooms per family). There were almost no private cars. w people had TV sets, refrigerators, vacuum cleaners and washing achines. The level of consumption of the most valuable food products as comparatively low.

We in the USSR, however, didn't even notice the lack of these items. ter going through the gruesome war years, we considered life normal 1956.

The Soviet Union lost 20 million lives in World War II. In 1956 there ere 4.5 million men less than before the attack of nazi Germany, and the rth rate was below the prewar level. Even now, in the 1980s, we are still eling resurgent echoes of the war.

It is difficult to list all the accomplishments that have occurred over the st 25 years.

The output of electricity has increased by more than seven times. What oes this mean, apart from the obvious growth of power usage per person industry? In 1956 only four per cent of the Soviet railroads were elec- fied: The figure is now 30 per cent. The impact of this gain can be dged by the following example. If all of our locomotives were still steam- owered, they would burn one-third of the nation's coal output. Electric action makes labor productivity more than three times greater than eam and 20 per cent greater than diesel. Today's transportation costs re 10 to 15 per cent lower than they were with diesel locomotives.

In agriculture the use of electricity has grown by over 25 times. This eans that the working and living conditions on the farm have com- etely changed.

At the beginning of the Sixth Five-Year Plan period, the output of l and gas condensate was 70.8 million tons—several times less than the en annual output of the U.S. Today that amount would not even be nough to meet our commitments to our Council for Mutual Economic ssistance (CMEA) partners, who will receive about 400 million tons of oviet oil during the period 1981 through 1985. At present the USSR an- ually produces more than 600 million tons of oil, including gas conden- ate, leaving all countries of the world far behind.

Natural gas extraction has grown even more rapidly. In recent years e annual increase has exceeded by three to four times the annual out- ut of the mid-fifties.

The output of cars has gone up, too, and it is now 13 times more than was 25 years ago. The number of tractors produced has almost quad- upled, and there has been a still greater increase in the production of omputer equipment, color TV sets, refrigerators and other household ppliances.

Today eight out of every ten urban families live in their own apartments. The average wage was increased by about 2.5 times, while the general level of retail prices for basic goods and products, charges for services and taxes has remained stable.

But there is more to it than the enormous growth of the country's economic potential and its capacity to satisfy the requirements of its citizens. The guidelines of development have greatly changed, too.

At the beginning of the Sixth Five-Year Plan period virtually everything the country produced—from watches to oil and from shoes to steel—was in short supply. The necessity-determined thrust of our economy was on quantitative growth. Today, however, the picture is different. The task of saturating the domestic market with goods has mainly been solved, and, therefore, more attention can now be given to quality.

By the beginning of the eighties, a colossal production, scientific and technical potential had been created in the USSR. The vast territories of Siberia, the North, the Far East and Central Asia are now being drawn into the economy on a broader scale. However, throughout the country the extensive factors of development have been practically exhausted. The new tasks of shifting to the intensive factors of growth, making production more efficient and raising the quality of output are coming to the fore.

This signifies a very profound restructuring of the Soviet economy which, among other things, demands that our economic managers begin to think in a new way. This question was raised at the Twenty-sixth Congress of the CPSU, held earlier this year.

What is the meaning of this new requirement?

Not counting the time taken away by the wars imposed on us and by the rebuilding of that which had been destroyed, the Soviet Union has had only a little more than four decades for peaceful construction. The country got used to working and living in a fast-developing but not always fully balanced economy. The managers grew up in this situation, became accustomed to it and often accepted the imbalances and the consequences, for example, violations of contract obligations or delays in construction, as something that could be lived with. Hence, a stereotyped way of thinking developed which is totally out of place today, when the country has seriously embarked on a path of balanced economic growth.

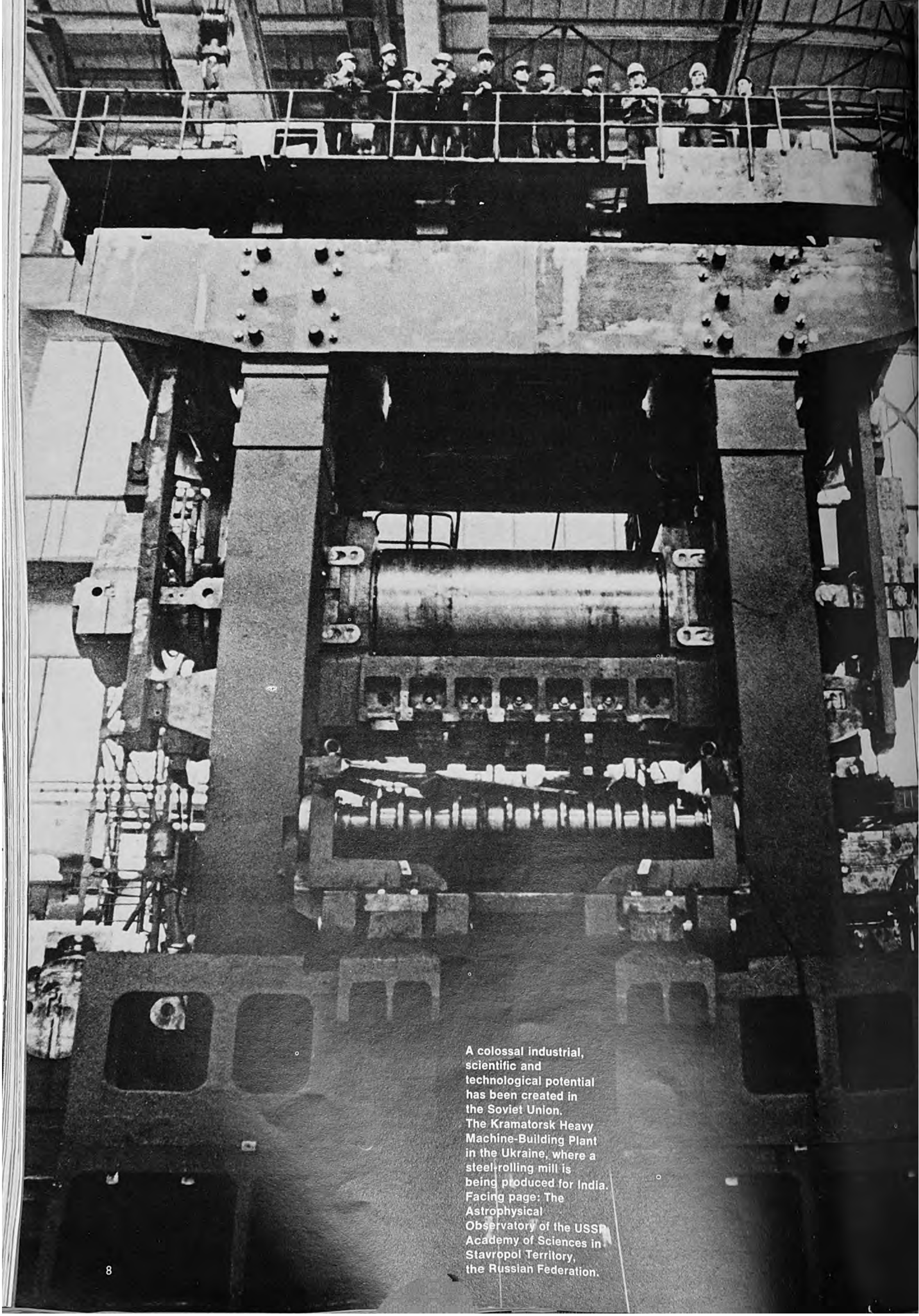
This creates a number of new demands on management, primarily on planners. The Soviet Union's goal is to achieve a well-rounded economy and ensure coordination. To expand production under a balanced economy, a deeper study of the social requirements and the laws governing their development is needed.

One feature of the new stage is that the economy is consistently being geared to raising the people's well-being. We need increases in the output of steel, oil, machine tools, etc., only inasmuch as they serve to improve our living standards and to solve the entire spectrum of social tasks. Otherwise the growth of the economic potential is meaningless.

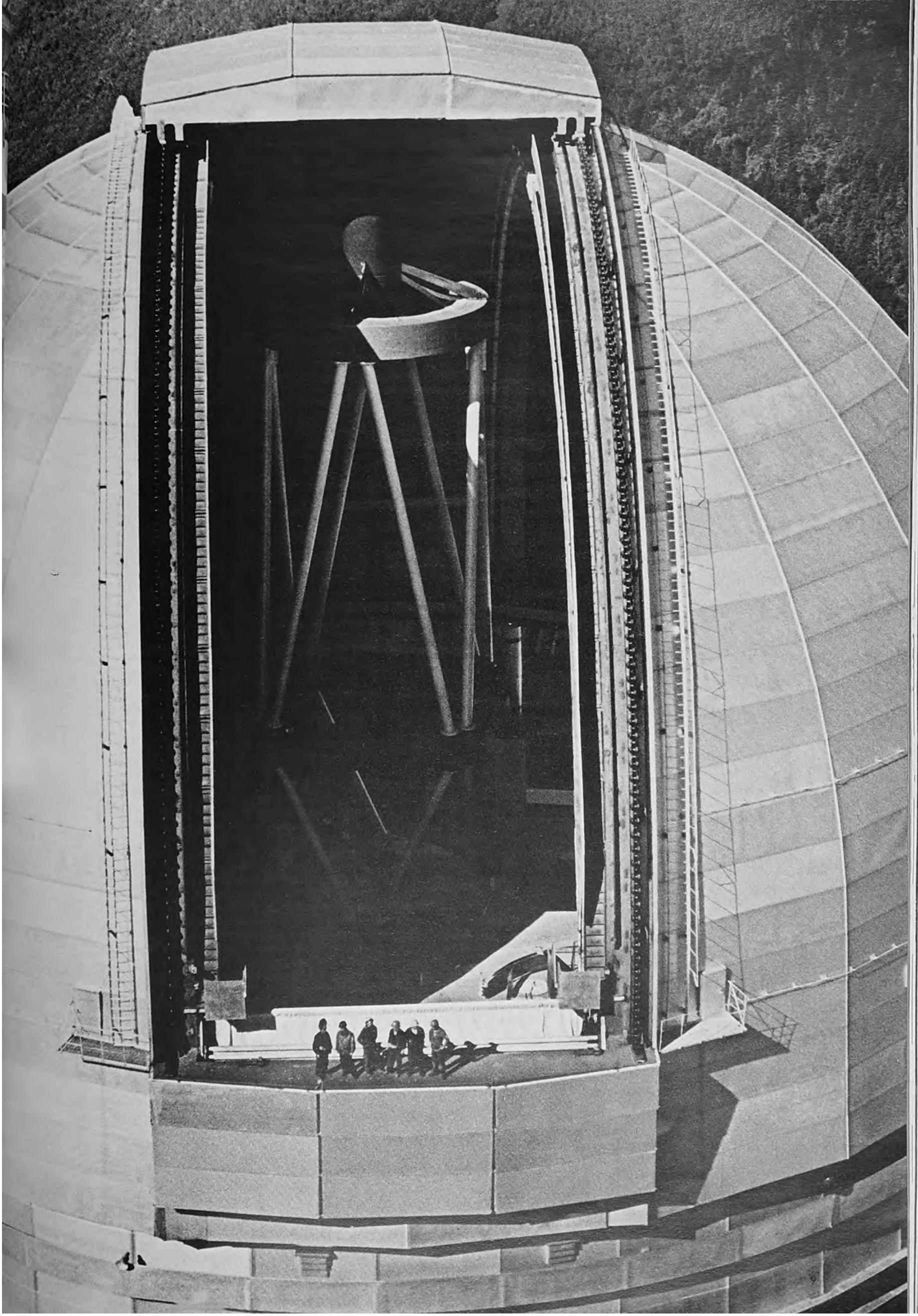
SOVIET LIFE magazine is celebrating its jubilee during the first year of the Eleventh Five-Year Plan period. The starting base shows that our economy, while preserving its intrinsic positive qualities, such as stable and dynamic growth, full employment and no inflation, is becoming more efficient and synchronized. Though the optimal levels of both are still far away—it will take years to achieve them—the initial results are encouraging.

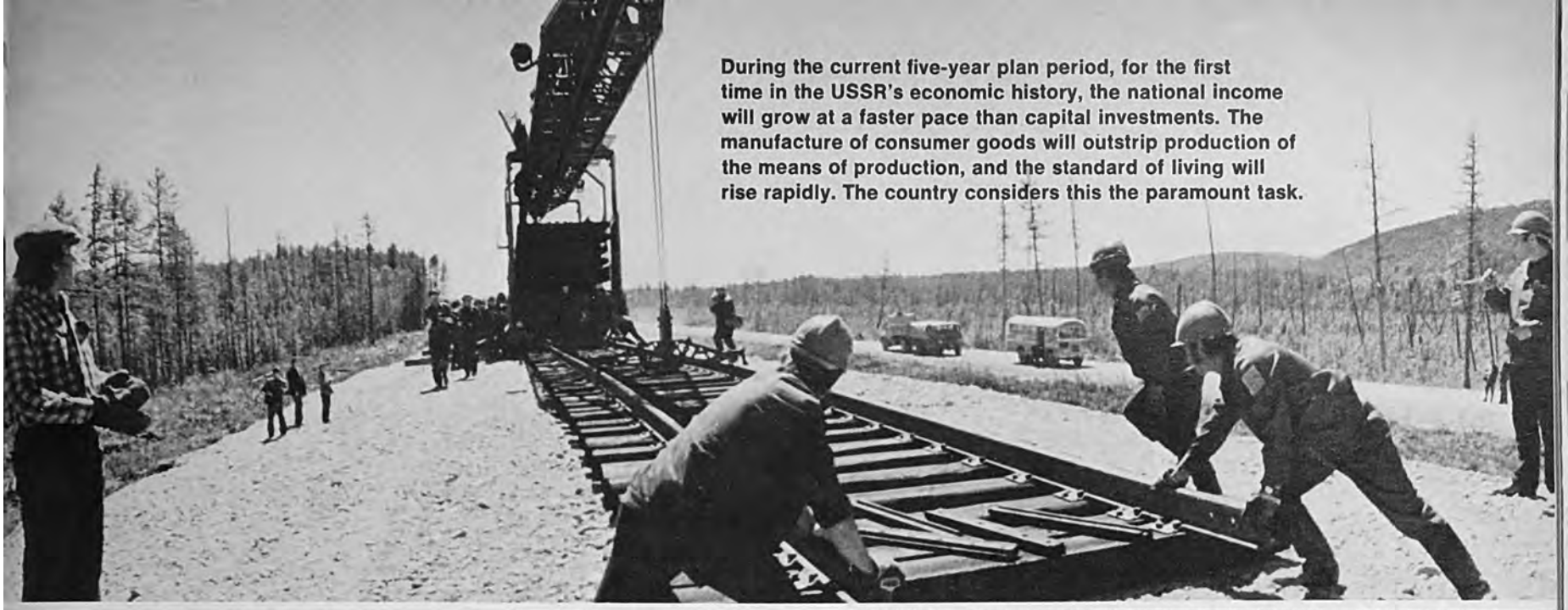
The targets of the first six months have been considerably overfulfilled. Higher labor productivity accounts for over three-quarters of the rise in industrial production. We attach primary importance to this factor, especially in connection with the unfavorable labor resources situation that was caused by the remote demographic effects of the war.

For the first time in the economic history of the USSR, the national income in the current five-year period will grow more rapidly than capital investments. And the consumer goods industries will grow more rapidly than capital goods production. Record sums of money are being earmarked for social tasks. Today our increased potential allows us to more quickly achieve the main aim of raising the well-being of our people. ■

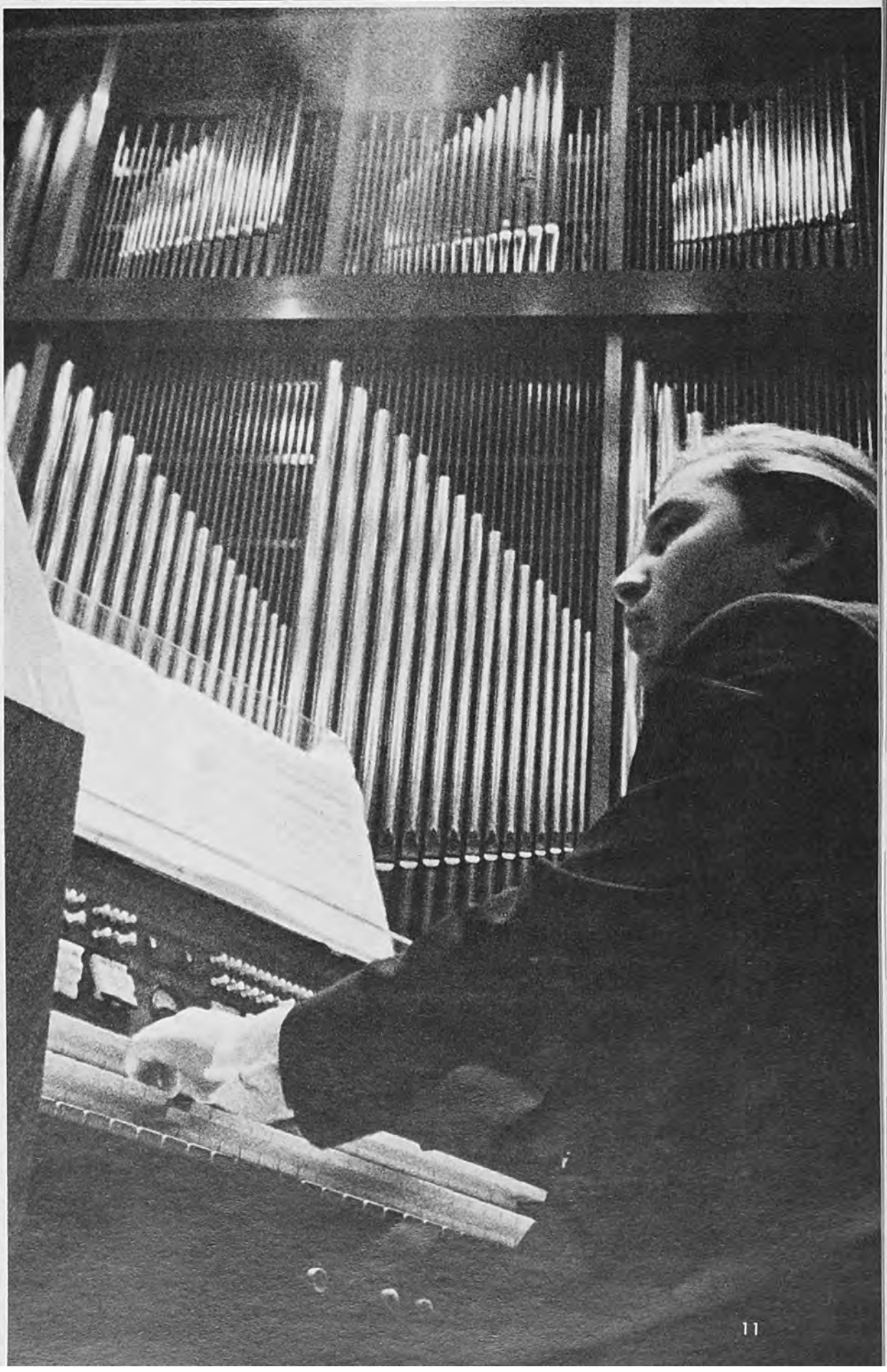


A colossal industrial, scientific and technological potential has been created in the Soviet Union. The Kramatorsk Heavy Machine-Building Plant in the Ukraine, where a steel-rolling mill is being produced for India. Facing page: The Astrophysical Observatory of the USSR Academy of Sciences in Stavropol Territory, the Russian Federation.





During the current five-year plan period, for the first time in the USSR's economic history, the national income will grow at a faster pace than capital investments. The manufacture of consumer goods will outstrip production of the means of production, and the standard of living will rise rapidly. The country considers this the paramount task.



The working and living conditions of the rural population have changed dramatically in the past 25 years. Scientific surveys conducted in all parts of the country point to the ways Soviet agriculture can continue the upward swing. Below: The research ship *Academician Korolyov*.

THE MAGAZINE TAKES ITS FIRST STEPS

By Yakov Usherenko

n April 1956, a small nineteenth century mansion on Chekhov Street in downtown Moscow became the editorial office of the magazine *USSR,* now called SOVIET LIFE. The publication was to be printed in English and was to be geared to American readers.

In October of that year, newsstands in New York, Washington and :ago as well as other major American cities began to sell the first e. At the same time Soyuzpechat, the Soviet newspaper and magazine ributing agency, began selling *America,* the U.S. illustrated monthly, over the Soviet Union. Thus, in 1956, under an agreement reached veen the governments of the Soviet Union and the United States, a ll bridge of understanding was built between the peoples of the two it powers.

he event was hailed by the Soviet public, which still had fresh memo- of the joint struggle of the two nations against fascism and for the verance of a number of European countries from the yoke of Hitlerism. officers and men of the Soviet and American armies who met and braced one another at the Elbe River in April 1945 were still alive and spering. And the interest in the USSR was certainly heightened in the ted States at the time.

Opening on Chekhov Street

lthough a quarter-century has passed since the first issue of the Soviet gazine came off the press, I can still recall clearly the first people who ne to the mansion that had been put at our disposal by the Moscow y Soviet for use as our editorial office.

here was a three-man staff at the beginning: Nikolai Zhiveinov, the hor of a number of books recommended as study guides for Soviet hools of journalism; Mark Vistinetsky, a talented writer on foreign affairs, o fought in World War II; and me. Enver Mamedov, a man with experi- ce in organizing and running editorial offices, was appointed editor in ief a short time later.

We took to the phones from the very first hours of work in the new ice, telling our future contributors—writers, journalists and illustrators that we were in business.

Our reputation grew, and people in other cities besides Moscow began aring about our existence. For instance, the popular Soviet poet Vissa- n Sayanov called us from Leningrad: "If you need a feature story about y city for American readers, I'd be glad to shelve my verses for a while d write it for you."

We received a letter postmarked Alma-Ata, capital of Kazakhstan, from well-known Kazakh writer Gabit Musrepov, who was ready to write a ory about his republic, where, at that time, the development of vast virgin nds had started. (There is a stirring account of this project in Leonid ezhnev's book *The Virgin Lands* published in 1978.)

From the point of view of time, the launching of our magazine was most rtunate. It emerged after the Twentieth Congress of the Communist Party the Soviet Union, which emphasized that the Soviet Union would con- nue to promote Lenin's bequest of the peaceful coexistence of states with fferent social systems, that it would steadfastly work to prevent an- her war.

This naturally stemmed from our entire internal policy: The Soviet eople were occupied with implementing a sweeping construction pro- ram. Suffice it to say that during the 1950s thousands of large-scale in- ustrial enterprises were built and put into operation, and a housing rogram got under way that provided up to two million new apartments annually. We editors of the magazine regarded it as our duty to tell Americans about all that.

Americans Suggest Topics

Deciding which topics should be covered in the coming issues wasn't easy. On the one hand, we were supposed to keep abreast of what was happening in the Soviet Union and select the most interesting items. On the other hand, we had to consider the needs of our readers overseas and their ideas about life in our country. We wanted them to know the truth about our foreign and internal policies.

The magazine's staff and its contributors—people who had been to the United States—attended the meetings at which ideas for articles were discussed. Among those who joined the magazine was Yuri Fantalov, who is now the editor in chief of Novosti Press Agency Publishing House (APN). He had graduated from the Bolshoi Theater School of Choreography before switching to a career in journalism. As a member of our staff, he visited the United States with the Bolshoi Ballet and later with the Education in the USSR exhibition.

Tours of Soviet performers in the U.S. were usually organized by the well-known impresario Sol Hurok. He visited our office on Chekhov Street each time he came to Moscow. Sol was a fine connoisseur of the arts and a true friend of the Soviet Union who favored extensive cultural relations between the two great powers.

We also attached great importance to our mailbag. Letters began coming as soon as the magazine hit the streets. American readers suggested topics they wanted to see in our issues. For instance, at the end of 1956 we received a letter from two oilworkers in the U.S. asking us how the USSR extracted oil from the bottom of the Caspian Sea.

Indeed, for the first time in the world, offshore deposits began to be developed in the Neftyanyye Kamni (Oil Rocks) area close to Baku, Azerbaijan, more than 30 years ago. Alexander Mokletsov took excellent pictures there in stormy weather (the Caspian is turbulent 260 days of the year).

Thursday Seminars at the Office

The talks weren't always held on Thursdays, but they came to be called Thursday seminars in the annals of our publication. The initiator was Yuri Fantalov, by then our editor in chief. Our permanent staff and free-lance writers listened to Soviet leaders, scientists, writers and journalists who had just come back from the United States. Their observations and proposals were extremely valuable for our work on forthcoming issues. For instance, I remember very well the seminar on education in the United States given by Mikhail Prokofyev, the present USSR Minister of Education. He said that Americans wanted to know more about the Soviet Union's educational system, colleges and campus life. We naturally took this into consideration when we prepared a number of articles on the topic.

It is natural for the peoples of the Soviet Union and the United States to be knowledgeable about each other's political, economic and cultural affairs. A lively and fruitful exchange of information and ideas allows for a closer and a better understanding of each nation's past and present developments.

The 300 issues of SOVIET LIFE that have appeared over the past 25 years have, without a doubt, played a significant part in telling American readers about the Soviet way of life, about the Soviet people and how they work and strive for peace and friendship with all countries. ■

GETTING TO KNOW SOVIET LITERATURE

NOVOSTI PRESS AGENCY—the agency providing material for SOVIET LIFE magazine—is sponsored by four Soviet organizations: the USSR Writers Union, the Union of Soviet Societies for Friendship and Cultural Relations with Foreign Countries, the USSR Journalists Union and the Znaniye (Knowledge) Society. For the anniversary issue of the magazine, correspondent Lyudmila Yenyutina talked with a representative of each organization.

YURI VERCHENKO is secretary of the board of the USSR Writers Union.

Q: What is the USSR Writers Union?

Verchenko: The USSR Writers Union is an organization for professional writers in the Soviet Union. The organization's membership numbers about 9,000 and includes prose writers, poets, playwrights, screenwriters, literary critics and translators.

Among its other responsibilities the union publishes creative works, assists inexperienced writers as well as other members of the union and represents Soviet writers in the world's literary community.

Q: What is the role of SOVIET LIFE magazine as you see it?

Verchenko: As we expected at its "christening," the magazine has become another important channel through which Americans can become acquainted with the best of Soviet literature and its authors.

Besides articles commemorating Mikhail Sholokhov's seventy-fifth birthday and the centennial of the birth of Alexander Blok, the great Russian poet of the early twentieth century, in recent years the magazine has published an essay on the Bashkirian poet Mustai Karim and the Russian writer and poet Sergei Narovchatov, a dialogue between poet Yevgeni Yevtushenko and literary critic Yevgeni Sidorov and excerpts from *Malaya Zemlya (Small Land)* by Soviet President Leonid Brezhnev and from the memoirs of Marshal Georgi Zhukov.

SOVIET LIFE takes an active part in developing Soviet-American literary contacts. The magazine has published numerous accounts of the meetings between the writers of the two countries, writer Yuri Trifonov's impressions of his trip to the U.S. in 1978, items by literary critic Yuri Khazanov about the publication of the Russian translation of a book of American folklore, an excerpt from a book about the Black singer and actor Paul Robeson written by the well-known Soviet writer Boris Polevoi, and William Saroyan's interview after his tour of the Soviet Union in 1978.

Q: You mention that SOVIET LIFE is "another important channel." What are the others?

Verchenko: Hundreds of works by Soviet authors are being translated into foreign languages, including English. At the book fair in Frankfurt am Main, Federal Republic of Germany (FRG), last year, more than a hundred contracts for the translation and publication of Soviet books were signed with Western publishers.

Q: When did the conferences of Soviet and American writers begin, and how often do they meet?

Verchenko: Since 1977 the USSR Writers Union has arranged annual meetings between Soviet and American writers. In my opinion, it is impossible to overestimate the significance of these contacts.

As people get to know each other better, they begin to understand each other's aims and aspirations and, often, learn from each other. In short, mutual understanding is always fruitful.

For instance, as a result of one of the Soviet-American writers' conferences, works by John Updike and William Styron were translated and published for the first time in the Soviet Union in the magazine *Inostrannaya Literatura (Foreign Literature).* This magazine, which mainly publishes translated works of foreign authors, is published by the USSR Writers Union and comes out in 500,000 copies.

Q: Could you speak in some detail about the publication of books by American authors in the Soviet Union?

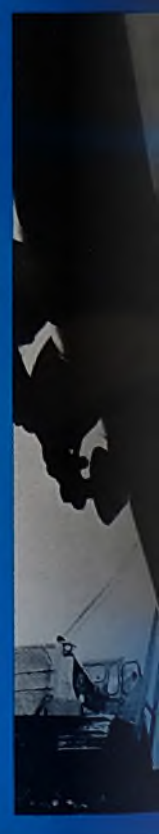
Verchenko: Since World War II the USSR has put out more than 2,000 works of fiction by American writers in a total circulation of 185 million copies.

Soviet people know and love Theodore Dreiser, Jack London, Ernest Hemingway, Walt Whitman, Henry Wadsworth Longfellow and William Faulkner. Books by Kurt Vonnegut, John Cheever, Arthur Hailey and many other writers come out in large editions that are quickly sold out.

Q: In this case, perhaps, shouldn't larger editions be issued?

Verchenko: Of course there should, though even now the number of books and brochures published annually in the USSR exceeds 80,000 titles printed in nearly two billion copies. Therefore, the Soviet Union leads more than any other country in the world.

Dr. Robert Miner (left) from Princeton University in one of the laboratories of the Institute of Organic Catalysis and Electrochemistry in Alma-Ata, Kazakhstan, 1975. Right: American specialists at the Krasnoyarsk Hydroelectric Power Station in Siberia, 1977.



Soviet and American archeologists working together on Olkhon Island in Lake Baikal, 1975. Right: Surgeons from the USSR and the U.S. perform an operation implanting an artificial heart in a laboratory animal at the Institute of Organ and Tissue Transplantation in Moscow, 1979.

American scientists at the Institute of Limnology of the Siberian Branch of the USSR Academy of Sciences, 1980. Right: A machine produced by the Caterpillar corporation in the U.S. is used to lay a gas pipeline from Orenburg to the western border of the USSR, 1976.

MUTUAL UNDERSTANDING AND FRIENDSHIP

KRUGLOVA is chairwoman of the presidium of the Soviet Societies for Friendship and Cultural Relations eign Countries.

n was the Union of Soviet Societies for Friendship and Relations with Foreign Countries founded, and how did to cosponsor the Novosti Press Agency?

a: It was founded in 1925 with the aid of such internaknown writers as Maxim Gorky and Alexei Tolstoy. Press Agency and our union have common goals: oth strive to develop and strengthen friendship, mutual under-, confidence and cultural cooperation with the peoples of other s, including the United States of America.

gether more than 50 million Soviet people belong to your societies. they?

a: Among our members you will find research workers, railroad rs, museum specialists, taxi drivers, members of the press, librarnovie stars, factory workers, in short, people from all walks of life.

are contacts with societies in the U.S. established?

a: In 1943, at the very height of the struggle of the Soviet and an peoples against fascism, the National Council of American-Friendship was set up in New York City. Today the council coes the work of 19 regional friendship societies in many large areas es of the U.S.

61 the USSR-USA Friendship Society was created within the frame- the Union of Soviet Societies for Friendship and Cultural Relations reign Countries. It assumed the job of developing relations between ple of the two countries.

ears the USSR-USA Friendship Society's work with the National was based on two-year cooperative programs. It has since been d to increase the time to three years. Work on the whole is carried he same areas as with other countries, that is, in exchanging dele-, films and exhibitions.

e Soviet Union we arrange showings of American films and funcevoted to significant events in American history and culture, for e, the day commemorating U.S. President Franklin D. Roosevelt, ghtieth birthday of Duke Ellington, the 100th birth anniversary of poet Robert Frost and innumerable other memorable dates.

In recent years the USSR-USA Friendship Society has staged individual exhibits of four American artists—Boris Chaliapin, Rolland Golden, Minisa Crumbo and Linda Shaepper.

In October a conference of Soviet and American people will meet in the U.S. to discuss peace and security. Many organizations in the USSR have already shown great interest in this conference—such as the Soviet Peace Committee, the Committee of Youth Organizations, the Soviet Women's Committee, the All-Union Central Council of Trade Unions (AUCCTU), and others.

Q: With what other American organizations do you maintain contacts?

Kruglova: There are several of them, including the World Trade Centers Association, the American Committee on East-West Accord, the Chkalov Committee, the American Friends Service Committee and the Citizen Exchange Corps.

Ties with these organizations grow every year, and that fills us with joy. It was gratifying for us to learn, for example, that more than 50,000 Americans visited the exhibition of contemporary Soviet pictorial art in New Orleans and New York organized by the World Trade Centers Association.

We also have good contacts with the Chkalov Committee in Vancouver, Washington. In 1975 a delegation from our organization attended the unveiling of the monument in Vancouver to honor the Soviet crew who, with Pilot Valeri Chkalov, made the first nonstop flight from the USSR to the USA across the North Pole in 1937.

Last summer, at the invitation of the Chkalov Committee, a delegation from our society visited the U.S. We signed a cooperation agreement for five years. I am sure that will give fresh impetus to our work.

Q: How do you think the magazine SOVIET LIFE helps to fulfill your society's aims and tasks?

Kruglova: I am happy to note that SOVIET LIFE has become a good source of information for Americans to learn about Soviet people and the Soviet way of life. The magazine carries reports on meetings between Soviet and American youth, on exhibitions of American artists in the USSR and on activities of friendship societies with different countries. In this way it helps promote mutual understanding and confidence between the Soviet and American peoples. This is what the society is striving for.

Power engineers from the States in the engine room of the Krasnoyarsk Hydroelectric Power Station, 1977. Below: American and Soviet specialists at the Sayano-Shushenskoye Hydroelectric Power Station in Siberia, 1977.

Dr. Glenn Seaborg (right), then chairman of the U.S. Atomic Energy Commission, and Soviet Academician Alexander Skrinsky at Akademgorodok, Novosibirsk, 1971. Left: Engineers from Occidental Petroleum Corporation at the construction site of a seaport near Odessa on the Black Sea, 1978.

John McCone (left), then chairman of the U.S. Atomic Energy Commission, and Soviet scientist Vasili Yemelyanov on board the *Lenin*, the USSR's first nuclear-powered icebreaker, 1959.

JOURNALISTS' RESPONSIBILITY

VICTOR AFANASIYEV is the editor in chief of *Pravda* and chairman of the board of the USSR Journalists Union.

Q: Why was the USSR Journalists Union established, and what are its goals?

Afanasiyev: The USSR Journalists Union was set up to unite journalists, to promote an exchange of professional experience and to help train people. This was no easy job since our vast country accounts for many large and small national and ethnic groups, but it was a necessary one. Besides, we wanted to establish contacts with our foreign colleagues. Today about 80,000 people belong to the union.

Q: What are the concerns of the USSR Journalists Union on the international scene?

Afanasiyev: Our union is associated with the International Organization of Journalists, which represents 130 countries. In addition, the union maintains contacts with 110 journalists organizations. Up to 150 delegations of foreign colleagues visit the Soviet Union annually.

Particularly close are our ties with journalists in socialist countries. Recently relations have improved with our colleagues in many countries of Western Europe (namely, Italy, the FRG and France) as well as in Latin America, Africa and Asia.

Q: What is the benefit of these contacts?

Afanasiyev: In my view, contacts with foreign colleagues are very beneficial because they enable Soviet journalists to see more, to understand better and, consequently, to write more thorough reports on the cultural, economic, political and social developments in other countries.

We in the Soviet Union do not prevent members of the foreign press from examining the Soviet way of life and making the information they obtain available to their readers. All who come here with this purpose in mind are always welcomed.

With tensions persisting in the world, I believe that journalists should strive to improve international relations by promoting friendly contacts and cooperation among nations. Opportunities are ample for this, and they should not be missed.

Q: What kind of relationship do Soviet journalists have with their counterparts in the U.S.?

Afanasiyev: Until 1977 our union was on rather close te with four major organizations in the U.S.: the American P Institute (API), the National Newspaper Publishers Associa the American Newspaper Publishers Association and the tional Press Photographers Association, and meetings betw our organizations were more or less regular.

In July 1977 the USSR Journalists Union hosted a delega from the American Newspaper Publishers Association led Harold Andersen. The group visited Moscow, Leningrad, Tal Kiev and Novosibirsk. Since then, however, contacts h virtually broken off.

Q: What are the prospects for future contacts between Soviet and Am can journalists?

Afanasiyev: I am confident that the deeper and more numerous these c tacts, the better it is for both countries. Soviet-American relations h slackened to a point unheard of since the Cuban missile crisis. The p ent situation cannot be ignored because relations between the U.S. the Soviet Union largely, if not crucially, determine international af in general. The good will of the Soviet Union was expressed from the p form of the Twenty-sixth CPSU Congress by Leonid Brezhnev. He forward an extensive program of clear-cut, practical proposals to impr the international situation and build trust between nations.

Q: Do you think SOVIET LIFE succeeds in bringing the people closer gether?

Afanasiyev: Yes, the magazine, in my opinion, is important. It does its to draw an objective picture of both our achievements and our setba The Soviet Union is a relatively young country, following a road that never been trodden before. It is only natural that it encounter difficu along the way.

Q: What would you like to wish SOVIET LIFE readers?

Afanasiyev: A former pilot and veteran of World War II, I'll soon see third grandchild born, and I want a peaceful sky to shine over us. I deeply convinced that peace should be preserved at all costs. My vie undoubtedly shared by all Soviet journalists who are prepared to con ute in every possible way to the efforts to better the international situa to consolidate peace and friendship among peoples, above all, betw the U.S. and the Soviet Union.

American concert pianist Artur Rubinstein in the Grand Hall of the Moscow Conservatory, 1964.

Amerindian artist Minisa Crumbo presents her painting *Makombo, Evening Thunder* to the Pushkin Museum of Fine Arts, 1978. Right: Astronaut Frank Borman (center) and his wife at the Hermitage in Leningrad, 1969.

The Nitty Gritty Dirt Band from the U.S. in Moscow, 1977. Top: Students from the University of Cincinnati at the Lenin Teachers Institute in Moscow, 1978.

ENLIGHTENMENT MISSION

MICIAN NIKOLAI BASOV is an outstanding Soviet phys- Nobel laureate, director of the Lebedev Institute of of the USSR Academy of Sciences, and for many years an of the board of the USSR Znaniye (Knowledge) .

ase describe the USSR Znaniye Society and its goals.
Znaniye is a public organization with 3.5 million rs. Among them are research workers, engineers, nic managers and specialists, government officials and ve farmers.

society seeks to popularize scientific and political knowledge the people of the Soviet Union. We have the largest publishing in the country. Last year alone it published 700 different books and lets in a total printing of 75 million copies. In 1980 people from e delivered 26 million lectures attended by 1.5 billion people.

lly, our society conducts a large part of its work through a network ple's universities. These universities, which are open to the public, t analogous to the usual educational establishments. Their purpose of all, to disseminate knowledge. All Soviet citizens who choose a t of interest are able to hear a two-year series of lectures on it. sent 13 million students attend the 47,000 people's universities.

viously your work requires huge financial expenditures. How are nded?

The society's activities are, for the most part, maintained through luntary cooperation of its members. About 900,000 instructors—9,000 of whom hold scientific degrees and titles—donate their time k in the people's universities. For instance, the faculty of a people's sity may include an academician and a minister, a manager of a factory and a Communist Party leader, a writer and an actor or an and a journalist. Incidentally, this is the foundation of Znaniye.

you agree that the participation of world-famous scientists in your e series takes them away from research which could be more prof- channeled into science?

Absolutely not. On the one hand, we feel that it is our civic respon- to bring knowledge to as many people as possible. On the other, y reaching the broad masses of people can our ideas become a real ting force in social development.

finite enlightenment functions were also assigned to SOVIET LIFE at the time of its founding. How do you think it has been doing in this area?

Basov: Acting as a sponsor of the magazine, our society assumed that SOVIET LIFE would tell Americans about the life of Soviet people and about our achievements in different spheres of human knowledge. In our opinion, the magazine has been satisfactorily accomplishing this mission.

It regularly publishes stories about Soviet scientists, reports about the research going on in our laboratories and articles on the most interesting achievements in Soviet medicine, physics and other fields.

Q: Does your society maintain contacts with American scientific organizations?

Basov: For many years we had good creative cooperation with the American Association for the Advancement of Science (AAAS). Prominent American scientists came to the Soviet Union to give lectures on various topics, such as architecture and the environment, cancer, education and personnel management in the U.S.

At the invitation of the AAAS such leading Soviet scientists as Academician Victor Zhdanov, director of the Institute of Virology, visited the United States. He spoke about the development of health services in the USSR. And Valentin Shteinberg, director and corresponding member of the Institute of History of the Academy of Sciences of Latvia, spoke to American specialists on the Soviet approach to solving environmental problems. It is sad that over the last two years these contacts have for the most part been suspended.

Q: What are the prospects for future contacts?

Basov: I am optimistic. The USSR and the U.S. possess huge scientific potentials that can be of great benefit to the peoples of both countries. I judge this by the contacts that I personally and the institute I lead had or partially still have. We are continuing to work on several joint projects. For example, we are involved in joint research on laser thermonuclear synthesis with scientists at laboratories in New Mexico and Vermont.

I have also retained good contacts with many other American specialists, including Professor Charles H. Townes, with whom Alexander Prokhorov and I jointly received the 1964 Nobel Prize for Physics. I try to follow the progress of his work, and he shows interest in mine. This is natural, and beyond all doubt mutually advantageous.

Roy Clark, ountry music singer, in Moscow, 1976. t American ballerina va Yevdokimova and French ballet master Attilio Labis perform in the USSR, 1976.

Duke Ellington gives autographs in Moscow, 1971. Below: Well-known artist Rockwell Kent with his wife at his exhibit in Moscow, 1960.

His Brother's Children, an amateur folk group from San Antonio, Texas, in Moscow, 1977.

Congratulations from Readers

After our announcement in the July issue that SOVIET LIFE would be 25 years old in September, letters of congratulations began pouring in. There is not enough room to print them all, but we promise to answer each letter individually. Below we publish excerpts from some of the letters.

Congratulations to you and all the good people who have produced my favorite magazine these past twenty-five years!

I well remember the first issues of SOVIET LIFE in 1956. At that time I had to put in a special order at the newsstand to insure getting the next month's copy, and have read practically every issue since then. Needless to say, I have enjoyed each one.

Those early issues of SOVIET LIFE helped me to appreciate a trip to the USSR in 1965 and led to further trips in 1967, 1969 and 1971. Each new issue brings pleasant memories of past experiences.

I am 71 now and am hoping that I can take another trip to the Soviet Union soon. If not, I will always have another issue of SOVIET LIFE to look forward to.

Sincere best wishes on the 25th anniversary of your magazine.

Harvey L. Cole
Renton, Washington

I have been reading your magazine for the *full 25 years of publication.*

My family and I have enjoyed your magazine—the beautiful colored pictures of various areas of the Soviet Union are always welcome. Articles on family life and sporting events are enjoyed.

I have been, and am, a high school social studies teacher. Frequent references to your magazine have been made by me in my approximately 30 years of teaching.

Thank you.

Roy M. Baldwin
Goshen, New York

I have been a subscriber to your most interesting publication since some time in the middle of 1968. It might intrigue you that my reason for subscribing was the fact that I myself appeared on the front cover of your "sister" publication "AMERIKA" earlier in that year and I thought it would be fun to find out what the other publication was like. I have been a subscriber ever since and with much pleasure.

I appeared on the cover of "AMERIKA" because its editors thought it would be interesting to Soviet readers to learn a bit about the life of Soviet exchange students studying in the United States and chose two who were at Stanford University.

The exposure in "AMERIKA" was fascinating because, when later in the year with my wife and daughter we visited the Soviet Union, I found that we were already famous wherever we visited in the Soviet Union! Thus, I know from personal experience that "AMERIKA" is an effective communication tool for the building of understanding between our countries, and I earnestly hope that, from your point of view, "SOVIET LIFE" is doing the same kind of job here in the United States.

Laurence Dawson
Los Altos Hills, California

The information that I receive each month through your magazine provides me with many insights into your country. I have been subscribing to SOVIET LIFE for just one year and have enjoyed the variety of articles that you present.

One day I hope to have the opportunity to study your language. One always learns a great deal about a country through the study of its language. Until then, I will continue to gain much information about your country and its people through the reading of SOVIET LIFE.

Please continue the good variety of articles, including of course, education among them.

Betty Visser
Marietta, Georgia

After graduating from college in 1956, I began teaching history and geography in the University School here at East Tennessee State University. In both areas I needed up-to-date objective information on the Soviet Union. It was my good fortune that you began to publish SOVIET LIFE (under a former name in 1956) at this exact same time.

I have been a subscriber for the past twenty-five years, reading every issue of the magazine, which has enabled me to keep up with the Soviet Union and its role in international affairs. I have kept each and every issue of the magazine and am proud to be a holder of these magazines for continued reference. This has included several moves.

Since 1964 I have been a professor of social science education with a primary responsibility for teaching young teachers in training. In every class I have used the SOVIET LIFE materials to enrich the learning of many new teachers.

I look forward to many more years of reading SOVIET LIFE. Thank you again for this fine effort to enable American readers to know more about the Soviet Union.

George A. Finchum
Kingsport, Tennessee

I have been a subscriber of SOVIET LIFE since 1959, and I have enjoyed reading every number since. I always look forward to SOVIET LIFE coming in our mail box.

I am interested personally in ecology and bird watching. I would appreciate it if more space in SOVIET LIFE is devoted to the fauna and flora of the Soviet Union and environmental studies.

Congratulation in your 25th aniversary!

Antoine S. Grayib, M.D.
Topeka, Kansas

I think it was in 1966, while studying at the University of Kansas, that I became acquainted with your fine publication. After completing graduate school, I continued reading SOVIET LIFE every time I went to the library.

Now I am a college professor of Economics and Law and a home subscriber. Many articles of your publication have served as research material for my students, particularly the economics commentaries that Dr. Alexander Birman used to write. Personally, the pages of SOVIET LIFE have enlightened me about various aspects of the Soviet people and territory. They have also contributed to dream up a number of trips. A run from Vladivostok to Moscow in the Tran-Siberian train is a project that I hope to realize in the near future.

Congratulations to past and present contributors on this 25th anniversary of SOVIET LIFE. My thanks to the Soviet people too, for allocating the resources that make this means of education possible.

Professor J. Armand Dubon
San Diego, California

Your July 1981 issue came, and as usual I was delighted with it. I have now been reading your excellent publication for over 10 years. You and your associates are to be congratulated for publishing this great magazine that always has many interesting, well illustrated articles; it is indeed enlightening.

Congratulations, best wishes, and gratitude for your 25 years of publication!

John J. Robinson, M.D.
Lake City, Florida

I enjoy the opportunity to learn about the Soviet Union through the pages of SOVIET LIFE. The stories and pictures help the reader have a more personal contact with the people of the Soviet Union.

As a teacher, I have had the opportunity to speak to students on history and other topics of interest. If they are a good group of students during my presentation, I send the class some material of interest as a reward. The SOVIET LIFE magazine is the one they enjoy most. I'm pleased to provide the students in our county with the opportunity to learn about your country.

James Del Rogers
San Diego, California

I am a political science and history teacher 71 years of age. I find SOVIET LIFE valuable. I make notes and file excerpts, and occasionally take your colored photographs and make 35 mm. slides from them.

Don Rogan
Lynwood, California

Congratulations are indeed in order on the twenty-fifth anniversary of SOVIET LIFE.

I first subscribed to your magazine in August 1974, I was impressed with the very first issue, and I am just as impressed with my latest copy. The quality of the paper, the excellence of the photography, the wide range of subjects covered together with the depth of the coverage, and the complete mastery of the American language, including the idiom, are unsurpassed by any other publication to which I subscribe, and I do subscribe to several.

In seven years, I have noticed no deterioration in the quality of SOVIET LIFE—on the contrary, I often believe it gets better. In these inflationary times, I consider it one of the very best values obtainable for my money; that is why I took advantage of your offer and extended my subscription for an additional three years.

Jesse B. Hartley
Milton, Florida

My name is Margaret Schenker age 81, Hungarian by birth, living in America since 1930.

I have been a reader of SOVIET LIFE since 1942 or 1943. I lived in Camden, N.J. then and was working for the Russian War Relief. A Catholic priest introduced me to a four-page little paper. I don't know exactly what was the name of the paper, but this little paper became the present SOVIET LIFE.

I enjoy SOVIET LIFE very much but the June 81 issue made me cry. I am very proud of your achievement.

In closing I would love to see a better relation between America and the Soviet Union, with an assurance for world peace in my lifetime.

With very best wishes for the future,

Margaret Schenker
Bronx, New York

I have been subscribing to SOVIET LIFE since about 1977, but I have been reading SOVIET LIFE since the mid-1960s. There is always something of interest to me in each issue, and the articles have supplemented and enhanced my travels in the Soviet Union. Congratulations on your twenty-fifth anniversary.

Martina R. Norelli
Arlington, Virginia

SOVIET LIFE magazine has become a very important part of our household since it was first published. Its sane reportage (including the beautiful photography), covering all facets of life in the Soviet republics, has been of great comfort and encouragement to us—as it must be also to all your subscribers.

Our thanks to your staff for a job well done.

Mr. and Mrs. Nicholas A. Shubin
San Francisco, California

Congratulations on your twenty-fifth anniversary of publication of SOVIET LIFE in September of 1981.

As you rightly say, many of the people who contribute to putting together this fine magazine come and go and so I say do many readers who for reasons of time or otherwise drop their subscription. But the magazine finds new writers and new readers and continues to live.

I do not exactly remember the year in which I first subscribed to SOVIET LIFE, but I am sure it has been over 20 years ago since I first found it. Since then I have consistently read it every month, never missing an issue. It was a source of enlightenment and companionship to me and my family, and if it were to stop its publication, we would miss it very much.

Through the years I've made gift subscriptions and have also won some prizes for participating in the many quiz contests you've had. Unfortunately, I did not win a trip to the Soviet Union, but I did take one of my own in 1975. I was happy to see so much diversity and action in building a better life for your people. If my plans come true, I wish to go again in the future.

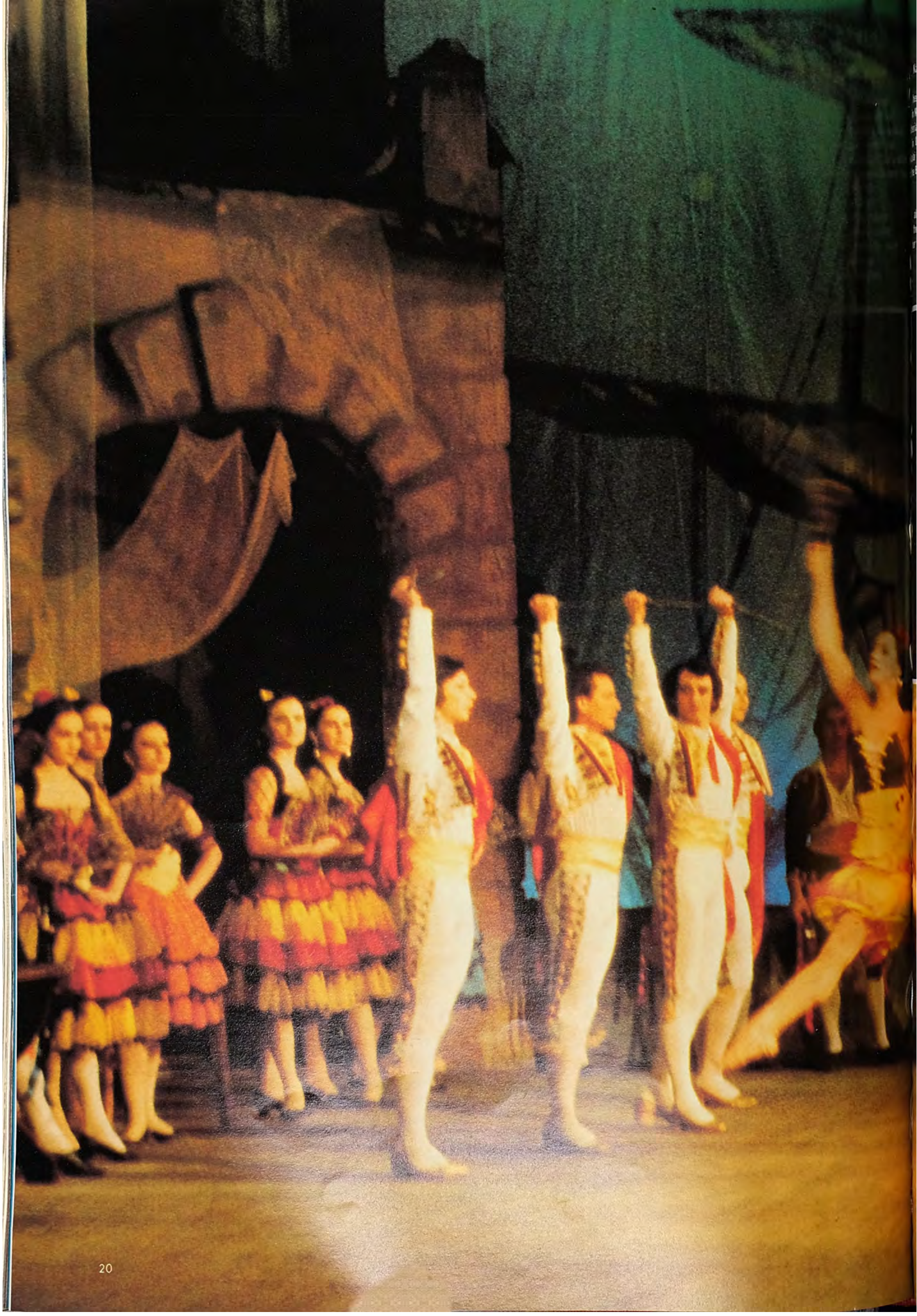
Your magazine expresses the feelings and aspirations of all peace-loving people of the world, and your government strives for détente and cooperation with all nations.

We wish SOVIET LIFE success and good luck for many more years to come.

Pasquale DeAngelis
Rochester, New York

Natalia Chekhovskaya is the lead dancer at the Krasnoyarsk Opera and Ballet Theater and a deputy to the Krasnoyarsk Territorial Soviet of People's Deputies.

THE SAME AGE AS "SOVIET LIFE"



BALLET STAR FROM SIBERIA

Natalia Chekhovskaya easily won the hearts of balletomanes Krasnoyarsk, Eastern ria. Here is the dancer *Don Quixote*. Right: ai Tatarchuk, chairman e Executive Committee of the Krasnoyarsk Territorial Soviet, is always willing to help the young deputy with r duties. Below: After a performance the ballerina celebrates with friends.

KRASNOYARSK, a large city on the Yenisei River in Eastern Siberia, is an important center of nonferrous metallurgy, machine building and science. Before Natalia Chekhovskaya came to Krasnoyarsk, she lived in Alma-Ata, capital of Kazakhstan, where she studied at a ballet school. After Chekhovskaya graduated, one of the teachers at the school who was moving to Krasnoyarsk told her a new opera and ballet theater would be opening there soon. The teacher persuaded the young ballerina to go along. And Chekhovskaya has never regretted her decision: She found herself working in a new theater with young and enthusiastic artists like herself. The chief ballet master of the theater was Nikolai Makaryants, a man of great inspiration, who was completely devoted to the art of ballet. Chekhovskaya started her career in Krasnoyarsk dancing the part of Giselle. In no time she was given the lead roles in *Swan Lake* and *Spartacus* and became the favorite of theatergoers in Krasnoyarsk. It was not only her superb technique that won her acclaim, but her sincerity, irresistible charm and inspiration.

Off-stage, Chekhovskaya is as sincere, frank and warm, and it was no surprise when the people of the theater nominated her to the Krasnoyarsk Territorial Soviet of People's Deputies.

A ballerina's day is quite demanding. There are dancing classes in the morning, rehearsals in the afternoon and more rehearsals or performances in the evening. It would be only natural for a dancer to want to spend what little time is left resting, but Chekhovskaya loves to keep active. Her free time is divided between playing the piano, participating in sports (she goes in for swimming and skiing), attending symphony concerts or reading.

"She is right!" says ballet master Makaryants. "Artists shouldn't isolate themselves in their art. They should experience beauty in all its forms. The abstract symbolism of the dance lacks depth without a knowledge of the period and the culture of the time. Ballet technique, no matter how perfect, does not fill the gap. Chekhovskaya travels the road of time and culture with relative ease."

After Chekhovskaya was elected deputy, she had even less free time than usual. She meets with constituents, attends sessions of the Soviet and performs a great number of public duties.

A deputy's job is not simple, but the work agrees with Chekhovskaya. She has broadened her knowledge of the vast Krasnoyarsk Territory, its people and their way of life. And the ballerina is admired by her colleagues and constituents alike for her sincerity, honesty and warmth—qualities she reflects in her art.

"Natalia Chekhovskaya," says Makaryants, "is artistic, musical and intelligent, and intelligence is worth a great deal in modern ballet. Add to this her culture and the life experience that she is now absorbing, and you will have a pretty good idea of what she is like." ■

Altyn Kaliyeva came to Kustanai 10 years ago from the little village of 40 houses in rural Kazakhstan where she was born. Her birth coincided with the beginning of a new epoch in the history of northern Kazakhstan—the development of the vast virgin lands. Thousands of people from all over the Soviet Union came there in the mid-1950s: agronomists, farmers, economists, livestock experts, geologists, workers and builders. They were going to till land that had never known the plow, develop the mineral resources of the region and build highways, railroads and new towns. People of different nationalities—Russians, Ukrainians, Byelorussians, Tatars and Uzbeks—settled alongside Kazakhs, the local inhabitants. However, the rapid changes that were taking place in the republic at the time did not reach Altyn's home. Her grandparents observed all the old customs and traditions and taught their children to do the same.

But one day Altyn heard an announcement on the radio that a vocational school was being set up at the textile mill in Kustanai. Right then she decided her future. The family tried to talk her out of going, but she was determined. Altyn had only completed eight years of schooling, and they wanted her to continue her high school education.

"Don't worry about me, I'm quite grown up," she argued. "After all, I'm 16. Besides, at the vocational school I'll be able to finish my secondary education while I receive professional training. I promise I'll visit you often; Kustanai is not very far away."

Her Work

Altyn graduated from the vocational school with honors and went to work at the textile mill with other young women who had studied with her. They knew she was responsive and kind, and it was not in Altyn's character to run in the face of difficulties. So they elected her secretary of the shop's Komsomol (Young Communist League). She was re-elected five years in a row.

At a Komsomol meeting Altyn suggested:

"Construction is in progress on an empty field near the mill. This will be the future textile township. What do you say to our organizing youth building teams? You can see that the builders have more than enough work to do. I am sure there is something we can do to help. We could go to the construction site on our days off."

A buzzing arose in the room.

"When will we have time to relax, then?" asked the other young women.

"That's just it, there is no place to relax," continued Altyn. "But when the textile mill builds a workers palace and a youth center, we'll have a clubhouse where we can go to hear concerts and see different sports events."

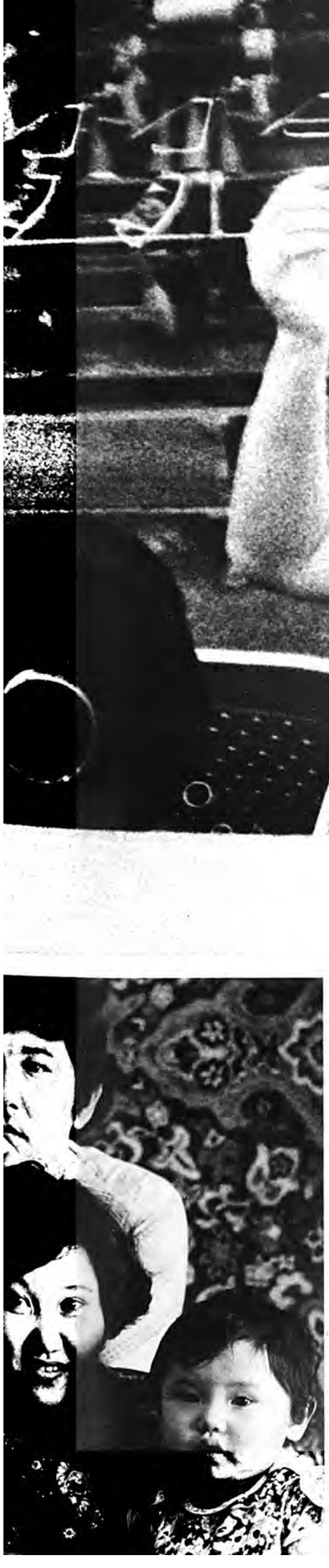
A lively discussion followed Altyn's proposal, and on Sunday a youth team appeared at one of the construction sites. For the next two years young women came every Sunday to help with the building, working without pay. Construction of the township made good progress, and soon a department store and a café opened. After that the newly opened after-work sanatorium welcomed its first patients. Every six months fresh groups of workers received new apartments.

Altyn realized that everything she was proud of, the fine mill where she worked, the new construction projects and the new way of life, had come to her land together with Soviet power, with the ideas of the Leninist party. So one day Altyn applied for membership in the Communist Party.

Altyn was distinguished among her friends by her businesslike manner, her sociable disposition and her readiness to help others. Being a good organizer, she arranged guest lectures for

TEXTILE WORKER AND DELEGATE

By Nina Maksakova



workers at the mill, ski outings to various interesting places and excursions to other towns. In the evenings she studied at a technical school because she had decided to go ahead in her profession. Although she was busy, she found time to attend concerts at the Philharmonic Society and see new plays at the drama theater.

Her Family

In 1977 Altyn married Kuantai Kaliyev, who worked in the same shop with her. After the wedding ceremony all their coworkers came to extend their best wishes. For a year the couple lived in the dormitory until the mill gave them an apartment in a new building. A year later they had their daughter Gulsara. She is two years old now. Every morning the parents take her to the nursery which was built with Altyn's participation, as was the house in which she and her family live.

Altyn believes she has a very easy-going husband. He helps her with the housework and shopping and takes Gulsara out for walks. This enables Altyn to assist people in need. Everyone should have enough time for that.

The workers at the mill elected Altyn deputy to the Kustanai Town Soviet of People's Deputies. Many women workers went to her and asked her, in her capacity as deputy, to help them place their children in kindergartens. Since the average age of the mill workers is only 23, there are a lot of new marriages and children. Six kindergartens are insufficient to accommodate them all.

On Altyn's initiative the Town Executive Committee adopted a plan for the construction of a child-care center, allocating half a million rubles for the purpose.

"I am still indebted to my coworkers," said Altyn. "Last February, before I left for the Twenty-sixth Party Congress in Moscow, the women in my shop pledged to increase their daily output to compensate for the two-week idleness of my spindles. And that is exactly what they did, though it wasn't easy." ■

The Kaliyev family: Kuantai Kaliyev, Altyn and their daughter.

25-YEAR-OLDS SPEAK ABOUT THEIR FUTURE

"You were born a quarter of a century ago. What plans do you have for the next twenty-five years of your life?" we asked a random group of Soviet and American young men and women. The people polled come from all walks of life and live in various parts of the Soviet Union and the United States. Here are what we consider some of the most interesting replies.

RAGIM KHASAYEV, oilworker, Baku, Azerbaijan.

FRANKLY, I've never thought about planning as far ahead as 25 years. What I'll be doing for the next few years, however, is clear. First, I'm planning to enroll in the correspondence department of a graduate school. I got interested in doing research during my first years as a student. One of the projects I helped with received an award from the USSR Ministry of Higher and Specialized Secondary Education.

The dissertation I am working on is connected with the maximum extraction of oil from the earth. True, so far it has been approved only at the "family" level. My whole family is in the oil business: Dad is a professor at a higher school of the industry, Mother is an engineer and my brother is in his final year in geological studies.

Everybody who graduates from the republic's oil institute starts out as an operator in the Soviet oil fields. It was the same for me when I graduated as an engineer three years ago. I'm a senior engineer today, but I still remember how difficult it was in the beginning. Since then I've picked up many useful points from my experienced colleagues. My work requires a great deal of knowledge, hence my desire to take graduate courses.

I can picture myself at 50, working in the oil fields as before but holding a higher position and, in keeping with family tradition, solving problems jointly with my son. My dream is to see my son become an oilworker.

AUDREY HAIR, legislative liaison at the National Prison Project of the American Civil Liberties Union, Washington, D.C.

RIGHT now and for the foreseeable future I'm going to be concentrating on only one thing, and that's to become an urban lawyer. Eventually, I'll represent people who otherwise might not have access to legal help.

I guess I'm a fighter. My father, grandfather and great-grandfather were lawyers. I want to do something to break down the barriers between lawyers and ordinary folk. The last thing in the world that people need from professionals is an attitude of elitism. And I'm under no illusion that the practice of urban law is some kind of romantic replay of a "Perry Mason" episode. I'm talking about dealing with everyday needs.

I'm hoping to be admitted to a law program in New York that concentrates on recruiting minority people to become lawyer advocates for the minorities. And when I say minorities, I include the disabled.

My job at the prison project has helped prepare me for what I want to do. Not the least of that preparation was writing legislative testimony that was presented before the U.S. Congress.

One of my major interests will continue to be prison reform. I'm particularly involved in developing pretrial release programs and third party custody in place of cash bond.

At the moment I have been concentrating on getting into school. Every so often I think of a line of Lorraine Hansberry's from *A Raisin in the Sun*. It goes, "How can someone with eyes that see and a heart that feels know and not react to the evils that afflict this world?" My mother always spoke about "resisting evils," and I guess that's what keeps me going. Perhaps after a while I can spend some time thinking about having a home and a family. But that's for later.

IOSEPH SIMS, office manager, Washington, D.C.

YOU might say I'm going to be independent, hardheaded and stubborn about what I want to do with my life. I'm going to go back to school and get my degrees in political economy and political philosophy. I want to teach politics, economics and philosophy from the point of view of real people and real problems.

After I finish my education, I'd like to go back to the Midwest. I guess I miss the smell of factory smoke. My father was a boiler engineer. In the Midwest it's different from the way it is in the East. At one and the same time it's more relaxed, more honest, more realistic in the Midwest. There people have a clear sense of who they are and where they're going. Those are the people I want to teach.

Five years, 10 years, 25 years from now, I want to be teaching working people about the history and cultural traditions that they've inherited. It's something I feel very strongly about.

People have to be for something if they want to accomplish anything. World peace, of course, is at the top of the list of what they have to accomplish. If that doesn't happen, then we're all in trouble. But I believe that we have every reason to be optimistic because most people want peace.

Of course, there are other things I want to keep on doing, and while they're not so socially all encompassing, they're important to me. I love to fish, hunt once in a while, play the clarinet, read and listen to music. And then there's cooking. I don't want to brag, but I can cook a chicken any way it can be cooked, and then a few more.

SANUBAR JAFAROVA, geologist, Baku, Azerbaijan.

I THINK I've made a good start after graduating from an oil industry institute three years ago. I started as a rank-and-file operator, and now I am in charge of the geological and hydrogeological laboratory of the newest offshore oil field in Azerbaijan. Each promotion has meant higher earnings for me.

In other words, I have every reason to be satisfied with my life. That doesn't mean, however, that all my plans and dreams have come true. For instance, I'd love to be the one who discovers a new oil field. That's why I have enrolled in the Geology Department of the Azerbaijan Institute of the Oil and Chemical Industries. Yes, that is my dream, but I realize that not everyone is destined to be a discoverer. In this respect, the older generation of Azerbaijanian geologists had greater luck: They found dozens of continental and offshore deposits of oil and gas, and deposits of polymetallic ores, as well as building materials, bentonite, subterranean pools of iodobromite and mineral waters.

Our oil- and gas-extracting enterprise was set up eight years ago in Sangachaly, a community near three surveyed offshore deposits in the Caspian Sea. The main development of this region will take place over the next 15 to 20 years. And the sea's surface will be covered by an extensive network of rigs that have adjoining platforms for the sinking of new wells. Our work will also become far more interesting, like finding two identical grains of sand. I would like the laboratory research we do to help our offshore oilworkers—courageous people in a dangerous profession—obtain still greater quantities of energy-producing raw materials.

Another hope of mine, naturally, is to get married pretty soon.

GEOFF LONGFELLOW, student at the School of Advanced International Studies of Johns Hopkins University, Washington, D.C.

IN general I could say that what I want to do in the next 25 years is to better the human condition. But abstractions like that don't mean very much.

So I want to work in the area of land reform, agricultural development, long-range educational development and population planning in most parts of Southeast Asia.

There's another thing I hope people will tackle in the coming years. Strategic arms limitation ought not to be a bipolar issue. Stopping the proliferation of nuclear weapons is the most important thing I can think of, not only for the United States and the Soviet Union but for all countries. Nothing can be achieved in the world unless there's peace everywhere.

SERGEI KOZLOV, lathe operator and student, Leningrad, the Russian Federation.

I SPENT most of my childhood in Siberia, in the Lake Baikal area, and I'm used to the way people work there, with so much work to be done yet not enough people to do it. That's also where I learned to value time, to plan my work and life in general. In other words, I'm really quite a practical person.

I'm satisfied with my job as a lathe operator, but I want to get ahead, too. Perhaps I'll become a shop manager and then an engineer. At some point I'd also like to assemble and test hydrogenerators in the countries where we export them.

I plan to see as much of Europe, Africa and the Americas as I can. I could do this, of course, as a tourist, but I'd prefer not to rush through these places. I want to take a closer look, and that can only be done by working there.

I'd also like to go back to Siberia, where many new hydroelectric power stations are being built. I hope that over the next 25 years I'll be able to help out there, too.

When I was younger, I attended music school, and I can play the piano and guitar. I'm taking organ lessons now. After I finish technical college, I want to pay more attention to my music.

I'm still a bachelor, but some time in the future I want to get married and have three, or perhaps more, children, all of them sons.

Do you know what would make me happy? If the friends I have today will still be with me when I turn 50.

25-YEAR-OLDS SPEAK ABOUT THEIR FUTURE

MARY MURPHY, teacher at the Coilprep Educational Program in Baltimore, Maryland.

MY plans for the future won't include making a lot of money because teaching has become the most important thing in my life. The program I work in tries to handle the problems of people in their late teens who read below the sixth grade level. Their lives make a kind of interesting intersection with mine.

People I talk with, even other teachers, are curious about where I work. Frankly, some of them are astonished. Many think I'm performing some kind of miracle by teaching the poor and functionally illiterate. Actually, the students I work with—aged 16 to 18 for the most part—have the same problems as anyone else. I've become friends with many of them, and we've remained friends even after they leave the program: A good number of them get jobs, or I might see them around the neighborhood.

It's obvious that one thing they've gotten out of the program that's as important as anything else is self-respect. Without a feeling of self-worth, it's impossible to accomplish anything.

I'm going to try to go back to school full time. I need two master's degrees, one in learning disabilities and the other in remedial reading. The two fields are obviously closely related. I'm going to give myself a specialist's background so I can stay here and get better and better at my work.

VLADIMIR GLUSHKOV, combine operator at the Solnechny State Farm, Skvortsovo, the Ukraine.

I WOULD like the next 25 years, and the rest of my life for that matter, to pass as it has for my father, Georgi Glushkov, who will be 70 next year. He has been an ordinary grain grower all his life, except for when he was a private in World War II. My father retired on pension nine years ago, but people still come and ask his advice and share their joys and sorrows with him. They consider him a wise and kind man who never acted against his conscience.

All four boys in the family have followed in Dad's footsteps. My eldest brother is the only one to have finished an agricultural college. He's the chief agronomist at a state farm 30 kilometers away, while my other brothers, Nikolai and Alexei, and I live on the same street as Dad. Nikolai is a mechanic, Alexei is a tractor driver on one of our farm's tractor teams, and I've been working with them for the last five years.

Farm machinery is becoming more complicated and the operators need more knowledge today. In the fall I intend to enter the correspondence department of a technical school that specializes in farm mechanization.

With all the new construction being done in the village, rural living keeps improving. Dozens of new houses are being built, and last year we opened a museum and exhibited the works of the local amateur painters, potters and engravers. The state farm has put up a new building for motorcyclists and built a swimming pool for the village children. At a recent meeting the farm's manager announced that money has been allocated for the construction of a larger clubhouse.

I like farm life, and it makes me feel good to know that in the future life will be even better.

MARY LORENZO, housewife and stable groom, Baltimore, Maryland.

I'VE loved horses ever since I was old enough to go out in the backyard and watch the watermelon man come down the street. I love the beauty of horses, their power, grace and speed. This isn't my first job working around them. I put in two years at the track doing just about everything but riding the horses over the finish line. I'd tack them up before a race—that means putting the saddle and bridle on the horse—and after the race I'd be there with a bucket of cold water. I walked them around the sheds to cool them off. To get them ready for the night, I'd wrap two layers of protective cotton around each of their legs, so they'd be safe while they slept. After all, a good Thoroughbred is worth 30,000 dollars, and the owner is paying for the legs.

Some of the racehorses were so powerful and temperamental and hard to control that my husband talked me into quitting my job when we got married. So it's been a while since I've worked at a stable, but it's good to get back to it again.

I also enjoy teaching people how to ride. It takes a lot of patience, most of it on the part of the student.

Some time over the next five years, I want to have a baby. It takes just about that long to be able to afford one. I have seven brothers and sisters and eighteen nieces and nephews, but one child for me is plenty.

Meanwhile, there's a lot to do around the house. We bought ours as a handyman's special, and we've worked hard to fix it up, starting from scratch. I also do a fair amount of baking for my family, friends and neighbors. So, all in all, I think my schedule for the next few years should be pretty full and rich.

VICTOR GLIVINSKY, navigator for Aeroflot (the Soviet Airlines), Kiev, the Ukraine.

I'VE wanted to be a flyer ever since I was a boy. And I wish that for the next 25 years of my life I'll keep on flying, over Siberia, Central Asia, the Ukraine and the Caucasus. I hope the doctors find nothing wrong with my health during this period.

A navigator's work is both interesting and varied. We help compile maps and seek new deposits of mineral wealth and sites for new construction projects. My dream is to find a large deposit of gold. A buddy of mine had such luck flying over Yakutiya. You should hear him now, "I've done something worthwhile for my country."

I can't picture the next 25 years of my life without the girl I want to marry. We could have a son, so he, too, could become a flyer.

I have a specialized secondary education, but it's quite possible I'll continue my education at the Kiev Civil Aviation Engineering Institute or the Leningrad Civil Aviation Academy. At any rate, I intend to become a first-class navigator, something that my professional pride and ambition call for. But in order for me to achieve all these things, there must be a peaceful sky above.

IARIPAT NEFF, sculptor and information consultant at the Energy Conservation Education Office, Baltimore, Maryland.

SINCE my job with the city is ending pretty soon, I'm going to have to start thinking about what I want to do. As usual it's going to be a compromise between earning a living and fulfilling a dream.

I've been making plans with a friend to start an interior decoration business. But what I really want to do is work on my own art, literally work for myself.

Most artists get along any way they can—working at an advertising agency, for instance. Some of them think about going to New York and being discovered, getting into a big gallery and being shown. Somehow that's not for me. I just want to go on making things, and right now I'm not too concerned with wealth and fame. And yet, that's not to say that feedback isn't important. I need people to react to my work.

If you wanted to characterize what I do, you could say that my work comes from a political feminist point of view, not in an overt political way but from my personal experience. I make photographs, objects, constructions and sculptures that originate from the long-term cycles in my life. For example, I've just turned 25, and for many people 25 is something like a magical age. It's a time when, like me, a person may have just graduated from school. It's the age at which you might expect your adult life to start. But I find that there is no such magical point. Life is a continuum, with peaks and troughs.

What's most important to me is to do what I have to do without any regrets. I want to be able to say as a 65-year-old woman, "Well, I chose what I did, and I'm not sorry." And I'd like whoever it might be who looks at my work to be able to say, "Yeah, that's what I feel, too."

VLADIMIR PAVLENKO, sailor, Riga, Latvia.

I'M still quite young but I've fulfilled my main desire: I'm a seaman. I've also had time to receive a higher education and to get married. So far, my wife Elena and I have only one child, a three-year-old girl. I say "so far" because I'm used to big families. My father, an ordinary worker, had six children. My elder sister, Anastasia, is a doctor, and my younger, Maria, works at a canteen. I have three brothers—Ivan is an inland water transport engineer, Victor is a first mate on the Black Sea Shipping Line and Nikolai is enrolled in a graduate course at the Odessa Polytechnic Institute. As for me, I'm third mate on the ship *Engineer Nechiporenko.*

Our RORO ship, the latest in maritime shipping, makes regular calls at ports in the German Democratic Republic, France, the Netherlands and Belgium, delivering large consignments of Zhiguli cars and other Soviet-built machines.

My dream, of course, is to be a captain of a ship. And all the signs, so far, point to its coming true: After three years of sailing aboard the *Engineer Nechiporenko*, I've moved up one step from fourth mate.

I'm studying English now. Later I want to take German and Spanish. Studying languages is both interesting and necessary. I have complete faith in the favorable development of international trade. After all, every seaman wants to sail for home with a full consignment on board the ship.

I love the sea, but I'd like to be at home for longer periods of time, too. Elena and I want to have several more children. We're hoping for a boy, a future captain, even if he is the sixth.

CHRISTY LYLE MASON, English teacher, New York City, New York.

I AM a Christian. As a follower of Jesus Christ, my life goals and ambitions will reflect the kinds of things that Christ teaches us.

To begin with, I hope to broaden my career as a teacher. At present I spend much of my time teaching English as a second language. It is my intention to further my education in this area and to sharpen my skills as an educator.

Secondly, I hope to have a family. I can think of nothing more exciting and rewarding than to experience the joy of parenting—bringing a child into the world and nurturing and teaching that child to become a responsible adult.

Thirdly, I hope to develop lifelong friendships. Friends have always been very important to me as a source of support and encouragement.

Fourthly, I hope to spend some time traveling around the world. I have always had a deep interest in all kinds of people and cultures, and it is my desire to be able to visit as many countries as possible.

In light of this, I want to express my deep concern over the present international situation, particularly the relationship between the United States and the Soviet Union. As a Christian, I stand for peace, and it is my strong desire to see the doors of communication between the United States and the Soviet Union kept open. I am very much in support of a policy of peaceful coexistence and favor all provisions for congenial and neighborly relations. Both countries have so much to give each other, economically and culturally, and I think it would be tragic if we rejected peaceful relations in favor of an isolationist attitude.

ESMERALDA ERMALE, actress with the Jan Rainis Art Theater, Riga, Latvia.

WHEN I was 16 years old, I was chosen to play the lead role in a film based on one of Jan Rainis' classics. That was what prompted me to enroll in the drama studio of the Latvian State Conservatory.

At that time I didn't know whether I wanted a career on the stage or in films, but I was sure that I wanted to act. Today I'm glad I chose the theater. My work on the stage is more interesting and complicated than it would have been in films: I have to portray the same character over and over again, each time as if it were the first.

I'm involved in almost all our productions at present, but I'd like more character roles. I'm mostly playing the parts of young naive girls now. This doesn't depend solely on me, but on the director, and more good luck, too.

As far as my private life is concerned, I have been pretty fortunate. I'm married and have two daughters, three-year-old Liene and one-year-old Ilse. My husband Edgar, an architect, is the same age as I. He has given me every encouragement in my work because he knows how much I love it.

My wish for the next 25 years is, primarily, that our daughters grow up "healthy, wealthy and wise." I also hope that my inspiration never leaves me, that my husband never stops loving me and that I'll continue to be a "somebody" on the stage and simply Mama at home.

SOVIET

The average Soviet citizen has changed dramatically over the past 25 years, according to Igor Bestuzhev-Lada, head of the Sociological Forecasting Department of the Institute of Sociological Research of the USSR Academy of Sciences and Copresident of the International Sociological Association.

THEIR SOCIAL IMAGE

By Igor Bestuzhev-Lada

To get a better idea of Soviet people today, it is necessary to go back more than half a century, to the time when Soviet society was being born out of the ruins of the Russian empire. Here then is a very general social profile of the average Soviet citizen of the 1920s: a peasant in homespun clothing living in a log house. Most of the population was illiterate or semiliterate since only one out of every 100 of the 18-year-olds of the time managed to get a high school education. The rest went to work after completing only a few years of elementary school. Peasants of the twenties were faced with numerous problems that are nonexistent today. Mainly, they had to keep from starving to death. This over the centuries had taken the lives of thousands of people each decade. And when the peasants moved to the towns to better their conditions, they could not find jobs because unemployment existed in the country until about the 1930s.

However, as Soviet power developed, the bleak situation for the peasants was rapidly becoming a thing of the past. Industrialization of the country was in full swing. Young people were covered by a compulsory four-year elementary education and later a seven-year incomplete high school education. In the 1930s the collectivization of agriculture was begun, and millions of rural people moved to the towns to become skilled workers. Then World War II interfered: The Soviet Union lost more than 20 million citizens. Hundreds of towns and tens of thousands of villages were destroyed. It took five years for the USSR to restore its economy.

Besides the towns and villages, World War II destroyed millions of Soviet families, including potential families since both husbands and eligible young men fell in action. There were millions of widows and prospective brides. The divorce rate of the old family was comparatively low and constituted no more than a few couples per hundred marriages.

Therefore, in general, marked social chan occurred in the country from the late 1920s the middle 1950s. However, there is no co parison with the changes that have taken pla over the last quarter of a century. In some spects, especially in connection with family li the rate and scale of the recent changes ha far surpassed not only those of past decad but those of past centuries, too.

Husbands and Wives Enter the Labor Force

Though the rural population of the country the 1950s was still in the majority, the avera Soviet citizen for these years was a worker or agricultural machine operator, who had co pleted about seven years of schooling. The fa ily consisted of a husband and wife, both whom usually held jobs, and several childre More often than not, one or more working re tives of the older generation (the parents of husband or wife) lived with the couple. As a ru the worker rented a room in an old house town. One sink and one toilet were shared several families. There were not more than two three square meters of living space per fami member. The combined wages of both the hus band and wife were several times smaller than average wage at present (in comparable rubles

The worker more often than not studied at even.ng school, to make up for lost time, an read a great deal, including fiction by Soviet a foreign authors (the latter in Russian transl tion). He or she went to the movies since tele vision had only first appeared (usually severa families would crowd around one TV set) an often took part in amateur art concerts, as spectator at least.

Moving to the Cities

Let us look at the situation that has taken shape over the past 25 years. Since the 1950s

PEOPLE

ıral/urban population ratio has been turned e down. Today two-thirds of the country's ation live in cities. At present the trend is despread that in 15 to 20 years, no less than ır cent of the population of the USSR will e in urban areas.

e average Soviet citizen today is a blue- or -collar worker who has completed at least year or, more often, a 12- to 15-year educa- has no more than two children, on the ıge, or quite often one child. Eighty per cent e urban families now occupy separate apart- s with all, or nearly all, the amenities. In addi- every year millions of families improve their conditions. The average family usually has lder relative living in a rural village, where ity children spend their summers. And some ies have one or two acres of land in the tryside with a summer cottage. Incidentally, et children usually spend one month at sum- camps located in the countryside.

Focusing on the Individual's Well-Being

ıe average monthly salary of a working mem- of a Soviet family has reached nearly 170 es. If the family's additional subsidies and erial benefits from the state's public consump- funds, including free health-care services education at all levels, are taken into account, average monthly salary of a Soviet worker the 200-ruble mark. At present a gradual ng of the living standards for all Soviet work- people is under way.

itizens of the USSR are guaranteed the right ork by their Constitution. Under no circum- ces can a person become unemployed. All iet people are provided with jobs in their e or profession, however difficult a task that ht be. Vacancies are nearly always available, ıgh, since the country is continually under- ıg large-scale development.

major part of the white- or blue-collar work- time is spent at work. And the people who k together frequently spend their leisure time ether, too, arranging parties, trips to the ntry, and other activities. Events happening work are discussed not only at meetings, but he worker's family as well. The worker also ks to the work collective as a source of ral support, to which he or she can turn for p. This important aspect of the Soviet way of called collectivism, greatly minimizes the enation of the individual, which is so wide- ead in the world.

More Leisure Time

Like nearly everywhere else on the planet, the set dominates the leisure time of the average viet citizen. Most men everywhere are sports fans. Meanwhile, the overwhelming majority of women like to see dramatic productions or movies. They like to attend concerts or go to museums or art exhibitions. Despite the dominance of the TV set, Soviet people, as before, contrive somehow to spend a comparatively large portion of their leisure time reading. Also many people are studying at either evening high schools and other educational institutions, raising their job skills, or attend evening universities, broadening their general education and cultural knowledge. About 100 million people, or one out of three Soviet citizens, in fact, are enrolled in one form of education or another.

It would naturally be wrong to suppose that the average Soviet man or woman spends all his or her free time watching television or reading. Parties with friends are as popular as ever as are weekends in the country. Particularly popular is summer camping and, now more frequently, camping in the winter. However, today one doesn't see the streets crowded with people out for an evening stroll or the active social contacts among people, which were common sights a quarter of a century ago.

Modern Society Brings New Problems

With progress the problems of the past have been replaced by new, more difficult problems of a higher level, many of which were brushed aside as trifles only a few years ago. Well, can there be life at all without problems? The main thing is to identify the chief social problems and to find optimal solutions.

It is difficult nowadays, among other things, to set up a lasting family or even to meet a prospective spouse. There are many reasons for this. One is the fastidiousness of people. Today there are millions of people who passionately desire a family of their own but are unable to set it up themselves. This is no longer a personal problem; it has become a social problem. To help these people, the government is setting up a service for people to meet each other.

Women are economically independent today. And husbands and wives make greater demands on each other. This is happening in the absence of the numerous relatives and friends who had traditionally helped settle the conflicts between the couple in the past. As a result, the number of divorces per hundred marriages has greatly increased. This being another social problem, society and the state have come to people's assistance by paying greater attention to the lives of young families, popularizing through the media happy families who have done away with the anachronistic division of household chores into "men's" and "women's" and demonstrating new ethics for relations between husbands and wives based on mutual respect.

As was mentioned before, the typical young Soviet family has one child. This obviously fails to guarantee even the simple reproduction of the population, with all the negative consequences. So there is a social problem here, too. And society has drawn up a program to ensure the family's reaching the optimal level of two or three children. There are increased material allowances to parents, improvement of their living conditions, a shorter working week for mothers, the establishment of preschool facilities, and so on.

A quarter of a century ago only one teenager out of every 20 completed high school. In the 1960s millions of parents strove to make their child that teenager, and the prestige of a college education grew immensely. The number of high school graduates taking competitive college entrance examinations increased accordingly. However, when compulsory high school education was introduced nationwide, it turned out that if high school continued to be only preparation for entrance into the university, it would result in undesirable disproportions in the structure of the labor force. The country does need thousands of engineers, doctors and teachers every year, but it also needs workers, drivers and salesclerks, too. Therefore, a further improvement of the educational system was launched to give young people a sound general and specialized education and confidence to start their working life.

What Is in the Future?

How can the growth of large and superlarge cities be prevented? What can be done with the hundreds of thousands of villages where young people don't want to live, but which are excellent centers for agricultural work and for summer vacations? How can we ensure an optimal combination of a child's family life with his or her public education, of home-cooked dinners with cafeteria meals, of private cars with mass transportation and of individual leisure time activities with organized recreation?

Today nobody is surprised to hear Soviet men and women discussing these problems at meetings or with one another in their spare time.

A special section of the decisions adopted by the Twenty-sixth Congress of the CPSU titled "Social Development and Raising the Living Standard of the People" is devoted to the program of solving long-term social problems. The program covers the period to 1990 and is based on forecasts until the year 2000. Thus, we in the Soviet Union have every reason to expect our social profile for the next quarter of a century to differ much more from the present one, than the latter differs from the stereotypes of a quarter of a century ago. ■

THE ARAPAIMA ARRIVES YESTERDAY

By Yeremei Parnov

When SOVIET LIFE asked well-known science-fiction writer Yeremei Parnov to take a trip into the year 2006, he agreed with surprising alacrity. In his mind's eye the author has been to even more distant times, and, in reality, he travels a great deal. Tibet, India and the Eastern European countries are a far from complete list of the places he has visited. Here we set out for the year . . .

"WE'LL have everything if we live to see it," my grandfather used to say.

7:02 A.M. I am awakened by the friendly sparrow who comes to peck at my window every morning. Perhaps that is its way of expressing its appreciation for the food I put in the bird feeder every evening as the *Wild Life Bulletin* recommends.

The cheerful and frisky little bird has become some sort of safety valve in the electronic comfort of my home, from which I feel like escaping every once in a while. But where could I go? Television get-togethers with friends, which create the illusion of real presence, have gradually taken the place of live contacts. I even see my wife more often on the TV screen than off. The dull shade of a nature preserve, where even the mosquitoes have stopped biting, does not attract me. But I never grieve or philosophize for long; there are always things to do. After all, a person is born to "discover" the world and learn all about it. That's the main thing. The rest will take care of itself.

After my morning exercises I stand on my head for a while. Next I hurry into the bathing room which, I'm sorry to say, is still a bit old-fashioned. I close the door, which seals hermetically, and fill the pool with sea water. I have a pleasant swim and then jump in the ionic shower for four minutes.

7:21 A.M. In the kitchen I listen to the instructions of my wife, who has arranged my schedule for the day. Frankly, I am fed up with oatmeal, orange juice, seaweed jelly, sea urchin caviar and plankton. Instead, I decide to eat sirloin steak and the avocado pear that my wife has gotten for company. I must admit that cows fed malt and given daily vibromassage to evenly distribute their fat make excellent beef!

It's a rare pleasure to eat breakfast standing up when there's no one to push you around, I think.

7:34 A.M. After pulling on a suit of pure polypropylene with automatic thermoregulation and listening to a five-minute suggestological tape to invigorate me, I sit down to work or, to be exact, I lie down on the sofa slab near the portable control panel. To start, I have to check whether the title I have decided to give my short story is original. I dictated it yesterday to my secretary-robot. The title "The Sterlet Arrives Yesterday" appeals to me, above all, because of its semantic paradox. It isn't new, but I have no doubt that the forgotten word "sterlet" will do the trick. I dial the Information Bank and dictate my inquiry distinctly. My request is translated into machine language, and the search is on. While I wait for the reply, I decide to sit down at the electronic screen for a game of chess with my secretary. I know it is impossible to win playing against a machine, but the situations that shape up now are thrilling and give me immense pleasure. I play the classical King's Indian defense. The game promises to be interesting, but the bank's answer catches me so much by surprise, I switch off the screen. The title is not original! Last year a story entitled "The Arapaima Arrives Yesterday" came out in the language of a tribe of Amazon Indians.

Well, I'll have to think of something else, something not connected with ichthyo-fauna. A pity though! Since wild game preserves have been set up, people have grown far less interested in relict fish. Whales, manatees and white tigers, no longer threatened with extinction, continue to attract universal attention for some reason, but everyone seems to have forgotten about the sterlet and white salmon. Cooking, you see, is my hobby.

7:50 A.M. My gourmet reflections are interrupted by the timer, and the pleasant voice of my wife reminds me I have a doctor's appointment. "If you want to make the rocketbus today," she says, "you'll have to hurry."

In this age of universal communications, when you can get in touch with any inhabited zone in a matter of seconds or make a round-the-world trip without leaving your living area, it's not that easy to get an assignment to some distant place. In the first place, I've gotten out of the habit of traveling, and then others have gotten out of the habit of sending me. I've had a hard time proving to them that color and stereoscopic representation with precise reproduction of sound and smell are not enough.

But I've no reason to complain so far. The electronic coordinator has gradually come to understand that no masterpieces of long-distance communication can replace the writer's personal contact with contemporaries, who, incidentally, are constantly moving further away from Earth. Besides, I've never asked for more than one or two trips a year to the Moon or Mars. That's all. I still regret not being chosen to go to the Antarctic last autumn though: I foretold the invention of the neutron bomb back in the middle of the last century, but I was passed over, as usual, and another fellow attended the opening ceremony of the new thermonuclear power station.

That was a truly historic day! People throughout the world watched as the last uranium charges from the annihilated (in keeping with the international agreement) MIRV warheads were put away in the waste-free stimulation synthesis zone. The exhibition held in Antarctica for the occasion displayed all the world's achievements since its rejection of nuclear suicide: Holographic replicas unfurled a panorama of space and underwater stations. No less impressive were the forests that have been planted on the vast expanses of the Amazon Valley, where all the trees had been felled, and in Hindustan, which had become completely treeless by the end of the twentieth century.

I return to the electronic screen to watch the Oceanic Olympic Games in which trained dolphins are participating—a big hit with the public. Personally, I am attracted by the competition of living creatures bred through the method of genetic engineering and subsequent selection. More than anything else I like the salamander that dances in the flame of a hydrogen burner. Trained by an 18-year-old student from Nepal, the creature is a real charmer. Only its obvious uselessness prevents the Nepalese from winning first prize. Caterpillars capable of cleaning up the oil along the seacoasts are certainly more practical, though they do not measure up by esthetic standards.

I watch the bio- and thermo-power stations, the farms and plantations, pleasing to the eye with their greenery, flash on and off the screen and recall the zoo of my childhood. I remember the happy times I had in that wonderful animal kingdom that nestled in the heart of the city. Now that wildlife has gained the right to life on an equal footing with humans, zoos have disappeared from the cities. That's only fair, of course. But along with the zoos something I find hard to describe has disappeared from our souls. That something suddenly awakens in me for an instant as I watch the competition of synthesized creatures, and I feel a tugging at my heart.

We always feel sorry for the past, even though it wasn't a very good past. But what if progress into the future becomes a constant effort to overcome nostalgia? What if it is the change of generations, the clash of ideas, dizzy, daredevil flights and . . . the pain of overcoming obstacles? If I ever have the chance to take part in a competition of artificially made creatures, I will probably attempt to reproduce a bird that became extinct in the nineteenth century or, perhaps, the Tasmanian wolf.

Well, what else do I have to do today? I think.

Molodaya Gvardia Publishing House has finished working on my story and has turned it over to the Information Bank. Today I am going to be presented with a new titanium certificate with a code number. That is the only thing that flatters a writer's vanity nowadays. I remember the good old ▶

days when, tired and happy, I would drag home stacks of my first editions that I proudly gave my friends. Everything is different now. Books that are written do not exist in a tangible form. You cannot touch them, take them in your hands or put them on a shelf. Today they are kept in invisible electronic variations inside an information repository. The success or failure of a work is estimated by the number of individual requests for it. You dial a numerical code, and the display will show you the story requested at the frequency you desire. If you wish, you can listen to the text or get a ferromagnetic impression with the help of a special gadget attached to the display. Personally, I prefer the latter, though I realize it's a tribute to the past.

8:07 A.M. I remember, by association, that I haven't looked through the *Literaturnaya Gazeta* for two days. I press Index 50067 and scan the columns, stopping a while at the sight of familiar names. I have no time to read now, so I take the impressions and put them in my briefcase, where my wife has put everything I'll need for my trip. What a memory that woman has! I envy her. When have I last seen her, I wonder? In person, of course.

Then I remember, not by association, that I have forgotten to take the cassettes with the university course on the unified field theory. Authors of science fiction should have at least a middling knowledge of the sciences of the time, and I've been quite lazy lately and have fallen behind. My age, too, despite the sensational successes of juvenology (the science that has given us longer youth), is beginning to make itself felt. My nerve cells are dying by the thousands every day, and my quick memory is becoming more sluggish, though I have not yet reached the limit of the average life span. But it's not too far off though. I am pinning my hopes on subcortical stimulation, a method elaborated at the Massachusetts Institute of Technology in Cambridge and the Center of Naturopathy in Delhi. I've decided to undergo a full course of treatment during the artificial lunar nights, which are timed to coincide with Moscow's latitude and which are synchronous with my biorhythms.

I can only study physics at odd moments. That is a pity. I find its mathematical play truly fascinating, though our long-cherished hopes of getting at the root of nature's essence are not justified. Now that we obtain quarks experimentally and have proved the principle of the violation of even numbers in the ultrasmall space cells, we are as far removed from our goal as in the time of Heraclitus. All elementary particles are found to be compound particles sooner or later.

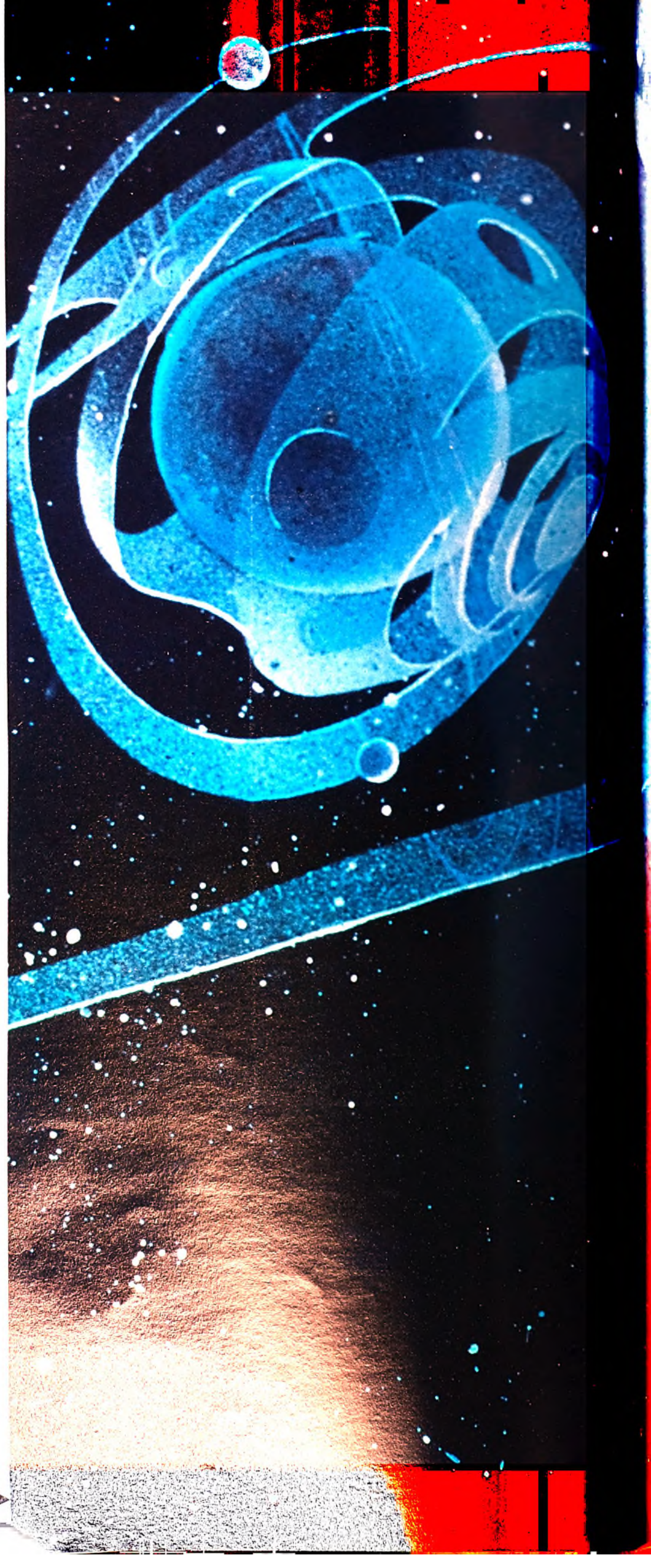
Nature is laughing at us, enticing us further and further on and, like the Goddess of Illusion, substitutes one essence for another. We have explored the nearest planets, and preparations are now under way for an international scientific investigation of Jupiter's satellites, but the stars are as much out of our reach as ever. Our hopes for an essentially new type of energy source have not yet been realized, and we have not the slightest inkling of whether we will ever be able to control time.

8:40 A.M. The telephone rings. It's my friend, a poet. He invites me to go with him to the guest house for writers and artists that was constructed recently on the Black Sea's shelf, a hundred meters below the sea's surface. Nothing is further from my mind now!

Buzzing along contentedly, the mechanical house cleaner rolls behind me, picking up the things I've left scattered around and switching off the electrical appliances that are not in use at the moment. A sharp siren makes me jump. If it weren't for the relay control, the machine would have swallowed up my Rocketoflot ticket. I kick the thing in disgust and snatch a clean handkerchief out of its sucking muzzle.

8:50 A.M. Finally I am out of the house. Screwing up my face to avoid the circling snowflakes, I hop hurriedly onto the moving sidewalk that crawls along at a snail's pace of 10 kilometers an hour to the nearest electrocar stop. Good thing the stop is quite near and I don't have to take a faster sidewalk. Riding past the orange-colored tower of an integrating device, I see a neon sign that reads: "Fir trees are best for New Year's parties." New Year's Day is not far off, and it is time to buy quick-growing seeds, I think.

9:03 A.M. At the electrocar stop I step into a transparent streamlined machine that has automatic controls. After I put my personal card of diamagnetic plastic into the analyzer slot, the contraption is set in motion. I name the route, and that's it. The rest is done by computer. It is forbidden to drive a car inside city limits. Only on the highway, where the speed limit in the traffic lanes may go up to 300 kilome-



"We always feel sorry for the past, even though it wasn't a very good past. But what if progress into the future becomes a constant effort to overcome nostalgia? What if it is the change of generations, the clash of ideas, dizzy, daredevil flights and . . . the pain of overcoming obstacles?"

2006

2007

"Nature is laughing at us, enticing us further and further on and, like the Goddess of Illusion, substitutes one essence for another. We have explored the nearest planets, and preparations are now under way for an international scientific investigation of Jupiter's satellites, but the stars are as much out of our reach as ever. Our hopes for an essentially new type of energy source have not yet been realized, and we have not the slightest inkling of whether we will ever be able to control time.

ters an hour, does the relay interlock of the gas pedal and steering wheel become disengaged. But the two-way communication with the center continues. In an emergency the computer takes full control of the electrocars in the area. Personally, I never touch the wheel.

I turn on the polaroid device that makes the car opaque. I can now perform my morning ritual. I squeeze a bit of cream from a tube and rub it into my cheeks. In two or three minutes the hair-eating bacteria make my cheeks smooth, and the alcohol obtained from the decay product has disinfected my skin. It's the greatest thing that the cosmetic industry has ever invented! The elixir for growing hair is nothing in comparison. It takes three weeks to produce results. That's natural: It's always easier to destroy than to create.

Like anyone going on a trip beyond the Earth's boundaries, even a short trip, I have to go through a lot of red tape. Besides the inevitable formalities which, to my deep regret, have increased even faster than the level of civilization, I have a lot of business to attend to, details that, like all normal human beings, I have put off to the last minute. Now it is all waiting to be done, and I am cursing my laziness. Only by flashing my press card am I able to move out of the stream of traffic and get a place on the intercity shuttle. To be exact, it is a shuttle between buildings assembled of standard units which tower with constructivist grace one-and-a-half kilometers above the Earth on gigantic piles. Formalities that appear senseless to me are most irritating. Naturally, I know why a gene bank of all the creatures living on Earth was created, but, for the life of me, I don't understand why a gene test is required each time I take a trip! To say nothing of the fact that the Moscow branch of the gene bank is situated in a building-city 200 kilometers away from the capital!

"The press! Urgent! For the jubilee issue of SOVIET LIFE magazine!!!" I send impatient impulses to the traffic control officer. Though we both know perfectly well that I have no right to expect special treatment, I am able to get on a reserve line and complete all my unimaginable and accursed business.

I even manage to catch a bite at the automat café and drink a glass of cold beer brewed from genuine polyploid barley. The little pill I swallow after drinking immediately acidizes the alcohol into vinegar. Even the slightest amount of alcohol in my blood would work against me today.

11:17 A.M. Having finished running around the city doing errands, I finally enter the office of good old Dr. Bairon.

"You do me an honor!" he says, squinting slyly, rising to meet me. "Imagine! Coming for a medical checkup without a summons! Unbelievable! To what do I owe the pleasure?"

"I need your certificate, Bairon," I mumble, shifting my feet.

"Oh, so you need a certificate!" he rubs his hands with satisfaction. "Where to?"

"Only to the Moon," I say nonchalantly. "So you don't really have to examine me."

"Lie down!" he bellows.

I try to protest, but Bairon has already called in the nurses. In a minute, naked, helpless and covered with a green sheet, I am being rolled to the apparatus room, sparkling with chrome and salad-green tiles. Before I finally capitulate, I beg the operator to switch on the suggestological cassette that I have brought with me. He shakes his head no: The subconscious should be unhampered.

I fall asleep and do not feel them connecting me to the scanners, polygraphs, analyzers and diagnostic devices. They check everything: my blood, brain waves, heart, blood vessels, eyesight, hearing, bone marrow, connective tissue, saliva, and so on. All deviations from homeostasis are removed immediately. Electrodominators and iontophoretic applicators correct the cardiac cycle and suppress neoplasms, normalize blood pressure and destroy anomalous cells in the blood and bone marrow. Of course, it is an excellent treatment, but I know I'll be a wreck for the whole day tomorrow. My bones will ache, I won't be able to hear as well and I'll have a temperature from time to time.

11:56 A.M. I am again sitting with Bairon. "We've transmitted your permission for flight to the Kamchatka Cosmodrome," he says condescendingly, drumming on the table with his strong surgeon's fingers. "But I don't like your blood vessels. You must clean them, my dear fellow! And it's time you started taking antisclerotin regularly if you want to live to middle age."

"Is it worth the trouble?" I ask, buttoning my jacket and putting on my telebracelet. "Living on pills so I can reach the age of 91? That's no life for me. I'll be satisfied with a healthy and vigorous 80."

"Don't miscalculate," smiles the doctor sadly. "Suppose you die a year before they invent immortality?"

"Dr. Bairon!" I exclaim, standing in the doorway. "Literary immortality cannot be had without biological death. But since there is no way for me to attain it, I will live to my dying day with a sense of eternity in my soul."

In the hall where the registration machine stands under the glass dome, I dial my wife's personal number. No matter where she is, the signal flashes on her bracelet and summons her to the nearest telephone.

"Hello," I say.

"Hello! How nice of you to phone again," she answers.

I start to say something to conceal my sudden feeling of sadness. We are used to departures and meetings, and this trip of mine is no different from any other. But leaving home always engenders a feeling of anxiety and foreboding. Happily, they have never been justified because it is not the future suffering in us but the past, the dear and customary past.

"See you soon!" I am able to blurt out.

The screen goes blank. There is nothing left to detain me in town. It is my good old town that is trying to hold me back with the links that we have established through the years.

I was born in a difficult and remarkable age. It fell to my lot to see humanity's most fantastic dreams come true, and the most daring forecasts become reality. But I have been granted something even greater: The bittersweet happiness of giving up the illusions and the dreams that humanity had used to soothe itself with from the cradle.

Apparently, the concept of personal immortality has to go just as the enticing idea of perpetual motion. Evasive time has once again jumped out of its cunning trap. It proved that it is not so difficult to make a copy of a person and multiply that copy, but the individual's memory and experience multiplied by the wisdom of evolution proved to be inimitable. People are now able to penetrate the vastly complex world which we each carry within us, but how are we to record in the eternal memory of electrons the countless treasures in museums and libraries? In short, we must say farewell to dreams and say welcome to yet another day granted by fate. Its inimitable brightness is both our goal and generous reward.

I feel a familiar impatience and the exhilirating chill of expected happiness. It is the call of the unknown; it tempts, worries and bewitches me with its eternally youthful spirit of untrodden paths.

12:38 P.M. Here I am aboard the 2,000-seat plane, which is taxiing to a runway of Sheremetyevo-7. The weather forecasts along the route are good, and I hope to land in Petropavlovsk-Kamchatsk in an hour and a half.

After fastening my belt, I choose a glass of genuine champagne made of Yakutiyan cloudberries and press the button on the order panel. As we approach the stratosphere, I look at the neighbor to my left. What a surprise! It's a cosmic-class android! To the best of my knowledge its memory circuit is made of optical diamond plates. It is distinguished for its capacity and is extremely compact since the diamond does not change its electromagnetic properties in a wide range of temperatures and requires no cooling devices. My neighbor's intelligence quotient must be no lower than 165. So we can have a "human-to-human" talk.

Unfastening my belt, I hand my neighbor my instant Xerox copy calling card. It thanks me politely and hands me its own. Just as I had thought, it is one of the Jupiter Program fellows. Humans don't fly to the giant planet yet.

"It's a pity we'll go our separate ways on the Moon," I say. "I'd enjoy visiting the Great Red Spot region with you."

"Nothing simpler," says the android, glancing at the Xerox card imprinting my personal number forever in its diamond brain. "When transmission to Earth begins, I'll summon you through the communications sputnik, and we'll exchange individualities. You'll become me and I'll become you for a few minutes."

"Sounds great!" I answer. "I simply don't know how to thank you."

"Don't mention it," says the robot, embarrassed. "It's I who should thank you. I have wanted to know for a long time how humans feel among machines."

We'll wait for the arapaima. That wonderful fish will swim in soon. ■

2002

"People are now able to penetrate the vastly complex world which we each carry within us, but how are we to record in the eternal memory of electrons the countless treasures in museums and libraries? In short, we must say farewell to dreams and say welcome to yet another day granted by fate. Its inimitable brightness is both our goal and generous reward.

LOOKING BACK

Yuri Fantalov, a Soviet journalist, was one of the first editors of SOVIET LIFE. Fantalov worked on the magazine for 12 years and was its editor in chief from 1961 to 1968. He is now with Novosti Press Agency Publishing House in Moscow. In the interview presented here, Fantalov remembers the years when he was at the helm.

Q: Tell us something about yourself and the state of Soviet-American relations when you were editor in chief of SOVIET LIFE .

A: The years I headed the magazine were not the best years for relations between the Soviet Union and the United States. The so-called Cuban missile crisis was still fresh in people's minds, and the war in Vietnam was going on. Yet, at the same time, the Soviet Union was advocating the establishment of good relations with the United States, and the principle of peaceful coexistence between states with different social systems, formulated by Lenin, was gaining broader recognition all over the world.

Contacts between the peoples of our countries were being promoted by agreements on cultural exchanges, which were resumed on a regular basis. The distribution of the magazines SOVIET LIFE in the United States and AMERICA in the USSR fitted well into the over-all program of extending Soviet-American contacts.

That was the time when Americans were being introduced to the Moiseyev Folk Dance Company and the Bolshoi Ballet, that audiences in Moscow and other Soviet cities were applauding the musicians from the Philadelphia Orchestra and singers from the Everyman Opera. The USSR Exhibition of Science, Technology and Culture was being held in New York and the American National Exhibition was opening in Moscow, while the exchange of writers, journalists, business executives and tourists kept growing. In the late 1960s the air route between Moscow and New York was inaugurated.

SOVIET LIFE had an especially important role to play during that period in promoting understanding and trust between the two peoples, whose interest in each other's life was growing day by day. Awareness of this civic and journalistic responsibility made the magazine's staff work with enthusiasm and inspiration. During those years we began to prepare special issues, each devoted to a major topic that we described comprehensively and in depth.

Q: Which issue do you remember particularly well, and why?

A: I think the August 1966 issue dealing with environmental problems would be my favorite. The variety of the articles and the acuteness of the problems that were raised triggered a good deal of response from our readers. The first letter we received was from Stewart L. Udall, who was then the U.S. Secretary of the Interior. He wrote:

Your special August issue Man and Nature was simply superb. Those who took the pictures and composed the text showed a deep appreciation of the natural wonders that abound in the Soviet Union.

There were many lovers of nature on the staff, and we did put our hearts into that issue.

Just as today, our country was developing rapidly, and every month interesting events occurred which we tried to report to our American readers in a captivating and easy-to-understand form. Take, for instance, what was happening in space exploration. Twenty years ago, on April 12, 1961, Yuri Gagarin became the first person to be launched into space. The SOVIET LIFE issue devoted to Gagarin's feat evoked a mountain of letters from readers. Our readers also responded keenly to the other articles we published on the USSR's studies of outer space.

Q: What were your impressions of exchanges with the readers of your magazine?

A: I fondly remember the letters we received from readers and meeting with them at readers conferences. The editors of the magazine never felt any lack of attention from our audience, and we tried to reciprocate. Readers' opinions, advice and proposals helped us improve SOVIET LIFE. It was as though the magazine's 64 pages were a keyboard on which we played pieces that we conceived with our readers.

Of course, we were inspired by the letters we received from readers, for example, the one from D. R. Reynolds, Idaho Falls, Idaho:

I wish to compliment you on the wonderful job you are doing in portraying Soviet life. It is a good thing for people here in America to see how your system works.

Here is another from a reader in Ontario, Canada, that was sent in 1966:

I feel it is essential for all the peoples of the world to come to understand one another, regardless of their philosophies of life. With the imminent and ever-present danger of a nuclear holocaust hanging over us, not only is it desirable that we understand one another and strive for peace and disarmament, it is absolutely essential for the very survival of mankind.

We are always glad to hear from readers, especially when their letters contain good advice. J. Maxwell Raspey, San Diego, California, wrote:

What impressed me above all else was the self-criticism, for example, in the article "Automation and the Worker." I ask you for more self-criticism like that.

We received this letter in 1966. Our magazine was still young at the time, but it was not an infant. I'm afraid in that early period we wrote very little about the problems encountered by the Soviet Union and about the difficulties we were going through in building a new society. We wanted to portray the brighter, more interesting and attractive aspects of Soviet life. But our own experience and our readers' responses showed that our approach was one-sided. We realized that we had to be frank with our readers, to show the problems and shortcomings that existed in our country and to describe why they happened and how we were coping with them. And SOVIET LIFE has been keeping to this tradition.

Q: People from different walks of life as well as journalists contribute to your magazine. What can you say about them?

A: I would like to list them all, from workers and farmers to well-known public figures, famous scientists and people in the arts, but this is impossible, of course. I can only say that I still feel profoundly grateful to them. Although pressed for time, they were always willing to speak to the American readers through SOVIET LIFE and describe their life and work and the present-day realities of the Soviet Union.

My colleagues and I were very happy to work with them. We learned a great deal from that cooperation. Among these friends were novelist Mikhail Sholokhov, poets Yevgeni Yevtushenko and Andrei Voznesensky, composer Aram Khachaturian, painter Martiros Saryan, ballet stars Galina Ulanova and Maya Plisetskaya, cosmonauts Yuri Gagarin, Gherman Titov and Valentina Nikolayeva-Tereshkova, surgeon Nikolai Blokhin and many other people of world fame. Most of them had been to the United States and knew and admired Americans. They were always happy to address our readers.

When we began organizing round-table conferences where acute problems were discussed by prominent specialists, I don't recall anyone ever declining our invitation to participate. Our discussion on cybernetics, economic planning and the social system, for instance, was a great success with readers. Among the scientists who took part were Leonid Kantorovich, Tigran Khachaturov, Anatoli Dorodnitsyn, Stanislav Strumilin and Vasili Nemchinov.

Q: What do you think about the magazine's future? What will it be like in another 25 years?

A: I have no doubt that future issues of the magazine will continue to satisfy the friendly and unbiased reader who has a sincere interest in the extension of contacts between the two countries. Today, regrettably, Soviet-American relations are not the best possible. But I'm certain that in a quarter of a century we will enjoy far greater fruits of friendly cooperation between our peoples. SOVIET LIFE will become even more informative, colorful and interesting and acquire thousands upon thousands of new readers. ■

HOW WILL OUR WORDS B

By Robert Tsfasman
Managing Editor, Moscow Editorial Board

I have been on the staff of SOVIET LIFE magazine for more than 15 years. In my opinion, our readers have made definite progress during this period. They now know more about our country and better understand its problems. This makes our work harder but more interesting: Conversing with a knowledgeable audience is more fruitful.

For the sake of fairness, let me note that in the past, too, some readers have surprised us with their erudite knowledge of Russian history, literature and art. One reader even "caught" us giving a wrong date in our story on Novgorod and put us to shame. But there were many more readers who, though well-wishing, still thought that "bears walk on the streets in Russia." American tourists at that time would tell us gladly after a stroll through Moscow: "Your people are well clothed. You have excellent new housing and plenty of cars." To us, these were naive observations, of course: Why should there be rags, slums and carts? But for some reason this influenced the thinking of the editors of the magazine, and in preparing reports about the Soviet people, we stressed in the photographs and texts people driving their own cars, going to their own summer houses, relaxing in their own comfortable apartments.

Then after some time we received letters like the following:

> Don't lay stress on material well-being—you won't surprise anybody with this. Your achievements lie elsewhere: in the spiritual wealth of society, in its moral climate. So write about that.

Placing emphasis on spiritual values is more difficult. Though knowledgeable people say that Americans and Russians are similar in many ways, their psychologies unquestionably differ. Much of what we take for granted is not all that clear to the Westerner, and vice versa. Therefore, it is not always possible to guess what material will produce which response.

Here is one example. Not long ago we published a report on a "factory mood service." It described how sociologists and psychologists had helped the workers and management at the Dneprovsky Machine-Building Plant create an extremely favorable psychological climate there. The results were a sharp increase in labor productivity, high wages, a reduction in labor turnover and more rapid promotions.

Generally speaking, the material was to the point and specific. But we published it thinking it wouldn't bring much response, as the specialists on America on our board asserted that applied sociology in the United States is too advanced for us to surprise them with this kind of report. Yet the article evoked wide response. The unanimous view of readers was that it had strikingly shown that in the USSR people standing on different steps of the social ladder are on friendly terms and display a sincere concern for one another.

Here is one more example from our mailbag:

> You give little space to sharp discussion issues and a struggle of opposed views. It looks like the millions of people in your country all think alike.

All thinking alike—that's absurd, of course. We have to refute this absurdity. Actually, we have increased our coverage of problems and discussions over the last few years. For example, in the February issue last year we published a round-table discussion on developments in the Soviet Far East. Prominent scientists, heads of ministries and famous writers took part. Soon after the publication of the issue, we received many letters of approval: The businesslike talk on unresolved complex problems had interested readers. Moreover, they saw that vital economic, social and other issues are discussed widely and openly in the USSR, at all levels.

Development guidelines for the eighties were debated before the Twenty-sixth Congress of the CPSU in this way. Over 121 million people participated in the nationwide discussion. Statements at mass meetings, letters to the press and government bodies and proposals sent directly to the central commission that organized the forum were duly considered. The commission took special pains to consider the views of people who disagreed on particular issues.

Our magazine covered this debate, and we hope that readers got an idea of the civic activeness of ordinary Soviet people.

Closer to Life, on the Heels of Events

What is a typical reader's request? Undoubtedly it is this:

> Show the daily life of ordinary people more. Make fewer general statements, and please avoid abstract statistics unrelated to particular situations.

We do our best to meet such wishes. Sometimes we bring out an issue wholly devoted to one republic or region. We can show the diversity of local life and give the reader the most useful information in this way. A good example—last year's December issue marked the sixtieth anniversary of Soviet Armenia. It was a great success, and the entire edition sold out quickly. We received bagfuls of congratulatory letters. The success may have been predetermined by the fact that there is a large Armenian community in the U.S., but, as far as we can judge, it is not only those people who liked it.

Our Ukrainian issue (January 1980) was also assessed highly by Americans of the most diverse origin.

For the most part we do not concentrate on special issues. Otherwise our magazine would turn into a geographical anthology. We already have something of an anthology, due to our long printing cycle, and we cannot keep up with all the events occurring in our vast country. For this reason we print "hot news" items only in exceptional cases. For example, the March 1981 issue covered the Twenty-sixth Congress of the CPSU. We managed to publish it in record time.

What Does the Barometer Show?

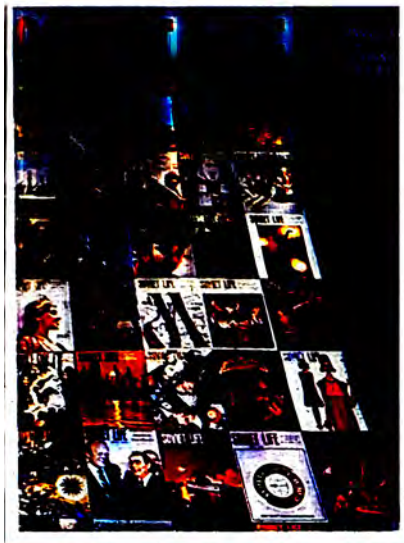
At one time there was an energetic and able young man on our staff. However, he went over to a Moscow newspaper two or three years later. We didn't want to part with him, but what could we do? He was free to go. He left because he thought if he wrote for a newspaper, he could better appreciate the usefulness of his work. For example, he could write a piece of topical satire, and he would soon learn the results: The evil has been punished, and justice triumphs. Or, say, he could find interesting personalities and tell the public about them, making their life stories worthy of emulation, examples for thousands of young people to follow.

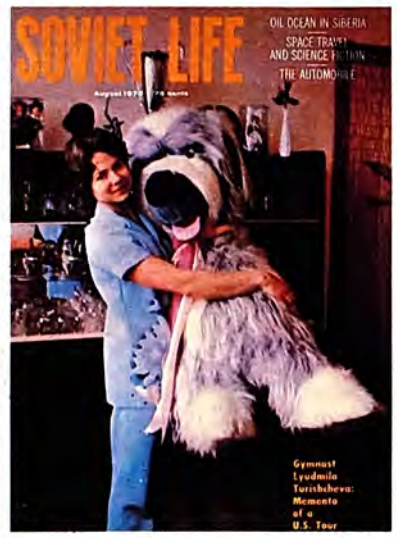
There are many times when newspaper journalists actively intervene in the lives of those surrounding them, and they can do a service to their fellow citizens with their pens. Our former colleague may succeed in this, but that is his field of activity. We—those who have stayed with the magazine for many years—have our own. To the extent of our abilities, we serve the cause of mutual understanding between two great peoples. These are not high-sounding words. It is our daily routine, made up of issue planning, searching for interesting topics and authors, editing, selecting photographs, painstaking work on the layout and other tasks, all the things that constitute the life of any editorial board.

Among journalists SOVIET LIFE is looked upon as a prestigious publication. This admittedly flatters us, but the ultimate results matter more. Our readers are far away, and their reactions are sometimes unpredictable. It is also important to keep in mind the following, not insignificant, detail: We mainly write in Russian, and, in translation, a considerable portion of our effort to write vividly is lost. Alas, sometimes a quote from Leo Tolstoy and a phrase written by a recent graduate of a school of journalism may sound alike.

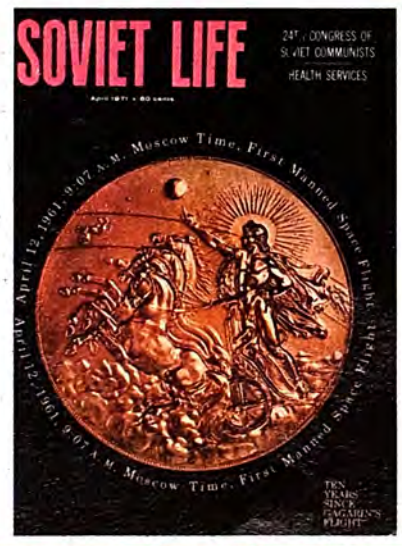
So for us there is much uncertainty and guessing. But, fortunately, we can go by the old, tested barometer—our readers' letters. The more warm comments we receive from across the ocean, the better the weather in our editorial offices and the more we are sure that we are doing a useful job.

VERBERATE?





The covers of SOVIET LIFE run the gamut from figure skaters to cosmonauts. They are as varied as the articles we try to bring our readers in the unending effort to make our country and its people comprehensible. This is our commitment, for we are convinced that world peace depends on mutual understanding.



SOVIET-AMERICAN RELATIONS

A ROUND-TABLE DISCUSSION

Oleg Anichkin: "The historically inevitable competition must proceed peacefully."

Igor Moiseyev: "I am sure cultural exchange will be revived in time."

Nikolai Fedorenko: We need "an energetic dialogue between our two countries."

Vladimir Sushkov: "An increase in trade could benefit both economies in many areas."

Dzhermen Gvishiani: "The suspension of cooperation entails a loss for both sides."

To mark its twenty-fifth anniversary, SOVIET LIFE held a round-table conference called "Soviet-American Relations: Experience of the Last 25 Years." Invited to take part in the conference were Oleg Anichkin, head of a section of the International Information Department of the Central Committee of the Communist Party of the Soviet Union and member of the Collegium of TASS; Igor Moiseyev, People's Artist of the USSR and leader of the USSR Folk Dance Company; Nikolai Fedorenko, secretary of the board of the USSR Writers Union, editor in chief of the Soviet monthly *Inostrannaya Literatura* (*Foreign Literature*) and corresponding member of the USSR Academy of Sciences; Vladimir Sushkov, Deputy Minister of Foreign Trade of the USSR; and Dzhermen Gvishiani, vice chairman of the USSR State Committee for Science and Technology and member of the USSR Academy of Sciences.

Oleg Anichkin: Soviet-American relations over the last 25 years have been packed with swift developments of a large-scale nature which were duly assessed in their time. What matters very much—and this is universally recognized—is that the state of Soviet-American relations is of determining import for the over-all situation in the world. Experience shows that when Soviet-American relations were developing normally, the political atmosphere in the world was peaceful, and, vice versa, the darkening of these relations immediately influenced the international climate adversely.

Although international relations are made by all countries, large and small, the state of relations between such big powers as the Soviet Union and the United States is of global significance. Their consequences go far beyond the framework of bilateral relationship. It is common knowledge that the solution of major global issues, such as curbing the arms race, eliminating the existing seats of armed conflict and protecting the environment, directly depends on the attitude of our two countries and the presence of a desire to cooperate on both sides.

The public at large enthusiastically welcomed the positive turn that occurred in Soviet-American relations in the early 1970s. The level of the development of these relations reached at that time provided a solid foundation for their continued growth and cleared the way for their subsequent deepening and expansion.

As a result of Soviet-American negotiations at the summit level, the leaders of the two countries reached an understanding of principled importance on the need to promote peaceful and equitable bilateral relations. That understanding was reflected in a whole parcel of Soviet-American treaties, agreements and other documents, including the Basic Principles of Relations Between the Union of Soviet Socialist Republics and the United States of America, the Agreement on the Prevention of Nuclear War and a number of treaties and agreements on the limitation of strategic armaments. These documents laid a sound political and legal basis for the development of mutually advantageous cooperation between the USSR and the USA on the principles of peaceful coexistence and largely facilitated the reduction of the danger of nuclear war. Therein lies their fundamental significance.

In a nuclear age the only basis for maintaining relations between the USSR and the USA is one of peaceful coexistence. Differences in ideologies and social systems are not an obstacle to the promotion of normal relations based on the principles of sovereignty, equality, noninterference in internal affairs and mutual benefit. The two sides should avoid military confrontations, prevent nuclear war from breaking out, display restraint in their mutual relations, be ready to conduct negotiations and accommodate differences by peaceful means. Attempts to gain unilateral advantage at the expense of the other side are incompatible with these aims.

Much divides our two countries—from socio-economic systems to ideology. Not everyone in the United States agrees with our policies, and we cannot say that we like everything going on in the U.S. If, however, the emphasis is placed on the differences of the two countries and if each side tries to outwit the other, the only result will be a buildup of mistrust and hostility. This is useless for our two nations and very dangerous for the world as a whole.

At the dawn of the Soviet state Vladimir Lenin warned the then American leaders that America would gain nothing by its policy of pious rejection on grounds that it did not like our government because, whether it liked it or not, Soviet Russia was a great power. This was true half a century ago, and it is all the more true toda

As a result of the attacks of certain influenti forces on détente, the situation in the world h deteriorated. It is very complicated and ten today. Hence, there is a need for dialogue at levels, which Leonid Brezhnev has suggested. special importance is a Soviet-American dialog at the summit level. Experience has proved th the meetings of top leaders produce the mo tangible results and lead to the most concre solutions of burning international issues.

The U.S. Administration announced that it w studying the latest Soviet proposals. In our vie this is a normal reaction: Leonid Brezhnev speech at the Twenty-sixth Congress of the CPS last February contained a package of large-sca proposals concerning various parts of the glob These proposals are not of a propaganda natur They have been prompted by the sole purpose finding ways to consolidate peace and curb th arms race. Naturally, these proposals should b carefully studied and discussed.

After a short while, however, the U.S. bega to say that perhaps they should not be too hast about negotiations with the Soviet Union. Obv ously, it is a case of delaying the beginning the dialogue.

There are also pronouncements of a differe order. These stem from the assumption that th United States should enter the dialogue after th Soviet Union has proved it "honors the code behavior" in international affairs. As to the *norm* of behavior, it is the United Nations Charter an those international agreements which have bee signed on behalf of the states that lay down such norms for all nations, including the U.S.

A policy of linkage has been used lately by th United States in relations with the Soviet Unio This policy is out of place in relations betwee equal partners and, as a rule, only leads to a impasse. The idea of linking the solution of on problem to the solution of another, which is n less difficult, is faulty for another reason, too. we had linked the policy of détente to other prob lems, we would never have achieved positive re sults. For example, on the eve of the Soviet-American summit talks in 1972, over the cours of which the first treaty on the limitation of strate gic armaments—SALT-I—was signed, the U.S. started the bombing of Hanoi and the *mining* of the Port of Haiphong. The Soviet Union did no link the two questions, believing that the meeting

the leaders of the two countries would positive results. This was a far from ision for us, but it was necessary and le.

ntinued accumulation of nuclear weap- their improvement increase the threat of ıctioned conflict and lower the nuclear . The proliferation of nuclear weapons, xpansion of the "nuclear club," also ɔig threat. Scientists have estimated that nd of this century about a hundred na- l be able to build an atomic bomb. Nu- nflict in any part of the world could be

tain areas the arms race is approaching eyond which it will be impossible to put ittive brakes by signing agreements on al control. The striving of certain states ary supremacy and their desire to upset ary balance existing in the world are be- ever more arrogant.

is lost, our descendants may not forgive his. For its part, the Soviet Union con- p come out in favor of promoting coopera- n the U.S. in all areas. We are confident acting jointly and by proceeding from a desire to come to an agreement on the a reasonable and realistic compromise as equality and equal security, our two es can find solutions to the most compli- roblems.

ave always proceeded from the fact that ition between the capitalist and socialist s will go on. There is no other way. But work with a view to transferring this ition to a track where it will not threaten angerous conflicts and an unrestrained ace. In short, the historically inevitable ition must proceed peacefully. The cause ersal peace and the interests of all the s and all the states will benefit greatly from

oiseyev: Our dance ensemble was honored ng chosen to launch Soviet-American cul- elations in 1958. We were the first Soviet ainers to tour the United States after the cul- greement was signed in 1956. We opened Metropolitan Opera House in New York nd our performance was a great success. mericans said they hadn't seen anything for a long time.

r we won the recognition and good will of merican public, we never had to ask for ng because people were eager to do every- they could for us. American hospitality can- e compared to that of any other Western . Americans are the most hospitable of all. with invitations, we were practically worn r the attention we received.

specially remember the Hollywood celebri- ho came to see us when we appeared in ngeles. After the performance we walked r bus through the corridor of movie stars ere applauding. A man came up to me and me a hug, saying we had given a wonderful rmance. Later I asked Sol Hurok, our im- rio, who that man was, and he told me it Marlon Brando.

en we were getting ready to go to the States e third time, I prepared a parody on rock 'n' hich was the craze then in the West. But I esitant to show it in the U.S. I decided to the then U.S. Ambassador to the USSR, llyn E. Thompson, Jr., to see the dance. the performance I asked him if I should it to America. "By all means," he said. "I e you, the number will be a tremendous ss."

Ambassador was right. The number was a it. I mention it only to stress an important re of the American character, I mean the city of Americans to laugh at themselves.

been to the U.S. nine times, but, of course, rst trip is unforgettable. It was a real holi- for us Soviet artists and for thousands in our American audience, too. The last time I was in the U.S. was in 1976. That time I didn't go as the leader of our ensemble but as the director of the Soviet festival on the occasion of the U.S. bicentennial. Our group included the Pyatnitsky Russian Folk Chorus, the Georgian ensemble and several other artistic companies.

Americans are fine people, and we enjoyed meeting with them very much. They appreciate folk art; they are genial and objective.

We were scheduled to go to America in 1979 with a new repertoire, but our tour was canceled suddenly. Instead, we went to Italy, where impresario Sherry Gold, the person who inherited Sol Hurok's job, saw our program. Ater it was over, he repeated sadly several times: "My God, my God! And I cannot take this program to America!"

The first Tchaikovsky competition opened in Moscow during our first tour of the United States. Van Cliburn stole the show. We were in New York at the time and saw how happy the Americans were at his success: They literally showered the pianist with flowers on his return from Moscow. It was a real holiday of American culture. It was our holiday, too, because we enjoyed equal success in the U.S. Lovers of music and art on both sides of the ocean rejoiced together with us.

It is a pity that those days are gone, but I am sure cultural exchange will be revived in time.

Nikolai Fedorenko: The fourth round-table conference of Soviet and American writers took place at the University of Southern California (UCLA) in Los Angeles last November. I lead off this way because at that time relations between the Soviet Union and the United States were so strained that, objectively speaking, the conference might not have been held.

Our writers' dialogue was conducted in a cordial and businesslike atmosphere. The university did everything for us not to feel any pressure whatsoever from the outside, and we really did feel at ease.

I realized then that, in spite of the ups and downs in Soviet-American relations, there are still areas that can bring us together at one table, in one hall, for a calm exchange of views. One such area is literature.

Our literary contacts with the U.S. have never been regular, whereas our round-table meetings have become traditional since the first, which was held at the Moscow Writers Club in 1977.

I believe that literature can play a highly constructive role. Books are our envoys, and, both in the Soviet Union and the United States, they have their own way of reaching the hearts of readers. A person may accept or reject the world that literature portrays, but, in any case, it is one way to get to know and better understand others, and one's self, too. At any rate, books and personal contacts of writers make it possible to clarify ideas and to convey to one another a great deal more than what we glean from the newspapers, hear over the radio or see on television. They help us understand the goals we seek.

The latest topic discussed at the Los Angeles round table concerned the spiritual values of humanity. We spoke of them and their fate in present-day conditions. We noted that these treasures, created by many generations, are dependent on the international situation, on whether there is war or peace. Countless values have been lost in time of war; countless more have been created in time of peace. We debated many points with our American colleagues, but we agreed on one thing, namely, that war, and all the more so, a thermonuclear holocaust, was inadmissible. The most sacred task for writers today is to do everything in their power to prevent a nuclear conflict.

At the conference we talked a good deal about what writers could do to avert a nuclear war. In his concluding statement Norman Cousins, who cochaired the meeting, pointed out that we had gotten together at the round table because we can serve as a metaphorical reflection of our identity. He said that statesmen, as distinguished from writers, are limited by a whole number of circumstances. Cousins hailed meetings of this kind because we can do what the politicians are unable to do, though we talk with each other in the language of politics.

It is extremely important today that there be an energetic dialogue between our countries. This is in the interests of each of us. Under any circumstances we should continue to talk and not rest on our oars. We must not forget that so many nuclear devices have been created now that the human race can be wiped out many times over. We all know that a person can be killed only once.

We share one Earth and the responsibility for it. Therefore, we must work together. We want the rattle of sabers to be replaced once and for all by the hum of construction, by the throb of creativity. This is what the Soviet people are interested in. That is why they have sweeping plans for creative effort drawn up by the Twenty-sixth Congress of the CPSU. We need peace and international security to translate them into practice. We don't want to see sums of money taken away from construction in order to be used for military purposes.

The question of peace cannot be separated from culture. War and culture are incompatible. Since 1956 we have always benefited from our dialogue, exchange of cultural values and live contact between those who create them.

Vladimir Sushkov: International trade is important for peace and good relations among nations. The Soviet Union has always favored normal growing trade and economic relations with the United States, relations based on long-term and stable agreements rather than on one-time deals. As early as in 1919 Vladimir I. Lenin, the founder of the Soviet state, pointed out the importance of having economic cooperation with the U.S. He told a *Chicago Daily News* correspondent, "We are decidedly for an economic understanding with America—with all countries but *especially* with America."

The general state of political relations between the Soviet Union and the United States has a notable effect on their business contacts. The result is that trade between the two countries can be sporadic, and periods of blossoming trade relations alternate with periods of their decline.

In the early 1970s détente had a good effect on Soviet-American trade. From 1972 to 1974 Soviet and American leaders discussed the state of trade between their countries at top level. They agreed to introduce special legislation, to develop and improve trade cooperation and to organize it more effectively.

As a result, Soviet-American business relations became more active, and the trade turnover increased from 161 million rubles in 1970 to 2.837 billion rubles in 1979. American exports to the Soviet Union rose from 103 million rubles to 2.487 billion rubles. In recent years 65 to 75 per cent of the American exports to the Soviet Union were foodstuffs: grain, rice, lemons, dried fruit, hops, almonds, and so on. Grain was delivered under a five-year agreement. The U.S. export of machinery and other equipment to the USSR reached a peak of 621 million rubles in 1976 and then dropped to 311 million rubles by 1980.

Increases in Soviet exports to the U.S., however, were not as dramatic (from 58 million rubles in 1970 to 350 million in 1979) because the U.S. did not grant the Soviet Union most-favored-nation status, which is normal practice between business partners. In 1979 the Soviet Union exported oil and oil products, ammonia and other chemicals, precious metals, vodka, certain consumer goods and raw materials, tractors, machine tools and electronic parts.

This structure was the result of the American Trade Act passed in 1974, under which the Soviet Union could not be granted most-favored-nation

Continued on page 56

IN RETROSPECT

Valeri Yuryev was the first managing editor of SOVIET LIFE. He reminisces about how it got started and its early days. It is, of course, the story of the magazine, but it is a story that can't be told without touching on the relations between the USSR and the USA.

Do any readers remember what was on the front cover of the first issue of SOVIET LIFE? Or the date considered to be the magazine's birthday? Or that the magazine's name at first, and for many years thereafter, was *USSR*? Such details, while of no special significance today, are part of the magazine's history.

A retrospective view is particularly instructive since it also helps us to recall certain vital chapters in the development of relations between the Soviet Union and the United States.

Prehistory

When SOVIET LIFE's founders began lining up the people for its Moscow editorial board in March 1956, I had already agreed to work in the magazine's Washington office. My office was to handle the production and circulation of the publication in the United States. Ahead of me lay five years of work as managing editor of the Washington editorial board and two years at the Moscow office after I returned home.

At the end of May 1956 I was scheduled to leave with Enver Mamedov, SOVIET LIFE's Washington editor in chief. However, we had to first wind up all the preparatory work for launching the magazine.

I remember the meeting at the Moscow office when the contents of the first issue were to be approved. It began with a discussion of which of the pictures should be used for the front cover. The founding fathers selected a picture of Soviet Premier Nikolai Bulganin and U.S. President Dwight D. Eisenhower chatting on the lawn during a break in the official meetings at the Geneva summit conference in July 1955.

This picture, and with it the birth of the magazine, is associated in my memory with the Geneva spirit, as the trend was called in the mid-1950s, the easing of the international tensions of the cold war, in the same way that the Helsinki spirit came to personify détente in the 1970s. It was said at the time that a thaw was setting in and the world political climate was beginning to change for the better. True, it was still a long way to détente, as the process came to be understood in the seventies. Nevertheless, recognition was growing, step by step, of not only the desire but also the need for peaceful coexistence.

It was precisely in this changed atmosphere that the United States and the Soviet Union agreed at the end of 1955 to an exchange of magazines. Practical preparations got under way in both countries, and in July 1956 the reciprocal agreement between the governments of the United States and the Soviet Union on the publication and circulation of the magazines *America* and *USSR* was finalized. A succinct announcement about it appeared in our first issue under the masthead on the inside front cover. This has been the customary place for it ever since. Some people may consider the announcement a formality, but to me it is the magazine's birth certificate.

The covers of the first issues of the exchange magazines *America* and *USSR*.

After 25 years, I had a hard time remembering the exact day the first issue came out, but a file of *Pravdas* for 1956 came to the rescue. A two-column story was printed in the Sunday, October 21, 1956, issue. In part it read:

> Newsstand sale and circulation by subscription began in the United States yesterday of *USSR*, an illustrated monthly magazine published in English by the Soviet Embassy in Washington.

In these 25 years, 300 issues of our magazine have appeared. The publication has undergone considerable changes in content and layout, but it has never deviated from its underlying principle of bettering relations between the Soviet Union and the United States.

Retrospective glimpses show that, until a short time ago, relations between our two countries were improving. The mutual alienation inherited from the cold war period was giving way to the establishment of mutually advantageous cooperation at all levels. Thanks to the efforts of both sides, we reached the end of the seventies with many positive results mirroring the policies of peaceful coexistence and the development of détente. Our contacts and exchanges in various areas became broader and more meaningful. The governments of both countries were able to overcome many difficulties and find a common language on some of the major problems that needed to be solved for the development of relations not only between the USSR and the USA, but throughout the world.

During the most recent period, however, Soviet-American relations have retrogressed. It is to be hoped, however, that in the eighties, as was observed by Leonid Brezhnev, we shall be able to preserve all the positive elements in Soviet-American relations that have been achieved in the past, overcome present difficulties and resume the interrupted dialogue. This is necessary even more today, perhaps, than before. I think there should be an active dialogue at all levels and, above all, at the summit.

Final Preparations

As one of our younger editors thumbed through the first issue of the magazine recently, he asked: "Why was the magazine distributed in October 1956 when the publishing date on the cover was August? And why was the second issue, which came out in November, dated September?"

Indeed, why did this happen? The third issue circulated in December, carried neither a month nor a year on its cover; it was simply marked No. 3. Using a number to designate the issue continued to be the practice for a long time. I can't even remember when the month and year first appeared on the magazine's cover.

To explain the reason for this curious occurrence, I have to go back to July 1956. By that time, preparations for printing the first two issues had already been completed. We hurried to mail the editions of the first two issues August and September, respectively. But we did not receive the green light to distribute the magazines until October for the following reason.

When everything seemed ready for the magazine exchange to begin, unexpected complications arose about the technicality of newsstand sales. Each side wanted to have reliable guarantees of circulation. Reaching agreement on reciprocity in this matter, however, was not easy because of the big difference in the way the two countries organize the circulation of periodicals.

Through joint effort, a solution acceptable to both sides was found, of course, but the talks held up the launching of *America* and *USSR* until October 1956.

At various times I met with representatives of *America* and other partners in our magazine exchange, and we were always able to find a common language on matters of common interest. It was this spirit of cooperation that I remembered most of all at the end of my five years in the United States. Naturally, I didn't exactly forget the difficulties that arose in the course of publishing and circulating our magazine.

Cooperation with Printers

The printing of our magazine went better than its circulation, but here, too, it wasn't smooth sailing in the beginning.

We wanted to find a printer in Washington, D.C., near our editorial office, but it just didn't work out that way. Some print shops were already overloaded, others lacked the technical facilities, and still others simply didn't want our work. Cold war sentiments were still evident.

Our search finally ended in New York City. The first issue was printed by a small firm that was really not equipped to handle the job. So we con-

to look for a printer while the talks on cir- on dragged on, and we found the Cuneo Inc.

ctically every month I flew to Milwaukee ometimes to Chicago to check and okay all proofs and layouts before the magazine to press. Despite the unusual circum- es, there was not a single major conflict g the four years the magazine was printed uneo.

quickly grew accustomed to each other developed a good relationship both at the gement and shop levels. I had most contact Bill Ravetto, the "guardian" of our magazine. ere were times, of course, when material d arrive from our Moscow office at the last te and we were late for our printing dead- Even then we'd work together to find a way f the situation. We had no complaints about o. The big drawback was the distance be- n our Washington office and the Milwaukee Chicago plants.

the time our contract with Cuneo expired, ad succeeded (incidentally, with the help of le at *America*) in finding a printer only 30 tes away from our office, the Haynes Litho- h Company in Rockville, Maryland.

ir magazine moved to the new place in July , and it is still printed there to this day. It a new name now, the Holladay-Tyler Printing oration.

ere is one interesting fact I would like to e with you: For a whole year, *America* and magazine were printed by the same company. *Washington Post* did a front-page picture on it titled "Peace Rules as *USSR* and *rica* Go to Press." Among other things it said:

> When it comes to magazine publishing, the ited States and the Soviet Union are not far apart. e two nations publish *America* and *USSR* at the ynes Lithograph Company in Rockville for dis- bution in the rival countries under a long-standing ltural exchange agreement. . . . The going may be ugh at the United Nations (and in other places), t in a Rockville printing plant there's peaceful existence.

remember the "guardians" of our magazine in lkville—John Dull and Bob Walters, first-class essionals in their line of work and friends a good sense of humor. We were able to t with them more often than with our partners Chicago and Milwaukee and thrash out our olems. In the early stages of our cooperation Haynes Lithograph Company, the pace of k increased noticeably each time an issue about to go to press. I suppose the same g was happening with *America* in those days. t the end of one of those hectic publishing les, Bob (and, sometimes John, too) sighed relief and joked: "Working against time the we do, it wouldn't take much to mix up the publications!"

Interest in the Magazine

would like to quote the appraisal of the ex- nge of magazines which appeared in the July 1956, issue of *The New York Times Magazine.* headline on the cover read:

AN EXCHANGE OF VIEWS
America to the Soviet Union;
USSR to America

And the commentary inside carried reproduc- ns of some of the pages of the two magazines. was signed "Harrison E. Salisbury" and read part:

> Propaganda relations between East and West en- ered a new phase this week. The United States ublished the first issue of America Illustrated, a sixty-four-page picture magazine for circulation in- side the Soviet Union. And Moscow brought out USSR, a sixty-four-page picture magazine for the United States public. . . . An earlier version of AMERICA was circulated in Russia until 1952, when the "cold war" killed it. USSR is much more elaborate than a small Soviet propaganda monthly issued in that period. USSR emphasizes an informal picture of Soviet life. . . .

A full-page picture story in *The Washington Post* reprinted some illustrations from *America* and *USSR* with an accompanying commentary by the well-known columnist Chalmers Roberts, who briefly outlined the contents of the opening issues of both magazines:

> The two magazines are published under an agreement ending a four-year freeze on publications by either government in the other nation. They are both in the "best foot forward" tradition. Each attempts to show the better things in [its country's] life. . . .

Naturally, I cannot present a complete review of the U.S. press on our magazine since I was able to preserve only a few clippings. However, the articles I have quoted reflect the interest evoked in the United States by the appearance of the first issue. We got a fuller picture when reports on newsstand sales started arriving.

Actually we did not advertise the magazine, at least not as the word is understood in the United States. It did get some publicity in the press and on television, but it was not all favorable.

On the newsstands the magazine was actually lost in the wilderness of other picture publications. Nevertheless, at the end of the first week of sales, the main offices of the American News Company, which handled distribution of *USSR,* reported a "sellout in the New York area on the basis of incomplete reports, with many requests coming in for additional copies." Similar reports arrived from the company's coast-to-coast branches.

Each month the number of subscribers rose, with people sending in their checks for one-, two- or even three-year subscriptions, not just the trial period. Bigger and bigger mailbags were delivered to our address.

I remember Holland Roberts, who was then president of the California branch of the U.S.-USSR Friendship Society, saying in a letter that the magazine had found the right and convincing way to tell Americans about the many aspects of Soviet life, one that heightened interest in the USSR among Americans of all walks of life. He said that they had received an excellent source of information about a distant country and people of whom they frequently had a blurred picture.

We could judge this heightened interest in the Soviet Union from the mail arriving at our office. Representatives of the magazine and of the Soviet Embassy were invited to speak before the most diverse audiences—schools and universities, Rotary Clubs and Chambers of Commerce, YMCA branches and even Sunday schools. Such meetings subsequently developed into readers conferences of our magazine.

These letters and personal contacts certainly helped us to plan our coming issues better and to select topics about Soviet life that would appeal to our readers.

Editorial Board Old-Timers

We have thus, step by step, approached in our retrospective narrative from the prehistory of our magazine to the present day, from the first issue to the three hundredth. The editorial board in Moscow is no longer the same as it was 25 years ago. Not one of the present staff members has worked on the magazine from its inception.

Both the Soviet and American staffs at the Washington office have also changed more than once. However, two American citizens have been with the magazine from 1956 until today.

Ananias Perry worked at a gas station near our editorial office in Washington. We needed a driver and asked the young and affable Black American if he wanted the job. He very quickly proved to be a competent driver and an excellent mechanic. I remember my brand-new Chevrolet once sneezing a couple of times and refusing to start. A group of perplexed people from the office, including myself, clustered around it, trying to figure out what was wrong. Finally we called Mr. Perry, who, without a word, got into the car, pumped the pedal a few times and pressed the starter. Without opening the hood, he quickly diagnosed the problem: "Mr. Yuryev, you're out of gas!"

From that time onward, and in far more complicated situations, we always appreciated his efficiency and good humor. I remember his being impressed by our pragmatism when we quoted the well-known Soviet satirists Ilf and Petrov: "A car isn't a luxury, but a means of conveyance." Mr. Perry made sure our office cars were always in good working order, a major contribution to getting the magazine out.

Lillian Henley was working in the Press Department of the Soviet Embassy in Washington, D.C., at the time the *USSR Information Bulletin* was being published. She became stylistic editor, proofreader, and even, when necessary, typist, in other words, a "Jill-of-all-trades" in preparing copy for the printer. I worked with her for five years and remember her tact in drawing our attention to translation errors made in Moscow. I also remember her uncompromising way of sticking to her point when trying to prove the need for changes that would make the magazine more intelligible for her compatriots. In such cases Lillian usually said: "I understand your point, but. . ." This was followed by detailed advice as to what had to be done and how to do it. As the sages have said since antiquity, "Argument brings out the truth."

Robert Kreisinger, who retired some years ago, worked for a long time in the subscription department of the Washington office. He, too, came to the Press Department of the Soviet Embassy long before the appearance of our magazine.

My story about the old-timers on the magazine's staff would be incomplete if there were no mention of those who have invisibly stood behind all the articles in our 300 issues: our translators in Moscow. I'll name only one, Yevgeni Petrovsky, whom I have known for at least 25 years, if not more (as a matter of fact, I've asked him to translate this article). His translations for SOVIET LIFE and other Novosti Press Agency (APN) foreign publications cover a wide range of subjects.

From USSR-1956 to SOVIET LIFE-1981

Speaking of the magazine's evolution over the past 25 years, I would like to mention the change in its name. The magazine started out as *USSR,* with the words "Illustrated Monthly" appearing under the masthead on the Table of Contents page. In January 1962 "Soviet Life Today" was added under USSR on the front cover. In January 1965, complying with readers' requests, the magazine was given its present name SOVIET LIFE.

There have been a great number of developments and changes in the Soviet Union over these 25 years. The swift pace of life, with its achievements and hardships, joys and disappointments, current tasks and plans for the future, the impetuous tempo of the Soviet land, with its scores of nations and nationalities, kept pushing us, too, permitting no standstill for our magazine. It was necessary, step by step, to study, to make each issue more interesting than the previous one, both in content and layout.

It was this nonstop drive to the future that lay at the basis of the magazine's evolution from USSR-1956 to SOVIET LIFE-1981. ■

EDITOR'S NOTES

READERS often ask us to tell them about the problems we encounter in putting out our magazine. Well, I would say that there are two major ones: space and time. I call the first one the vertical problem: the battle between writers and photographers for space; and the other, the horizontal problem: bridging the time gap made by an ocean and thousands of miles. The first is common to all publications that contain both text and pictures. The second is peculiar to a publication that is written and illustrated in one country and printed in another.

Our staff consists of two teams—one in Moscow and the other in Washington—and they don't always agree, but I have no hesitation in stating that when it comes to the purpose of S LIFE, the two are of one mind: to promote standing between peoples of the United and the Soviet Union. To this end we are trying to figure out how to make our ma more interesting and provide our readers formation that will help them to become acquainted with a country across the ocea has a different economic and social syst this ambition, we of SOVIET LIFE are a clos family.

On our twenty-fifth anniversary we wish subscribers and readers success and prosp good luck and a peaceful sky overhead.

Our staff: Valeri Belyakov (1), Nikolai

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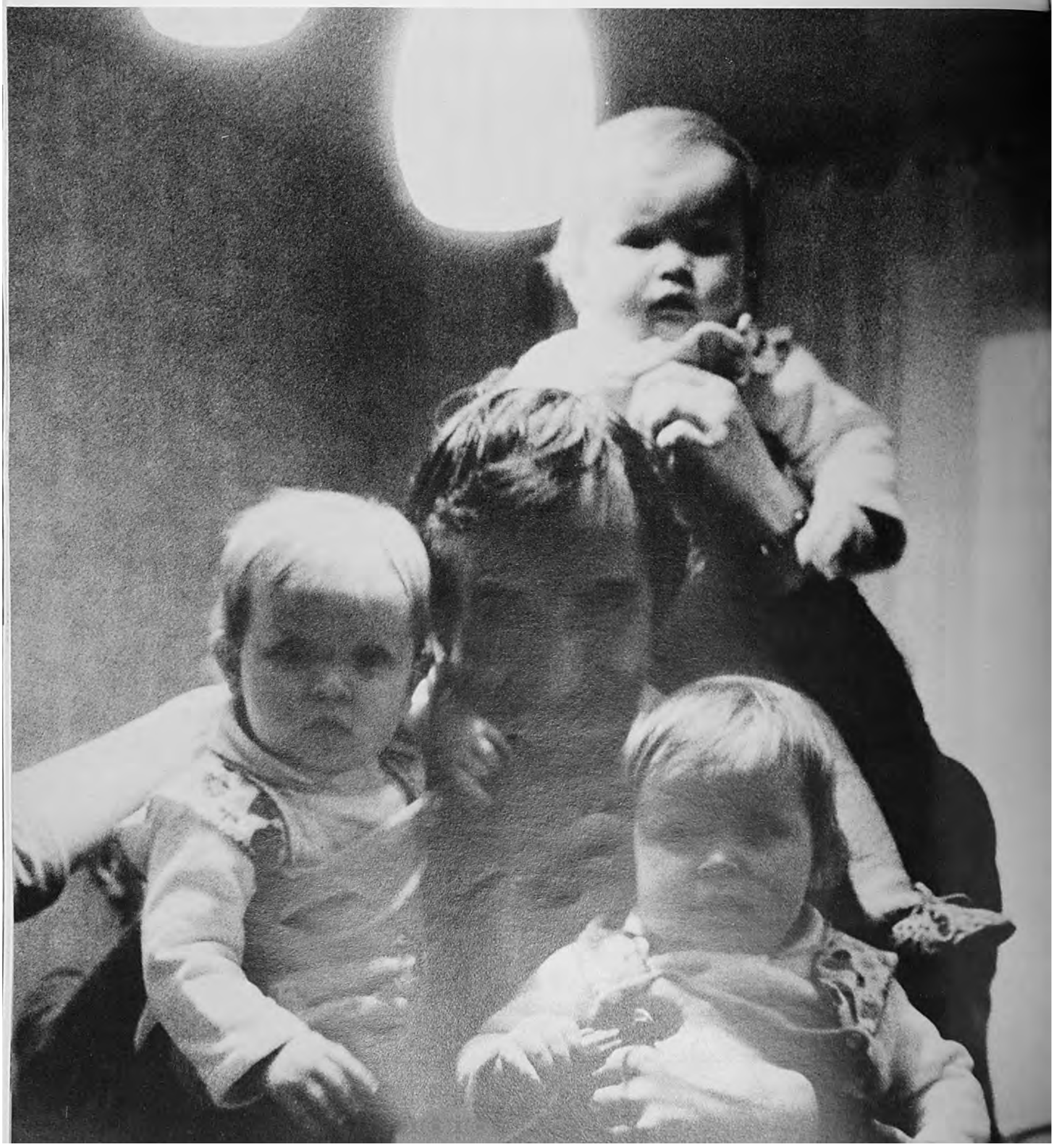
yakov (14), Vladimir Pomochilin (11), Alexei Tertyshnikov (17), artists; Vsevolod Tarasevich (5), Yuri Abramochkin (10) and Igor Kostin (20), photographers; Sasha Tropkin (2), Asya Nikolenko (3), Boris Alexeyev (9), Victor Rudenko (13), Vera Kondratenko (15), Oleg Shibko (16), Elya Kvochkina (18) and Marina Khachaturova (19), editors. Some of the editors are old-timers, others are just starting out. They are responsible for either making you doze off while reading our articles or keeping you awake far into the night. Lyuda Bondarenko (6) and Ghira Bulusheva (8) are our picture editors, and Lena Kazanova (4) is our secretary. Managing editor Robert Tsfasman (21) and deputy editor in chief Gennadi Rodionov (7) are responsible for transforming the hodgepodge of pictures, drawings and texts into a magazine. Judging by the letters we receive, they are successful 81 out of 100 times. Editor in chief Oleg Benyukh (12) is the man who is forever indebted to both the staff and the readers. Georgi Isachenko (22), editor and head of the Washington office, and Felix Alexeyev (23), managing editor, are our ambassadors extraordinary and plenipotentiary across the ocean. Lillian Henley (24), Linda Bell (25) and Barbara Major (26), stylistic editors, are largely responsible for how "American" SOVIET LIFE reads.

So there you have it, the international, Soviet-American team that makes the magazine. ■

OUR VERY HAPPY DADDY

By Victor Rudenko



ast year one of SOVIET LIFE's editors, Alexander Tropkin, or Sasha as he is called by his colleagues, became the proud father of girl triplets—Nastya, Olya and Natasha. Events like this don't happen very often, n Moscow with its eight million population. in chief of the magazine Oleg Benyukh had ained, though, that something extraordinary ound to happen on the staff during the Inional Year of the Child, but no one had ted anything quite like this.

reat deal of material that could be called tional passes through Tropkin's hands daily, didn't enjoy being in the limelight himself. ntally, our office learned the happy news om Alexander, but from his eight-year-old lik.

After we heard the news, emissaries of the magazine, carrying red tulips, rushed to the hospital to greet the triplets at the door of the maternity ward. We discovered that Alexander, the man of the day, was a hero only to his colleagues. But he wasn't able to hold all three daughters in his arms at once so that staff photographer Yuri Abramochkin could snap a picture. His wife, however, had done her job well: Even the smallest of the babies weighed almost as much as a healthy newborn.

Since last year Alexander has grown accustomed to being the father of a large family. He now eagerly pulls out snapshots of his lovely girls everywhere, even in the cafeteria, even to strangers, and has given his consent to our publishing this article.

It is only fair that fate has made Alexander the father of four children. I have yet to see the child who can resist him. Just ask Alik and his friends. They know this better than anyone else. Alik's dad has a keen understanding of what children need, perhaps because Alexander grew up without a father's love: His father was killed in World War II.

The happy mother of the girls has the same name as her husband—Alexandra, or Sasha for short. If Alexander is responsible for the atmosphere, the mood and the diverse interests of the family, then Alexandra is its foundation. While Alik was the Tropkins' only child, his mom was able to combine a career as a chemical engineer with homemaking. By the way, before she took her paid maternity leave, Alexandra patented an ▶

Olya, Nastya and Natasha with their happy father, Alexander Tropkin. Right: The Tropkins out for a Sunday stroll. Eight-year-old Alik proudly pushes his three sisters.

invention. When the triplets reach the age of three and can enter kindergarten, Alexandra plans to go back to work.

The birth of a child brings a family great joy, and the Tropkins received three times as much. However, it also meant three times the expense and the work.

Indeed, for a whole year after the babies were born, our colleague was not the same man we had grown accustomed to. He was kept busy with his family life. He no longer had time to arrange group visits to exhibits and rare bookshops or to plan the office parties. He stayed at work just long enough to get his job done. And on weekends he no longer could travel to the old Russian towns located to the north and east of Moscow, to the Yaroslavl and Vologda regions, where tradition is still strong, the old melodies can be heard and the pace of life is slower. These are the areas where our colleague would go to find subjects for his stories or to paint landscapes. Incidentally, Alexander Tropkin, a graduate of an art school, is known as an artist as well as a journalist and a feature story writer.

What was it that kept Alexander away from his usual pastimes? To begin with, the family's home that had been big enough for three was too small for six. The family was eligible to receive a larger apartment from the state, but the apartments listed with the Executive Committee of the Soviet of People's Deputies of Perov District, where the Tropkins lived, didn't exactly suit them. Either they didn't like the kitchen, the balcony was too small, the elevator couldn't accommodate a large baby carriage or the park was too far away.

After a month of looking in vain, Alexander went to the City Soviet to talk to his deputy. The visit resulted in the Tropkins' being allowed to choose an apartment in any of the new residential neighborhoods in Moscow. Finally they found one they liked. It is located in an old district near Sokolniki Park, one of the most beautiful areas of the city, where back in the seventeenth century Czar Alexei Mikhailovich hunted falcon.

The Tropkins' new home is much larger than their old one, and the windows of the nursery look out on a garden. They are paying three times more rent, which constitutes about nine per cent of the family's budget since only Alexander is working at the moment. When Alexandra [illegible] back to work, the figure will be cut in half.

The birth of the triplets was not a financial burden to the Tropkins, however. The funds received from the trade union and the maternity were more than enough to cover the expense of furnishing the nursery, and every month the girls received special baby food free at the children's canteen in the district.

If they had to, the Tropkins could have [illegible] upon the services of a special nurse [illegible] charge. Luckily, they didn't need this since the girls were in exceptionally good [illegible] However, as is customary in the district, a pediatrician came to see the triplets every day [illegible] beginning. This was provided free of charge.

The Tropkins, however, did go all out for the girls' first birthday. Alexander's colleagues at SOVIET LIFE as well as friends of the family were invited to a sit-down dinner [illegible] among other good things, marinated mushrooms and caviar. The Tropkins have always been known for their warm hospitality.

The guests were entertained by Nastya, Alik and Natasha showing how they had learned to walk and say Mama and Papa and other words only they could understand. The triplets graciously listened to toasts to their parents' efforts toward solving the population problem and wishes for their happiness.

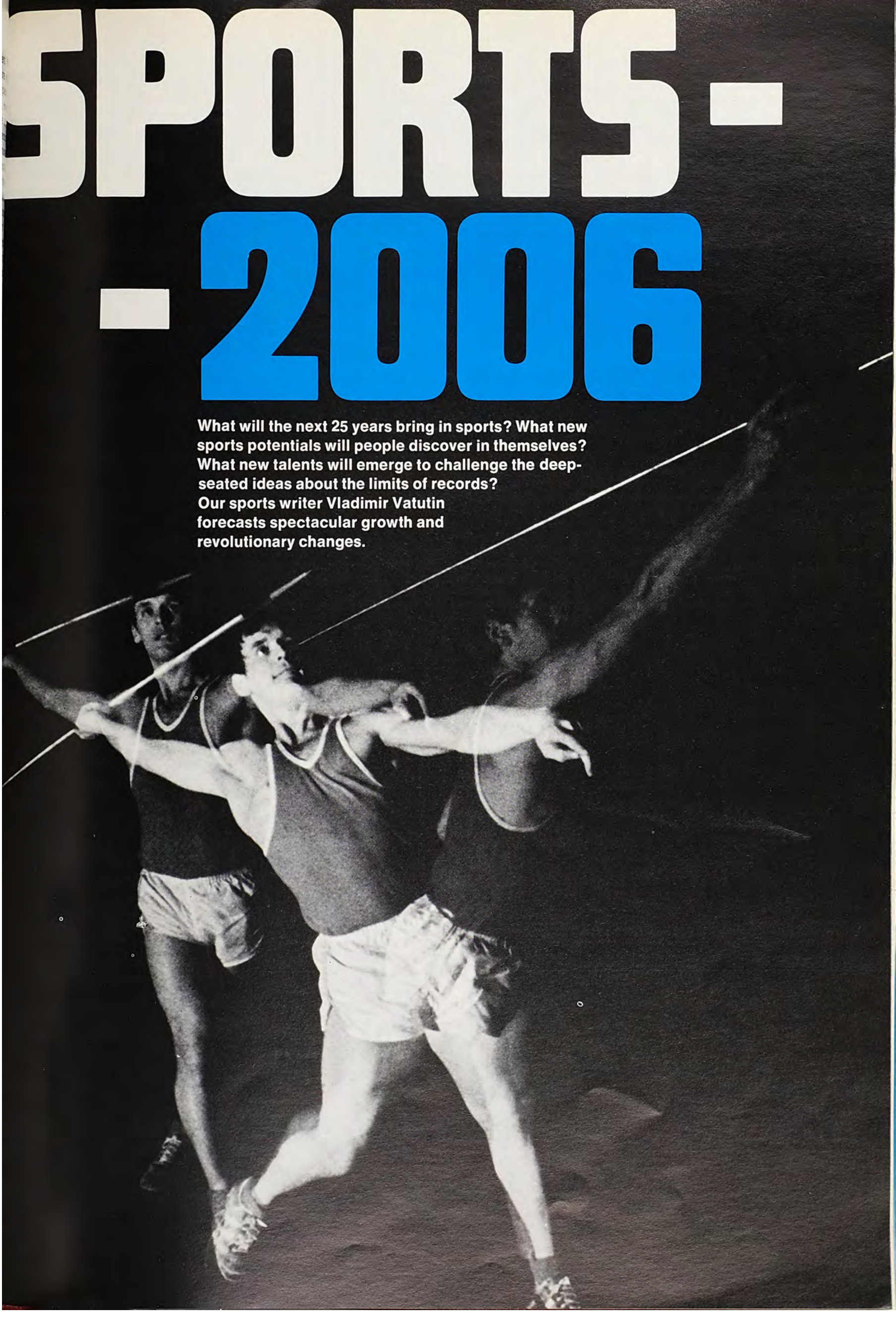
The children were fast asleep long before the music and merrymaking quieted down. The guests were sorry to leave such a happy home.

The next day Alexander left on assignment for the Russian North he loves so well. He went with a clear conscience, though—the first year, the hardest period for all parents of young children, was over.

"Dad always helps Mom around the house," says Alik. "When they both worked, Grandma took care of everything." Above: Alexander is known as an artist as well as a journalist. Below: The Tropkins went all out for the triplets' first birthday.

SPORTS-2006

What will the next 25 years bring in sports? What new sports potentials will people discover in themselves? What new talents will emerge to challenge the deep-seated ideas about the limits of records? Our sports writer Vladimir Vatutin forecasts spectacular growth and revolutionary changes.



The time is August 5, 2006; the place, the Central Lenin Stadium in Moscow; the event, the high-jump final.

The bar rests at 2.50 meters. Pyotr Smirnov, a 26-year-old from Volgograd, is the only contestant left. He prepares for his last try.

Over the public-address system the announcer's voice bellows: "If Smirnov clears the bar, he'll make a new record in world high-jump history!"

All eyes are focused on the athlete as he makes his runup, takeoff and faultless jump. Smirnov hops up from the stack of mats and stabs the sky with both fists. The whole stadium rises to its feet to acclaim his new world record.

* * *

The real time is still the twentieth century and not the twenty-first. Pyotr Smirnov was born only a year ago. He is tossed up to the ceiling by his father's strong hands, and August 5, 2006, is still 25 years away for him. But I wonder whether a clearance of 2.50 meters is possible or simply a flight of fancy.

"Don't be in such a hurry to beat a retreat," says Gennadi Semyonov, who has a candidate's degree in biology and is in charge of a laboratory of the USSR Research Institute of Physical Education dealing with the elaboration of a system of sports competitions and the forecasting of sports achievements. "The person and the name of the future record breaker may be a flight of the imagination, but clearing the bar at 2.50 meters, 14 centimeters higher than the present world record of 2.36, is quite feasible."

Predictions of this kind in running, swimming, weightlifting and speed skating seem fantastic to millions of fans, but sports officials, coaches and athletes trust the judgment of the sports forecasters. Their conclusions are based on an analysis of the best accomplishments over the last decades plus current trends in the development of sport.

With the use of mathematical formulas and electronic computers, the experts are able to predict results quite accurately.

"I'm convinced," says Gennadi Semyonov, "that it's impossible to groom a top-class athlete today without having a clear idea of future goals.

"Our forecast service," he goes on to say, "was started more than 10 years ago. Its staff members recently had proof of the validity of their predictions of the top achievements world athletes would reach by 1980. For instance, in practically all the Moscow Olympic events where the results could be measured, the contestants confirmed the correctness of the forecasts. A clearance of 2.36-2.37 meters was predicted in the high jump, and Gerd Wessig of the German Democratic Republic cleared 2.37. Wladislaw Kozakiewicz of Poland won the pole vault with a clearance two centimeters short of the predicted height. It was figured in advance that the time in the women's 100-meter freestyle race in swimming would be 54.97-54.79 seconds, and Barbara Krause of the GDR won with 54.79. There are many more examples of this kind.

"The computers in our laboratory predict the following winning times and distances in the 1984 Olympic Games:

Track and Field

	Men	Women
100-meter dash	9.96	10.72
high jump	2.39	2.05
long jump	8.73	7.20
pole vault	5.82	
triple jump	17.78	
Swimming		
100-meter freestyle	48.77	54.05
100-meter breaststroke	1:02.26	1:08.82
Speed Skating		
500 meters	36.85	

"Here are a couple of our forecasts for the period up to 2000: 36 seconds flat in the 500-meter men's speed-skating race; 6.50 meters in the pole vault.

"I support the view that it is possible to calculate times and distances for the beginning of the twenty-first century, but difficult, so far, to substantiate them plausibly. This, however, does not stop people from probing into human possibilities. With the help of mathematical formulas and electronic computers, a Polish scientist forecasts the following men's track and field record at the turn of the century: 100 meters—9.58-9.53 seconds; high jump—2.47-2.50 meters; pole vault—6.85-6.91 meters; shot-put—26.28-26.48 meters; javelin throw—103.96-105.68 meters.

"West German experts believe that in men's swimming, the time can be reduced in the 100-meter freestyle to 46.6 seconds, in the 1500-meter freestyle to 14 minutes 07 seconds, and in the 100-meter breaststroke to 59.3 seconds. So that there will be an all-out offensive on the current records."

The 1980s are viewed optimistically by Soviet high jumper Valentin Gavrilov when he predicts clearing 2.40 meters. A national champion more than once, a European title holder and a place winner in the Mexico City Olympics, Gavrilov thinks that there is a good possibility that an athlete will go over the bar at 2.50 meters before the end of the twentieth century. Such a jumper, in his opinion, should be 205-210 centimeters tall, weigh 85-90 kilograms, sprint 100 meters in less than 11 seconds and make a long jump of 8 meters.

Gavrilov is convinced that the amazing abilities of the human body will continue to be revealed in sports. He points to the major role played in the high jump by the Fosbury flop, the introduction of resilient floor covering and the improved training of the athletes.

When Richard Fosbury won the 1968 Olympic high-jump event with his new style of clearing the bar, the rest of the athletes were doing the orthodox Western roll. In the Moscow Olympics 12 years later, only 3 of the 13 contestants stuck to the old style, and they finished with the lowest scores.

The world's leading jumpers will undeniably go on improving their style. So, together with the further technical renovation of the stadiums, a clearance of 2.50 meters is feasible before the end of this century.

The advance in the Olympic pole vault performances will be even more striking. William Hoyt of the USA sailed over the bar at 3.30 meters with a wooden pole in the first of the modern Olympic Games, held in Athens in 1896. A bamboo pole came into existence a few years later, and the world record was immediately bettered by 15 centimeters. This type of pole was used until the middle of this century, when a metal pole was tried out successfully in Sweden. After that came the nylon pole, and, lastly, one made of fiber glass, which John Pennel of the USA used to bring the world record up to 5.18 meters. Adapting the technique to the latest type of pole, the vaulters boosted the record centimeter by centimeter. In the Olympic season of 1980 alone, the bar was raised seven times before Kozakiewicz finally left it resting at 5.78 meters.

The alliance of sports and technical improvements continues to smash one world record after another. Perhaps that is why the scientists envision such fantastic achievements in the pole vault at the turn of the century.

There are excellent potentials for the growth of athletic prowess in the foreseeable future in the Soviet Union because the health of the population has become a matter of state importance, and physical education is promoted on a mass scale. About 83 million people in the Soviet Union today regularly participate in sports of all kinds. The total is expected to approach 100 million by 1985.

That is another forecast made recently by the USSR Research Institute of Physical Education. Having analyzed the statistics, the trends toward increased mass participation in sports and the greater accessibility of sports facilities, scientists of the institute have not only outlined the model

Sports officials, coaches and athletes trust the judgment of the sports forecasters, who base their conclusions on the best showings made over the past decades and current trends. With the help of mathematical formulas and electronic computers, they are able to predict results quite accurately.

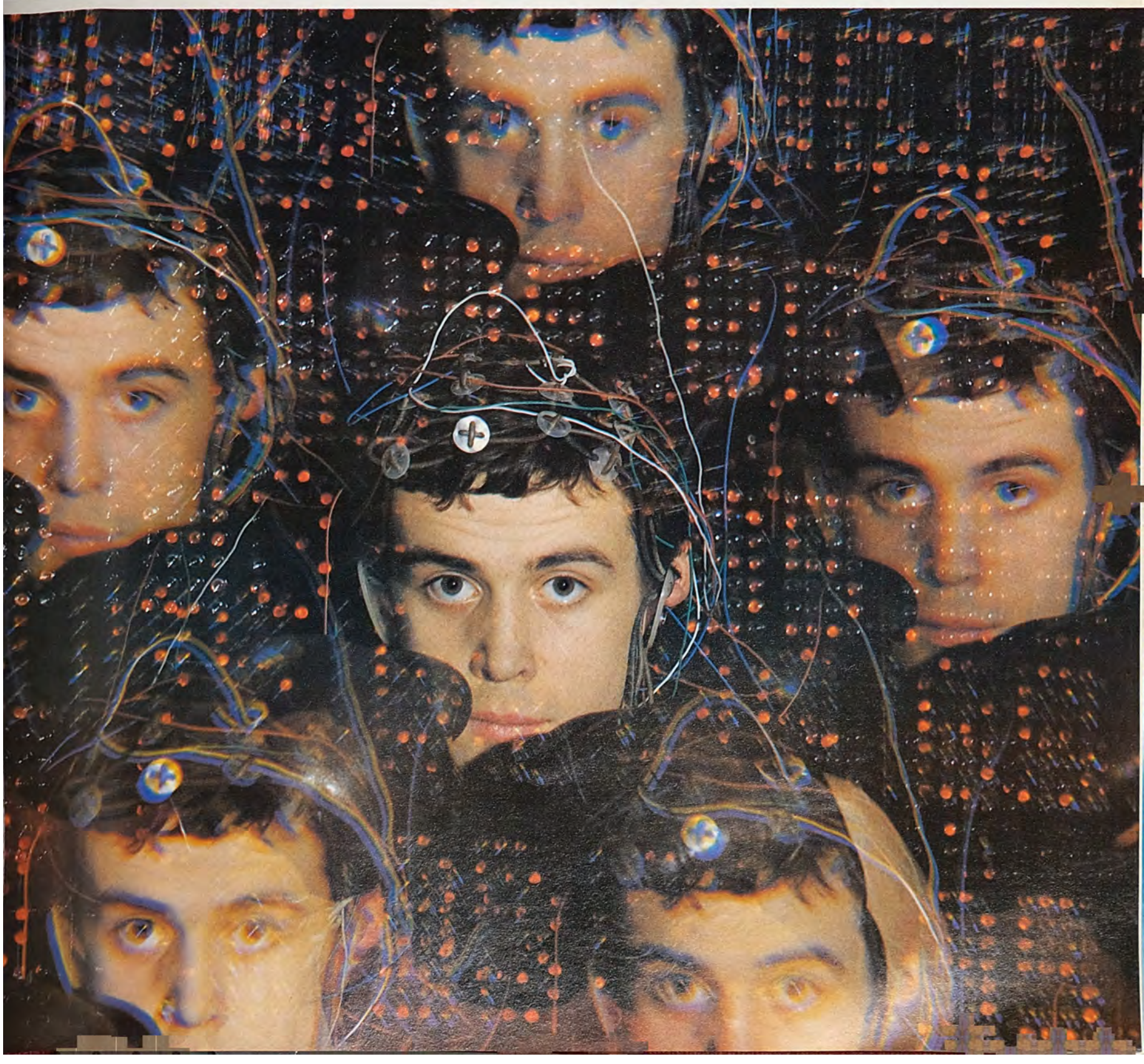
of a physical education system, but made clear cut recommendations that will be useful in planning the construction and modernization of stadiums and recreation areas, the scale of training coaches and the expansion of enterprises producing sports gear.

Millions of fans are eagerly looking forward to a further assault on the records. The Moscow Olympics provided powerful impetus for this attack. At the 1980 Moscow Olympics 36 world and 74 Olympic records were broken and hundreds of national records were set. The Moscow Games will remain a milestone in the history of world sports. They were a real step beyond the barrier of the unknown. These achievements have shown once again how great the human potential is.

And science is helping to ferret out these reserves. This new branch of the science of the human being—anthropomaximology—is making progress in the USSR. It is concerned with the physical and psychological capacities of humans. One of the main authorities in the field—Professor Vladimir Kuznetsov, a former world record holder in the javelin throw—is convinced that the research in progress will make it possible to find ways of enhancing human powers, not only to achieve record levels in sports, but also to identify individual abilities.

Let us cite two recent facts from competition records. "A 15-year-old Moscow school pupil has cleared 2 meters 12 centimeters at the city junior contests." "A 16-year-old French boy has jumped 2 meters 16 centimeters."

Now let us recall that Valeri Brumel at the age of 17 could clear only 2 meters 1 centimeter and Richard Fosbury at 15 showed only 1 meter 77 centimeters; Jacek Wrzola at the same age never got higher than 1 meter 60 centimeters, and Gerd Wessig was an adult when he cleared 1 meter 70 centimeters. That was how the future Olympic champions began their careers. Their followers are now boldly bidding for much higher summits.



FASHIONS

DESIGNED BY VYACHESLAV ZAITSEV

By Elya Vasilyeva

The fabric for the jacket and ... and blue ... silk.

I first met Vyacheslav Zaitsev 17 years ago when I introduced him to the readers of SOVIET LIFE as an up-and-coming clothes designer. A year later, Zaitsev had his first triumph when his Ancient Rus collection was awarded the gold medal at an international fashion festival in Moscow.

Zaitsev says that SOVIET LIFE was the first magazine to tell Western readers about him. Today, the Soviet and foreign press calls him "an outstanding personality in dress designing." No matter where they are held—Holland, Italy or even Paris—his fashion shows are always a success.

Set Designer

"I am in the wrong business!" Zaitsev told me after the première of Alfred de Musset's *Lorenzaccio,* a play set during the Renaissance. Although it was the clothing designer's first try at scenic designing, a Moscow theater critic wrote: "I was struck by the fine taste of the stage décor, the beauty of the costumes and the splendor and vivid colors of the props."

I think it was the success of the première, the new sphere of activity and his satisfaction with this kind of work that prompted him to make such a categorical pronouncement. A happily gifted individual, he has been able to express himself in the theater, in the cinema and in graphic art. It is amazing how much he has managed to do in the past year alone. He wrote a book that was published in an edition of 10,000; "clothed" the Olympic Games in Moscow; worked on several premières in the theater, cinema and television; taught a graduate class of designers at the institute; became chief manager of a new fashion house and organized a musical show called *Fashion Theater.* In each new genre he tries to find and assert his ideal of beauty.

Russia Is His Main Theme

"I get my ideas from Russian nature, folklore and our immortal Russian art," said Zaitsev.

What Pierre Cardin and Yves Saint-Laurent are to French and American women, Vyacheslav Zaitsev is to Soviet women. He is shown here with two of his models.

Western papers often him "the red Dior" or ow's Saint-Laurent." After monstrated his "Russian is," they began to write aitsev was an artist who und his own style.

as not a simple thing to e, appearing, as he did, ally at the birth of Soviet s designing. For many after the war we simply give fashion much thought. concerns and necessities first, and most people had the time nor the inclina- o dwell on their appear- So it is not surprising that ould immediately spot a ner on a Moscow street. most of our men and n are elegantly dressed. aste of millions of people eveloped in the past dec- o such an extent that they elves have begun to create ns and influence the cur- ogue. This new trend is an ct reflection of the in- ed prosperity of the Soviet e.

id Not Start from Nothing

1925 Soviet dress designers awarded the Grand Prix in at an international exhibi- hose motto was "Only New, e and Comfortable Clothes." s success may be explained e fact that it was the first in history that clothes de- rs worked for the masses. s the first time that millions rkers and peasants became "customers" of fashion es. The war and the devas- that it caused forced us to one many of our plans, in- ng fashion designing.

ur school of fashion is still young. I would say it is just ning to take its first steps. ever, it has already dem- ated that it is inde- ent of foreign trends. concept of fashion s radically from f the West," tains ev.

oving Quality

t only does he put artistic ideas very into words, but, what is important in my opinion, he npions translating them into That is why he never de- es the present state of our on designing and light in- ry in rosy hues but concen- s on what hinders their ad- cement.

he problem of improving the lity of consumer goods, in- ing clothes, has become so e that in his speech at Twenty-sixth Party Congress nid Brezhnev spoke quite frankly about shortcomings in light industry and of the necessity of making it answerable to the consumer.

A wider field of activity is now opening to Zaitsev and his colleagues. He has been appointed supervisor of a new fashion house that is presently being set up in Moscow. Its primary function will be to supply shops with a sufficient quantity of clothes in styles that will satisfy the buyer.

With Pencil and Paper

Looking at his drawings, we see the restless rhythm of criss-crossed lines, an impetuous stream of color, a vivid contrast of spectral colors or, on the contrary, of harmonious tones.

"Paper is my greatest friend; it enables me to stop and record time. You can hold council with it and entrust both your joys and sorrows to it. It has saved me more than once from disappointment and complacency, from human unkindness and upheavals of the soul. And it has saved me from physical pain.

"I was in the hospital with two broken legs. Whenever I closed my eyes, I could see the lights of a bus speeding around the corner, hear the screech of metal and my scream of despair.

"Then they brought me some paper, a whole pile of neatly stacked white sheets. I conveyed my pain on paper. Living and drawing are the same to me. The long and short lines, the dots, the colors I make on the paper form the initial silhouettes which, later on, after long hours of working at night, will turn into new trends, new images, new fashions."

A Look at Tomorrow

"I wouldn't take it upon myself to predict how fashion will develop, what form it will take in 300, 200 or 100 years. It is hard to foresee which way it will turn even in the next 10 years because there are too many unpredictable factors that influence it. It makes too many sharp zigzags and turns. I do not like ephemeral fantasy. That is why I believe that long-term predictions are useless. We never know what the textile researchers will offer us next, perhaps a material that will require a new approach. There is only one thing I can say definitely: The fashions of the future should make people happier and kinder," Zaitsev said in conclusion. ■

SOVIET-AMERICAN RELATIONS

A ROUND-TABLE DISCUSSION

Continued from page 41

status or credit from the U.S. Export-Import Bank to buy American machinery and other equipment. It was also affected by the uncertainty of the trade prospects that arose in the late 1970s, which did not help Soviet or American businessmen.

In the beginning of 1980 the U.S. Administration set out to limit trade with the USSR: Among other measures, the grain embargo was introduced.

The United States was thus made a less attractive supplier since Soviet foreign trade organizations found that although American companies were reliable and some American goods top quality, even large-scale government-backed deals, like those with Occidental Petroleum Corp., could fall through.

In 1980 the Soviet trade turnover with the developed capitalist countries increased by 22.6 per cent, reaching 31.6 billion rubles. This is against a figure of 25.8 billion rubles in 1979. Trade with the U.S., however, dropped 46.4 per cent, from 2.8 to 1.5 billion rubles.

Like any other country, the USSR is concerned with a large-scale international division of labor, profitable trade, and scientific and technical contacts with the rest of the world. At present the Soviet Union trades with 139 countries and has trade agreements with 115. In 1980 the Soviet gross social product (GSP) was 1.061 trillion rubles. Of this figure, 9 per cent, or 94 billion rubles, represented foreign trade.

The Eleventh Five-Year Plan (1981-1985) envisages a new fuel and raw material base in the eastern part of the country with large-scale power and industrial development—a truly great opportunity for the development of trade and technological cooperation with the West. Besides importing equipment for oil and gas fields and iron, steel and other metal smelting, Soviet trade organizations are in the market for a variety of equipment: for light industry, for the processing of agricultural produce, for programmed machine tools and whole assembly lines. This could encourage profitable and long-term cooperation and help maintain reliable and stable relations with trade partners.

Yet, both Soviet and American trade experts admit that the volume and structure of Soviet-American trade have fewer opportunities than the present level of economic, scientific and technological progress would seem to justify.

Last year the U.S.'s share in Soviet foreign trade amounted to 1.5 billion rubles, a figure equivalent to only 0.14 per cent of the Soviet GSP and 1.6 per cent of the total Soviet foreign trade, a tiny amount in relation to the output of either country—so small that further cuts would have little effect on either country. However, an increase in trade could benefit both economies in many areas. It would build confidence in each other and improve Soviet-American relations.

Leonid Brezhnev said at the Twenty-sixth Congress: "The USSR wants normal relations with the USA. There is simply no other sensible way from the point of view of the interests of our two nations and of humanity as a whole."

Dzhermen Gvishiani: Scientific and technological ties between our two countries have been a major link in Soviet-American relations. In 1972 and 1973 when the Soviet Union and the United States signed a series of agreements on scientific and technological cooperation, many people wondered if these two countries with different economic and political systems would be able to cooperate in these fields. The practical results obtained in various fields of cooperation quelled those doubts.

The Soviet Union and the United States had arranged to work together in the fields of energy, space exploration, oceanography, environmental protection, medicine and health care, agriculture, transport, nuclear energy and construction engineering. It is easy to see that the two countries have concentrated their efforts in very important fields. The results of Soviet-American cooperation could have brought substantial benefit to both countries and the world as a whole if it had not been suspended by the American Government. The suspension of cooperation entails a loss for both sides.

It is interesting to note that most of the Soviet and American scientists spoke highly of the results they achieved by working together, especially the results produced over the last few years.

Soviet organizations maintained wide-ranging scientific and technological ties with many companies in the United States. The Soviet State Committee for Science and Technology signed agreements on scientific and technological cooperation with 70 of them. Under these agreements the two countries held seminars and exhibitions, exchanged samples, expertise and information and carried out joint research and development projects. In some cases scientific and technological contacts with individual companies resulted in the establishment of economic cooperation and the signing of commercial contracts.

The successful development of mutually beneficial cooperation between our two countries over the past decades gave hope for its good prospects. Soviet scientists and specialists made a substantial contribution to the development of this cooperation, and they are ready to continue joint work with their American counterparts. We know that the American scientific and engineering community is very interested in maintaining cooperation with our country. However, the American media is often engaged in speculating that the Soviet Union has more to gain by mutual cooperation and that the United States should think twice before developing scientific and technological ties with it. This is a false premise and a gross error in judgment. American scientists themselves have refuted this allegation. The Soviet Union's achievements in science and engineering have gained universal acknowledgment and are being used in many industrialized nations, including the United States.

True, the Soviet Union and the United States can do without mutual scientific and technical cooperation, but is it reasonable to reject such cooperation? At present there is no country in the world that can hold the commanding position in all major fields of science and engineering. The Soviet Union and the United States are countries with a vast scientific and technological potential, yet even they cannot successfully and with the same degree of intensity conduct research and development in all fields. This emphasizes the importance of pooling efforts and maintaining a fruitful exchange of ideas to avoid the unnecessary wasting of time and expense and the unjustified overlapping of work. It is from this point of view that people should assess the benefits of Soviet-American cooperation in the field of science.

Many urgent problems need to be solved on our planet, such as the rational use of the achievements in science and engineering and the rational use of energy and other resources, protecting the environment and raising the standard of living of our peoples. Soviet-American scientific and technological cooperation on a long-term, mutually advantageous and equal basis would help us reach these and other noble goals.

Science has no national boundary. Any attempt to place restrictions on scientific and technological cooperation is unnatural and, therefore, futile. We are convinced that common sense will eventually prevail and Soviet and American specialists will again work together for the good of their people and the world as a whole.

1. Congresses of the Communist Party o Soviet Union play a vital role in the cou life. The photograph was taken in Feb 1981 at the moment when the Young Pi welcomed the delegates and guests congress.

What was the number of the congres

2. After Olga Korbut performed in the Uni States, thousands of young Americans t up gymnastics, and numerous clubs w named after her.

Our magazine wrote about Korbut serv times. We even told you that she married soloist of a Byelorussian pop music group.

What is the name of the group?

PHOTO QUIZ

SEPTEMBER 1981 marks the twenty-fifth anniversary and the 300th issue of SOVIET LIFE.

The magazine today is a far cry from the first issue that came out in 1956. New printing technology and design have changed its appearance considerably. As for the contents, we now devote more space to describing the life of the average Soviet citizen and Soviet-American contacts.

In short, the 300th issue is quite different from the first. But there is one thing that never changes: In every single issue SOVIET LIFE tries to promote understanding between the Soviet and the American people.

SOVIET LIFE is completing its first quarter-century with the hope that in the years to come it will continue to arouse warm feelings for our country in American readers.

Our magazine has acquainted you with both the famous and the typical in the population. Political and public figures have spoken to you from these pages. We have told you about the North and the South, the East and West of our country and tried to show you the variety and greatness of the multinational Union of Soviet Socialist Republics.

In order to remind you of what you have read in our magazine, we decided to place five photographs on these pages that appeared in earlier issues. Do you remember the events and faces of these people? For the correct answers see the October issue.

ovember 28, 1921, Vladimir Lenin, the r of the Soviet state, spoke for two with an American in his study in the n. Among other problems, they spoke ablishing mutually profitable Soviet- an trade relations.
picture was taken during that talk.
r, the American spoke with admira- how knowledgeable Lenin was about in the United States.
was that American?

4. Twenty years ago the first man to be launched into space was a Soviet citizen named Yuri Gagarin, aged 27. Gagarin's flight introduced a new profession in the USSR.

What is this profession called?

5. Ballet is the national pride of the Russians. The Bolshoi Ballet Company is known and admired in all corners of the world.

In the picture you see the young ballet star Nadezhda Pavlova in a scene from the ballet *Romeo and Juliet*, based on Shakespeare's famous tragedy.

Who wrote the music for the ballet?

"SOVIET LIFE" RECEIVES GAGARIN MEDAL

Alexei Leonov presents Oleg Benyukh, editor in chief of SOVIET LIFE, with the Yuri Gagarin medal. Seated from right to left are: Lev Tolkunov, chairman of the Novosti board; Vladimir Shatalov, director of the cosmonaut training program; Pavel Naumov and Karen Khachaturov, deputy chairmen of the Novosti board.

A MONTH after the April issue of SOVIET LIFE was published, cosmonauts Vladimir Shatalov, Alexei Leonov, Leonid Popov and Dumitru Prunariu, Popov's Rumanian partner in an Intercosmos flight, were invited to our offices. In addition to which Popov and Prunariu came to see us on June 2 directly from the Kremlin, where they had just received the highest Soviet state awards. At that ceremony Leonid Brezhnev, General Secretary of the Central Committee of the Communist Party of the Soviet Union and President of the Presidium of the USSR Supreme Soviet, pronounced those now famous words about space possibly and necessarily being peaceful and only peaceful.

Cosmonauts do not like to deliver grandiloquent speeches. They are more likely to joke around when people start talking about them. They did say, though, during their meetings with journalists, that there is great personal risk involved in conquering space but that it is easier to take this risk when you know that your work in orbit is in the interests of peace and all humanity. They wanted the readers of our magazine to know this.

The cosmonauts enjoyed our April edition, with its portrait of Yuri Gagarin, the man who opened the road to space, on the cover. During a celebration at which Lev Tolkunov, chairman of the board of directors of Novosti Press Agency, was present, Alexei Leonov awarded SOVIET LIFE the Yuri Gagarin Memorial Medal for the "broad and accurate information on Soviet activities in space it makes available to the American public." Our staff is sincerely pleased to receive this medal commemorating Yuri Gagarin, the first man in space, who has left us all with a passionate call to preserve peace in the cradle of humanity.

FREEDOM OF RELIGION

Spiritual Leaders Speak Out

Judging from our mail, we find that freedom religion is a question of special interest to m readers. We have invited representatives of clergy of the Orthodox Church, the Roman Ca lic Church and Judaism to discuss this subj

WOMEN'S RIGHTS

Guaranteed by Law

Equal rights is one of the main topics in October issue. What does constitutionally g anteed equality of the sexes mean? How women exercise their rights? What privile and benefits do they enjoy? Have social chang created new problems? Next month we will int duce you to four professional women—an agro mist, a school principal, a trade union lea and an astrophysicist (Olga Dluzhnevskaya, the photo above). Find out what they have to s

VETERANS AND THE HANDICAPPED

A Special Report

Several articles next month illustrate the c and concern that the state and society give v erans and the handicapped, who are made to fe that they belong and are needed by their countr

COMING SOON

Nuclear Power Development: Safety First!

YESTERDAY, TODAY, TOMORROW

By Gennadi Gerasimov
SOVIET LIFE Commentator

E DEVELOPMENT of American-Russian re-ations is an interesting, yet still poorly ed, period of history. Formal diplomatic re-s were established between Russia and the d States in 1809. Before that, in December when the War of Independence was being d, John Adams, one of the Founding Fathers e United States, wrote that the thought of ng trade between Russia and North America gly appealed to him. In June 1804 Thomas rson wrote to the Russian czar that it gave great pleasure to see how trade between the countries was expanding.

ussia has always had friendly feelings for rica. American sociologist Pitirim Sorokin e in his book *Russia and the United States,* ished by E. P. Dutton and Company, Inc., in :

roughout the entire history of the United States, ssia has been its best friend. . . .

ow there are theorists of international rela-s who say that the two big powers cannot live efully any longer for the simple reason that are big. In a nuclear age, however, to live in ce, to coexist in spite of differences, is an erative, because any other road would lead to ide on both sides.

Lenin's Bequest

he victory of the 1917 October Revolution in sia was the "Ten Days That Shook the World" John Reed. He was already a famous journal-t the time and an eyewitness of the Revolu- about which he wrote. For many American lications that formed the mainstream of infor-ion at the time, the events in faraway Russia e a chance occurrence of a transient nature. wever, what many thought to be a chance urrence still exists.

rom its outset, the new Soviet Government red promoting good relations with the United es. Vladimir Lenin, the founder of the Soviet e, said the following in an interview with a respondent of the New York newspaper *The rld* in February 1920:

know of no reason why a socialist state like ours nnot do business indefinitely with capitalist untries.

enin substantiated the principle of peaceful coexistence between states with different socio-economic systems.

Soviet-American business contacts began to be developed before formal diplomatic relations were established in 1933.

The glorious allied cooperation in the struggle against the common enemy—fascist Germany—followed.

Then came the years of the cold war.

Estrangement

As the cold war was being escalated, an abyss of misunderstanding between our two nations was widening, too. The first small bridge across it was built in 1956, when the agreement on the circulation of the magazine *America* (in Russian) in the Soviet Union and the magazine *USSR* (now SOVIET LIFE) in the United States was signed.

Now, 25 years later, we can sum up some of the results of Soviet-American relations.

Probably, the main result is that with good will on both sides, relations between the two countries could be normal and even friendly. That is why I will not discuss the things that divided us but those that brought us closer together.

Perhaps the launching of the first artificial Earth satellite by the Soviet Union on October 4, 1957, was the reason that the U.S. revised its attitude toward the Soviet Union and, therefore, Soviet-American relations. It should be noted that both before and after Sputnik was launched, the USSR displayed many diplomatic initiatives in the same direction. On January 23, 1956, for example, the Soviet Union proposed that a treaty of friendship and cooperation be concluded with the United States.

In September 1959 Nikita S. Khrushchev, the head of the Soviet Government, paid an official visit to the United States and met with President Dwight D. Eisenhower at Camp David.

The next meeting of the heads of government of the Soviet Union and the United States (Khrushchev and John F. Kennedy) took place on June 3-4, 1961, in Vienna. However, after that meeting, too, relations remained unchanged for a couple of years.

First Steps Toward Each Other

On December 2, 1962, UN Secretary-General U Thant delivered a speech at Johns Hopkins University in Baltimore which won wide acclaim. The UN Secretary-General pointed to the importance for all humanity of peaceful relations between the Soviet Union and the United States. He stressed that Soviet-American relations brought strong influence to bear on the contemporary world as a whole and that a clash between the two powers could lead to the annihilation of the entire human race.

On June 10, 1963, President John F. Kennedy spoke at the American University in Washington, D.C. In his speech the President pointed to the need for peaceful coexistence:

> Among the many traits the peoples of our two countries have in common, none is stronger than our mutual abhorrence of war. Almost unique, among the major world powers, we have never been at war with each other.

Shortly afterward, on August 5, 1963, the Treaty Banning Nuclear Weapons Tests in the Atmosphere, in Outer Space and Under Water was signed in Moscow by the USSR, the USA and Great Britain. In the two months that followed, more than a hundred other nations signed that treaty. In addition, the USSR, the USA and Great Britain agreed not to place nuclear weapons in outer space.

Opportunities for Improvement

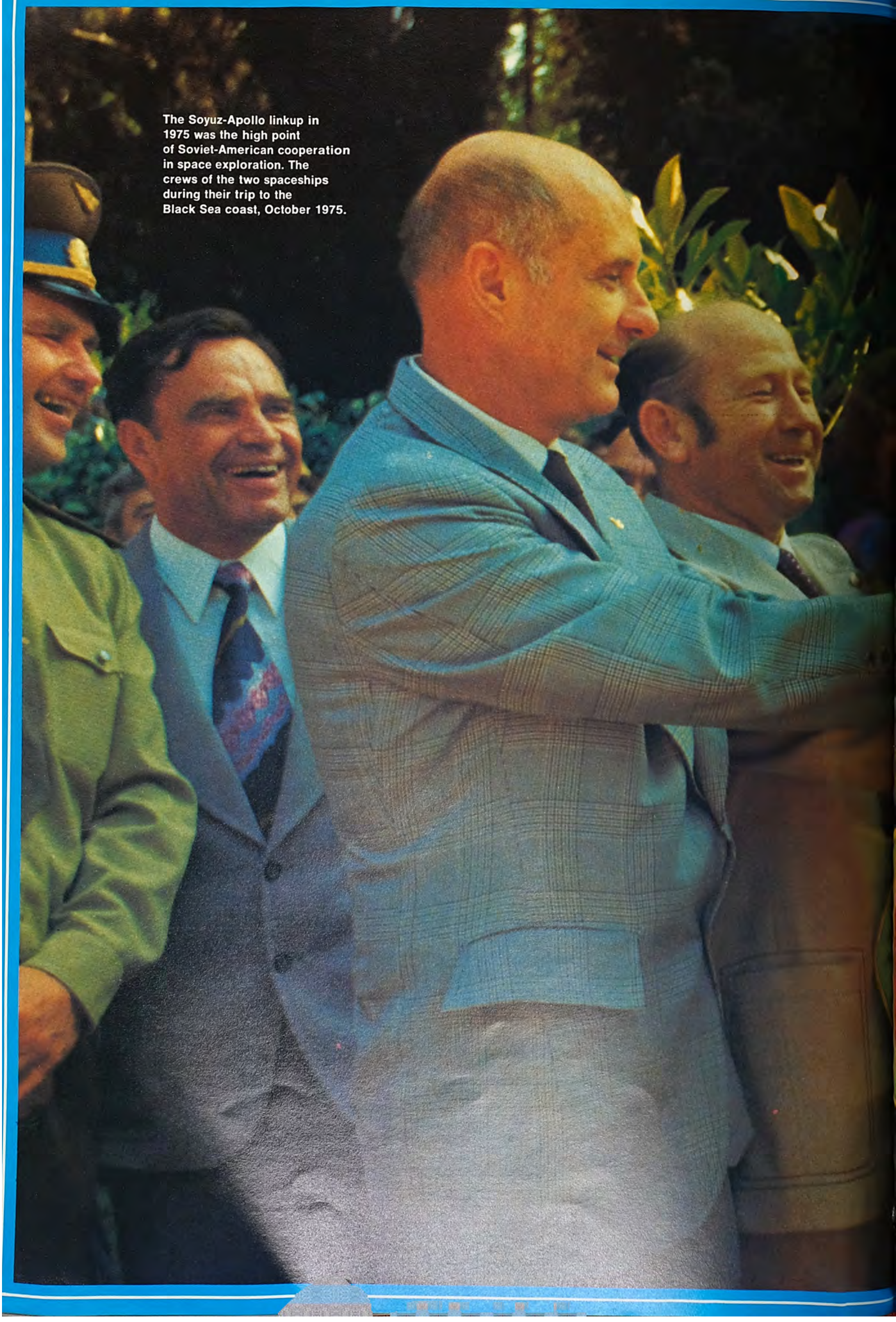
In 1967, the head of the Soviet Government Alexei N. Kosygin met with U.S. President Lyndon B. Johnson in Glassboro, New Jersey, but because of the Vietnam war, the impulse for détente did not yet develop into anything more tangible at that time.

Nonetheless, on July 1, 1968, the Soviet Union and the United States, together with 59 other countries, signed the Treaty Banning the Proliferation of Nuclear Weapons.

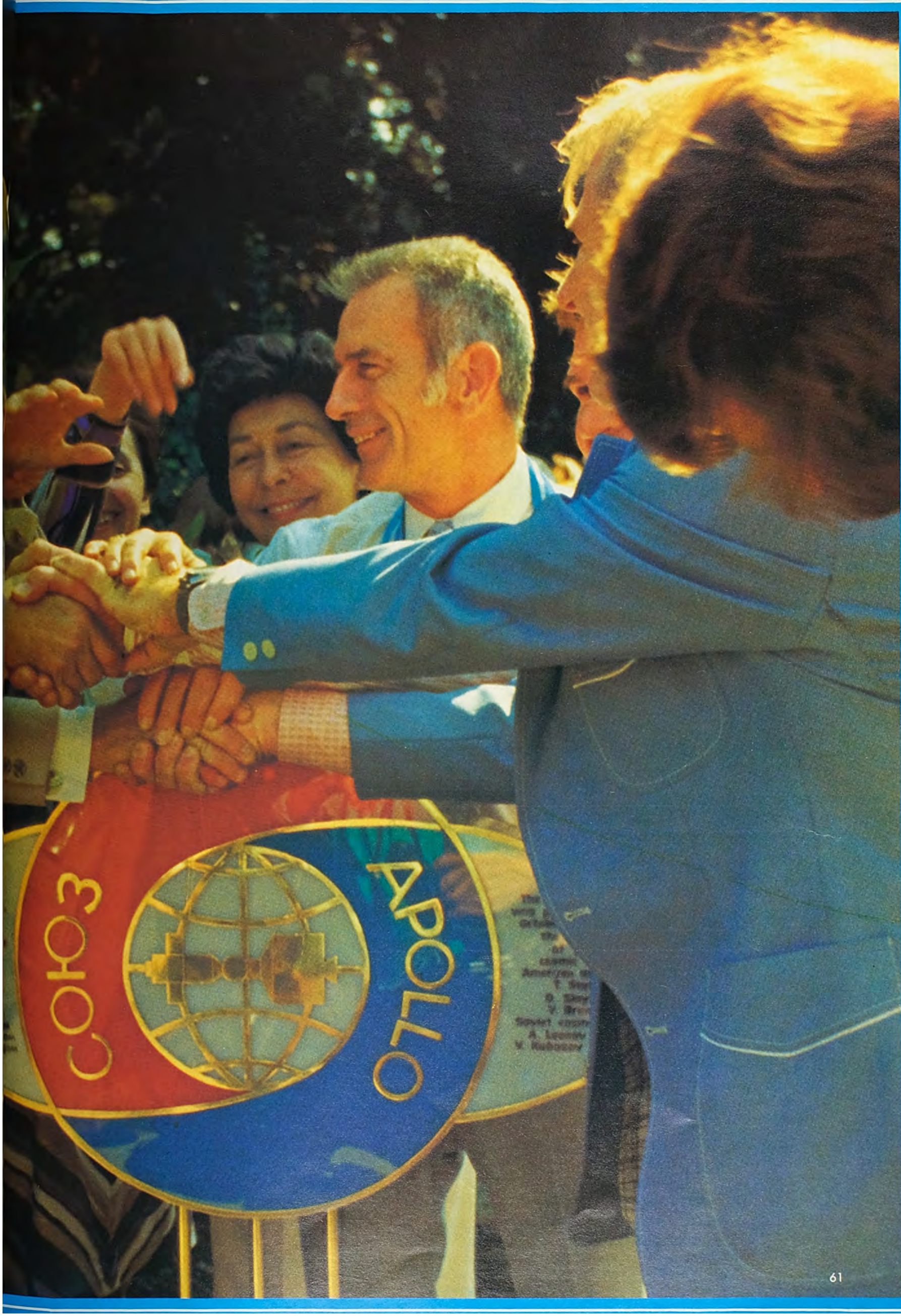
In November 1969 negotiations between the two countries got under way in Helsinki on a question that had previously seemed to be inaccessible to diplomacy—the limitation of strategic weapons. For the first time ever these weapons became a topic of businesslike discussion.

Some time before that the two countries signed an agreement on direct passenger air communication, and Pan American and Aeroflot planes began making flights to Moscow and New York, respectively. In March 1967 the U.S. Congress endorsed the Soviet-American consular convention.

And yet, the sixties were years of unused opportunities. ▶



The Soyuz-Apollo linkup in 1975 was the high point of Soviet-American cooperation in space exploration. The crews of the two spaceships during their trip to the Black Sea coast, October 1975.


СОЮЗ
APOLLO

Over the years the number of Americans who visit the Soviet Union has greatly increased. Some people come to compete in sports events like the USSR-USA basketball game in Moscow shown here. Others, like the group (above left) from International Harvester in Chicago, Illinois, are guests of Soviet workers. Still others, like Malcolm Forbes, the editor in chief of *Forbes* magazine, and his crew of five (above) who made a 1,500-mile-long motorcycle trek through the USSR in 1980, come for recreation.

Positive Changes

e Twenty-Fourth Congress of the CPSU, held larch 1971, adopted the Peace Program, h laid down concrete tasks in the field of gn policy aimed at consolidating peace. king at the congress, Leonid Brezhnev said the improvement of Soviet-American rela- would accord with the interests of the So- and American nations and the interests of gthening peace:

We proceed from the assumption that it is pos- le to improve relations between the USSR and USA. Our principled line with respect to the pitalist countries, including the USA, is consist- tly and fully to practice the principles of peaceful existence, to develop mutually advantageous ties, d to cooperate, with states prepared to do so, in engthening peace, making our relations with them stable as possible.

r his part, U.S. President Nixon spelled out r factors that provided the foundation of the countries' common interest in peaceful co- istence:

Neither country wants a nuclear exchange that uld cost the lives of tens of millions of people;
The enormous cost of arms;
Mutual interest in the expansion of trade and ntacts;
The tasks of economic and social development ound the world point to the need for concen- ting effort on constructive work.

The Beginning of Détente

By the autumn of 1971 an understanding had en reached on the usefulness of a summit eeting.

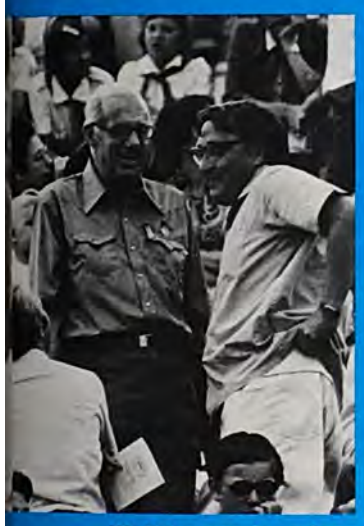
From May 22 to 30, 1972, President Nixon was the Soviet Union on an official visit. The nego- tions in Moscow centered on major problems of bilateral relations and the general situation in the world. Special attention was attached to the question of diminishing the danger of nuclear war.

At the end of the visit 10 documents were signed. The most important of these is the Basic Principles of Relations Between the Union of Soviet Socialist Republics and the United States of America. This document states:

> They [the USSR and the USA] will proceed from the common determination that in the nuclear age there is no alternative to conducting their mutual relations on the basis of peaceful coexistence. Differences in ideology and in the social systems of the USSR and the USA are not obstacles to the bilateral development of normal relations based on the principles of sovereignty, equality, noninterference in internal affairs and mutual advantage.

This is how the political foundation of Soviet-American relations was formulated in 1972.

Young farmers from the U.S. in the USSR as part of the Young Agricultural Specialists Exchange Program (YASEP) visit the Brest Fortress in Byelorussia, 1978.



Well-known American pediatrician Dr. Benjamin Spock (center) at the Artek Young Pioneer Camp on the Black Sea coast, 1977.

American and Soviet sailors shake hands after laying a wreath at the monument to the men and women of Boston who lost their lives in World War II, May 1975.

Also signed in Moscow were the Interim Agreement on Certain Measures with Respect to the Limitation of Strategic Offensive Arms (SALT-I), agreements in the field of economic cooperation and on cooperation in environmental protection, medical science and public health, the exploration and use of outer space, science and technology and the prevention of incidents on the high seas.

It was about the same time that a Soviet trade commission was set up in Washington and an American commercial commission was organized in Moscow.

Not many people know that the Export-Import Bank of the United States was set up on the initiative of U.S. President Franklin D. Roosevelt specifically to finance trade with the USSR. The Soviet-American credits agreements that were signed in Washington in early 1973 returned to that bank the functions that had initially been bestowed on it.

The two countries also set up a joint trade and economic council with the participation of leading American banks and corporations. Among the agreements that were concluded was the one with Occidental Petroleum International Inc., signed on April 12, 1973, for construction of a mineral fertilizer industrial complex in the USSR and on the export of superphosphoric acid from the United States and chemicals from the USSR.

In his message to Congress on May 3, 1973, "U.S. Foreign Policy for the 1970s: Shaping a Durable Peace," President Nixon stated:

> In the week of May 22-29, the United States and the Soviet Union took a decisive turn away from the confrontations of the past quarter-century.

Eight Days in June

The visit to the United States by Soviet leader Leonid Brezhnev on June 18-25, 1973, became another major landmark in the history of Soviet-American relations. During the negotiations the sides summed up the results of past relations and mapped out concrete measures for the future extension of cooperation in the maintenance and consolidation of peace and the promotion of trade, economic, scientific, technical and cultural ties.

Americans Carol Schmidt and Julie Cannell, members of the YASEP group, lived with the Yakubovsky family for two months on the Rassvet Collective Farm in Byelorussia, 1978.

Eleven documents were signed over the course of that visit, including the Agreement Between the Union of Soviet Socialist Republics and the United States of America on the Prevention of Nuclear War, in which the two sides undertook the obligation to avoid military confrontation, refrain from the threat or use of force and to immediately enter into urgent consultations with each other in the event of a conflict.

In the Basic Principles of Negotiations on the Further Limitation of Strategic Offensive Arms, the countries agreed to make serious efforts to work out the provisions of the permanent agreement on more complete measures on the limitation of ▶

In May 1972, Van Cliburn gave a series of concerts in Moscow and Leningrad. He is shown here at the Leningrad Philharmonic Society. The American pianist won first prize at the Tchaikovsky International Music Competition in 1958.

the above-mentioned arms both quantitatively and qualitatively.

In their drive to "beat their swords into plowshares," the sides also signed an agreement on scientific and technical cooperation in the peaceful uses of nuclear energy.

At least 40 out of the 101 agreements signed by the Soviet Union and the United States since the establishment of diplomatic relations in 1933 were concluded between the summit meeting in May 1972 and the one in June 1973.

Speaking over American television in 1973, Leonid Brezhnev said:

> For us peace is the highest achievement to which all men should strive if they want to make their life a worthy one. We believe in reason, and we feel that this belief is shared also by the peoples of the United States and of other nations. If that belief were lost, or if it were obscured by a blind faith in strength alone, in the power of nuclear arms or some other kind of weapon, the fate of civilization —of humanity itself—would be miserable indeed.

The visit by President Richard M. Nixon to the USSR, which took place on June 27 through July 3, 1974, was the next landmark of Soviet-American cooperation. At that time the two sides signed the Protocol to the Treaty on the Limitation of Anti-Ballistic Missile Systems, which provided for the further limitation of such systems. An understanding was reached on the concerted limitation of underground nuclear weapons tests, continued efforts in the field of limiting strategic offensive armaments, on measures for concluding a convention concerning chemical warfare. The two countries signed the Joint Soviet-American Communiqué, which provided, among other things, for their obligation to take the necessary steps toward adopting "the most effective measures possible to overcome the dangers of the use of environmental modification techniques for m tary purposes." Moves were made to expa cooperation in industry, power engineeri health protection, housing and other constr tion. To put it briefly, the sides continued weave the fabric of détente.

This process also continued under U.S. Pre dent Gerald Ford. On behalf of the United Stat he put his signature to the Final Act of the H sinki Conference on Security and Cooperation Europe. On November 23 and 24, 1974, Brezhn and Ford met near Vladivostok. The two leade reaffirmed the determination of their countries implement consistently the mutual obligatio stemming from the documents signed since M 1972, worked out the principles of the secon strategic arms limitation treaty (SALT-II) a agreed upon the need to conduct negotiations t the further limitation and a possible reduction strategic arms.

Cooperation Slows Down

he next Soviet-American summit meeting took ce almost five years later, from June 15 to 18, 9, in Vienna. Leonid Brezhnev, General Secre- of the Central Committee of the Communist ty of the Soviet Union and President of the sidium of the USSR Supreme Soviet, and my Carter, President of the USA, signed Treaty on the Limitation of Strategic Offensive ns (SALT-II), the Protocol to the treaty, a Joint tement of Principles and Basic Guidelines for bsequent Negotiations on the Limitation of ategic Arms and a document of agreed state- nts and general understanding in connection the treaty. This was the consummation of ny years of effort and work.

ome time passed, and from the rostrum of Twenty-sixth Congress of the CPSU Leonid zhnev said on February 23, 1981:

> The USSR wants normal relations with the USA. There is simply no other sensible way from the point of view of the interests of our two nations and of humanity as a whole.

Today, as before, the Soviet Union is ready for a dialogue with the United States at all levels, including the summit.

A Better Future

I was Novosti Press Agency's correspondent in the United States from 1972 to 1978. It was a period of very interesting work for a journalist.

Once when I was in New York, I had dinner with Chinghiz Aitmatov and Kurt Vonnegut—a Soviet and an American writer. It was a historic day: As we watched the docking of the Soyuz-Apollo spaceships, the two writers spoke of the usefulness of Soviet-American cooperation, the absurdity of animosity and the fragile nature of Spaceship Earth. Some time before that event, I had flown to Houston, Texas, to cover the preparations for the Soviet-American encounter in space.

I also visited Pittsburgh, where Soviet and American specialists were working on the design for a steel factory for the Kama Truck Plant, and when I returned to the Soviet Union, I went to the town of Naberezhnyye Chelny, where the design was being translated into reality.

I was present at the sessions of the Soviet-American Trade and Economic Council in Los Angeles and Moscow and interviewed many American businessmen who favored the all-round development of trade and cooperation between the two countries.

I met many Americans, and I always found them friendly and peace-loving. They all agreed that neither country had anything to gain by animosity, let alone war. To me, this was a guarantee that in spite of our current difficulties, a better future lies ahead. ■

25
years

SOVIET LIFE

October 1981 • $1.25

THREE SPECIAL REPORTS:
WOMEN
THE HANDICAPPED
RELIGION

The first and last phases of a total solar eclipse, Bratsk, July 31, 1981, noon.

Photographs by American astronomer Larry Bohlayer

See story on Cover III.

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Astronomer, artist, equestrienne, wife and mother Olga Dluzhnevskaya is interviewed by Anna Frolova.

SOVIET LIFE

The magazine SOVIET LIFE is published by reciprocal agreement between the governments of the United States and the Soviet Union. The agreement provides for the publication and circulation of the magazine SOVIET LIFE in the United States and the magazine AMERICA in the Soviet Union.

October 1981, No. 10 (301)

Statement required by Public Law 87-865 (39 U.S. Code 4369, Section 132.6 of the Postal Manual) showing the ownership, management and circulation of Soviet Life Illustrated Monthly, published in Washington, D.C., for October 1981.

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LETTERS TO THE EDITOR

After our announcement in the July issue that SOVIET LIFE would be 25 years old in September, letters of congratulations began pouring in. There is not enough room to print them all, but we promise to answer each letter individually. Below we publish excerpts from some of the letters.

Please allow me to express thanks and appreciation for your fine magazine and wish you and your country success in promoting peace and devoting energy aimed at arresting the recent escalation of the arms race. Good luck in strengthening the friendship of fraternal peoples and the forces of progress!

James W. Warhola
Columbus, Ohio

Continued on page 2

THE HANDICAPPED

Created for the crippled and disabled at a Moscow factory.

56 | Father Boleslav Gavrikhovsky, a Roman Catholic priest in a small village in Byelorussia, writes about his ministry.

RELIGION

62 | The mystique of 23-year-old gymnast Alexander Dityatin is probed by Alexei Srebnitsky.

EDITOR'S NOTES

Three themes dominate this issue: women, the handicapped and religion. Judging from our mailbag, the conditions of Soviet women are of interest to many readers. The fate of the handicapped, the problems they face—both personal and social—and the ways they are solved are, in my view, a reflection of the maturity of a society and a test of its everyday deeds. The last section deals with religion under socialism. Many a false or unfounded story has been written about religion in our country. I hope our articles on the subject will help set the record straight.

Over the years we have devoted a lot of space to women. This month we decided to introduce you to four representatives of the "fair sex"—an agronomist, an astronomer, a school principal and a trade union leader. As I see it, features on the lives of real people, who are both typical and quite unusual, are the best way to convey the fate of generations and their place in history. Every detail counts when telling such stories. Put together, they portray the contemporary Soviet woman.

I find that it's always hard to describe someone else's tragedy. But what an accomplishment when a person overcomes a handicap! In our section on the handicapped we illustrate not only how they perform socially useful work, but also how they lead rich and full lives.

The section on religion cites cases in point on the exercise of freedom of conscience in the Soviet Union, which is guaranteed by the Constitution. We have interviewed the clergy of various religions as well as parishioners. And we explain how old churches are painstakingly restored as architectural monuments protected by the state.

So here we present three aspects of Soviet life, each of which could be the subject for a whole issue. We plan to continue dealing with these three subjects from other viewpoints and different angles in coming issues. So let us know what you think.

LETTERS TO THE EDITOR

Continued from Cover II

Your magazine is getting better and better, and I thought your July issue was the best of them all, but now, the special issue I just received is even better!

We hope for world peace and look forward to the day when everyone can go anywhere and everywhere and enjoy life, which can only be done in a condition of peace and harmony between peoples everywhere.

Gerald A. Petersen
Moraga, California

I wish to congratulate your fine magazine on your silver anniversary. I have been a subscriber for more than 25 years since I recall the time when the magazine's title was USSR Magazine.

In those days, when a region of your vast country was mentioned, you showed an outline map with an asterisk of the place, locating it relative to Moscow. I would like to see this practice resumed.

SOVIET LIFE is an excellent magazine, and I hope our U.S. equivalent in the USSR is as well done.

I am a retired design engineer from International Harvester Company, and I look forward to reading you every month. I also travel extensively and hope to visit your country eventually.

I am glad there are cultural and scientific exchanges and would like to see more commercial activity between our countries.

Unfortunately, there remains a great lack of understanding by our people of the way your system works. Your emergence as a superpower is proof that it does.

Paul C. Thielen
Scottsdale, Arizona

I am a native of the charming little village of Viganj by the sea, on the peninsula of Peljesac in Dalmatia. My ancestors carried wheat from Russia in their ships while the people in Russia went hungry. When Napoleon's army destroyed the ships that flew the Russian flag, that was the end of my ancestors' trip to Russia.

My father, my uncle, as well as my brothers worked on the steamships that carried wheat from Russia as kitchen boys. At the age of 13, I was a cabin boy for four engineers on a ship that took us to Poti to pick up a cargo load of minerals for Rotterdam.

When we were young, my older brother and I used to read stories about political prisoners being driven to Siberia, and we used to cry. Although at the beginning of the Russian Revolution one could read anything about the Revolution, since we were still under Austria, I would listen to the conversation among the sailors on the ship I worked on. Soon secret papers about the Revolution began to be secretly circulated, which I read with great joy, although I did not understand much. Ever since then I have been interested in the events happening in the Soviet Union.

The American-Russian Institute in San Francisco was organized in 1932 by Mrs. Rose Isaak. The magazine at that time was titled USSR. I do not remember when I started reading the present SOVIET LIFE, but I am sure that it has been from the day of its birth. I am the oldest living member of the American-Russian Institute and a close friend of Dr. Holland Roberts, now dead. My life has been enriched by reading SOVIET LIFE, for which I thank you very much.

Joseph Splivalo
San Francisco, California

It is clear from reading SOVIET LIFE that there is a strong and very healthy desire within the Soviet Union to build genuinely cooperative and friendly relations with the United States. Though not always so clearly articulated in writing, there is also a similar desire in many—perhaps in some way almost all—Americans for peace.

Hopefully more and more people will come to make an inward commitment to putting sanity, human welfare and our very physical survival above the existing feelings of U.S.-USSR tensions.

If and when this commitment to our deepest interests bcomes strong enough, I feel a real faith that this growing movement for peace will find the necessary political and philosophical expression.

Robert Davis
Cleveland, Ohio

It is now 20 years—or maybe a few more since this wonderful magazine has come to me—so may I express my gratitude to you and my love for the magazine. I am 83 now.

Ora Mae Rowland
Portland, Oregon

As one of the 400 billion people of this world, I would like to wholeheartedly respond to the "Appeal to the Parliaments and Peoples of the World" that you published in August.

May I also echo the wish the editors expressed in celebrating the upcoming 300th issue of the magazine: "A clear sky and bright Sun for everyone on this planet." I too have fervently wished for this, particularly at such times as when my three-year-old granddaughter is sick in the middle of the night, and I am holding her head, and I think of the little children in other parts of the world who might be sick too.

It wouldn't make a bit of difference to me what nation they lived in or what their parents believed, I would wish them to be safe.

In the appeal the USSR Supreme Soviet issued on "the fortieth anniversary of the attack by Nazi fascism on our homeland," it stated that: "The Soviet people bow their heads to the glorious memory of 20 million fellow citizens who fell in the war. World War II inflicted incalculable disasters and suffering on all humankind. . . . A repetition of the tragedy must not be allowed. Everything must and can be done to prevent another war."

This reminded me of President John Kennedy's speech at American University in 1963. When referring to the Russian people, he said:

> Among the many traits the peoples of our two countries have in common, none is stronger than our mutual abhorrence of war. Almost unique among the major world powers, we have never been at war with each other. And no nation in the history of battle ever suffered more than the Soviet Union in the Second World War. At least 20 million lost their lives. Countless millions of homes and families were burned or sacked. . . . In short, both the United States and its allies, and the Soviet Union and its allies, have a mutually deep interest in a just and genuine peace and in halting the arms race. . . .
>
> The United States, as the world knows, will never start a war. We do not want a war. . . . We labor on, not toward a strategy of annihilation but toward a strategy of peace.

Since each nation knows that it wants to avoid war at all costs, maybe the most important task before us is to succesfully communicate, as your magazine did, these genuine motives to each other. If each of us really believed this reality, it would change the unreality of the "criminal idea of the permissibility of the use of nuclear weapons" mentioned in your appeal.

We are so caught up in spiraling unrealities that few of us are aware of the real facts, such as was pointed out in the same issue, that: "There is only a narrow strip of water two miles wide dividing us."

Elizabeth Little
Mill Valley, California

I would certainly like to take this occasion to assure you how much I appreciate your distinguished magazine SOVIET LIFE. I have enjoyed reading every bit of it. Your country surely appears to be full of progressive and peaceful people; this magazine has given me a new vision of what the real Soviet Union is. It seems like I had always read articles or heard reports on T.V. from biased people who did not report the whole truth about this magnificent country.

Arnon Dantas
Forth Worth, Texas

I have been reading SOVIET LIFE for three years and have enjoyed every copy of the magazine with the exception of those issues which favored the construction of nuclear power plants. I happen to take a very dim view of atomic energy as a source of electric power generation and cannot reconcile myself to its use considering its long-term potential for human hazard.

I am convinced that atomic power plants and human beings cannot safely coexist on our small planet and believe that the use of atomic fission should be outlawed whether for nuclear power or for nuclear bombs.

This is to wish you another twenty-five years of success in your endeavors for understanding and for the furtherance of peace between the peoples of the U.S. and the USSR.

Nathan H. Sauberman, P.E. (Ret.)
Fairfax, Virginia

I enjoy your publication very much and with such a vast area to cover, it should never lack in variety.

My parents originate from the Ukraine in the province of Bukovina. I have heard them mention villages like Chernovits and Vranceni as well as the Carpathian Mountains. I suppose the above-mentioned are small farming communities and not very newsworthy, but perhaps you can devote some small space to the areas mentioned in future issues.

Michael Claruk
Blaine, Washington

Early congratulations on your twenty-fifth anniversary in September.

In September 1978, I took a two-week bus tour of the Soviet Union, visiting Leningrad, Novgorod, Kalinin, Moscow, Smolensk and Minsk and areas between. It was a most interesting and enjoyable trip.

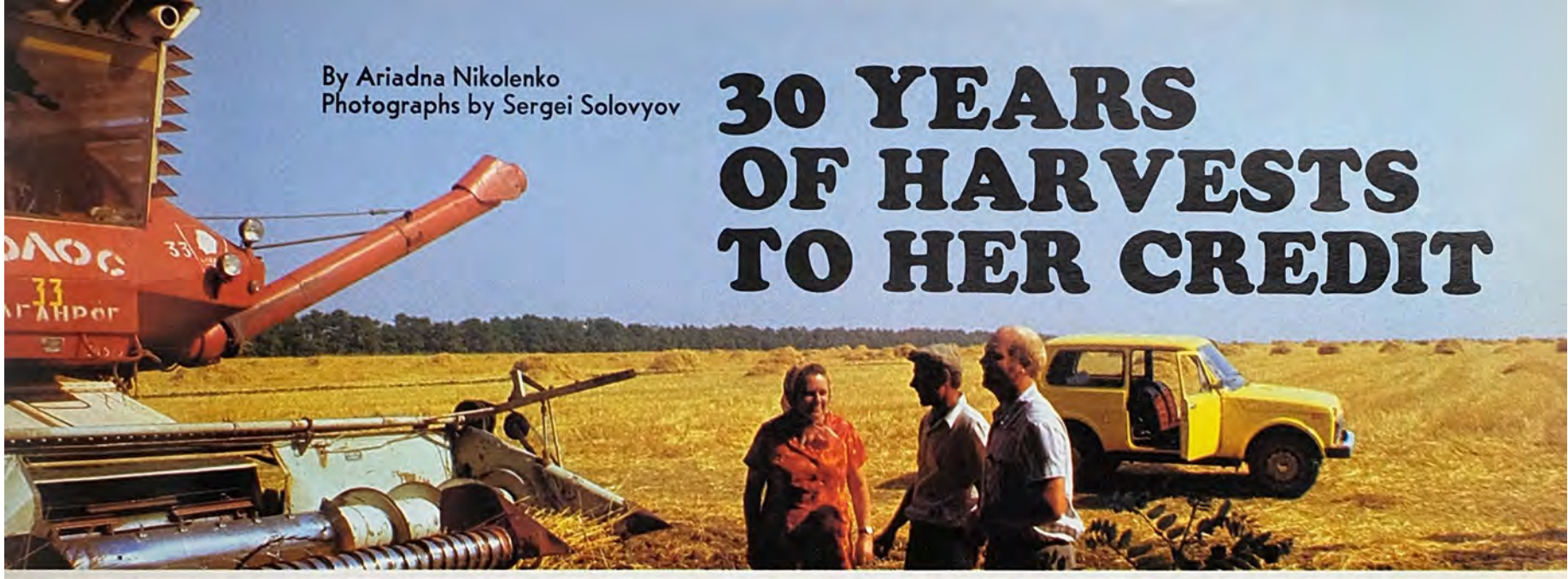
I particularly enjoy SOVIET LIFE articles and accompanying pictures of Soviet cities and scenery, and other articles of historical significance. When I read of cities I've not visited, I dream of someday visiting them; and when you do features on places I've seen or been to, I have fond memories of when I was there.

Dennis L. Dolney
Minneapolis, Minnesota

My congratulations to you and the editorial board for your admirable magazine, SOVIET LIFE. I find every issue rich with informative articles and superior photographs. Particularly impressive have been those depicting the people and places in your various republics, also articles concerning the arts and theater, ecology, the space program and medical science. An interesting subject might be public transportation in the Soviet Union—the Moscow subway, surely the world's finest, the railway system, the airlines, busses.

In 1956 I spent a memorable month in the USSR, visiting your great cities and many of the beautiful scenic areas. It is quite impossible to delineate the many pleasant experiences in a short letter, but I must mention an abiding memory is of great friendliness and courtesy extended to me everywhere by the Soviet people. I hope I can return for another visit, and, meantime, I wish SOVIET LIFE continued success.

Rupert Leach
Portland, Oregon



By Ariadna Nikolenko
Photographs by Sergei Solovyov

30 YEARS OF HARVESTS TO HER CREDIT

Yevdokia Seliverstova, ef agronomist of the Temizhbeksky State Farm in Stavropol Region, has ated 30 years to the land of fertile black- egion, one of ountry's main granaries.

WE WERE AMBLING through a vast field of golden wheat. It's hard to walk on prickly stalks if you're used to the smooth asphalt of the city. The Sun was beating down upon us mercilessly.

"By the end of the day, you'll find that your soul, as well as the land, radiates heat," remarked Yevdokia Seliverstova, my companion. Yevdokia is chief agronomist at the Temizhbeksky State Farm, whose fields spread for kilometers around us.

Yevdokia has worked here in Stavropol Region of the southern part of Russia for 30 years, applying her energy and experience to this rich black-soil area. Southern Russia is one of the major grain producers of the Soviet Union.

Yevdokia is only a little older than the state farm she works on, which was organized back in 1930. She wasn't born here, though, but in Smolensk Region of Central Russia. She still recalls the cool, green groves of birch trees, the soft white snow piled high on the roof of her parents' home and the small piece of land that barely fed the large Seliverstov family.

During the late twenties rumors circulated throughout the village where she lived that on the far-off steppes of the Northern Caucasus huge new state farms called sovkhozes were being set up. The word was that the soil was very rich, but there weren't enough people to work it. And so Yevdokia's family and several other families from Smolensk Region moved to Kuban.

At first the land of Stavropol was not particularly hospitable to the newcomers. Wild and virgin, it stretched to the horizon. The settlers lived in dugouts. Packs of wolves roamed nearby. The first wheat crop was not very encouraging—only three centners per hectare. But that was 50 years ago.

I listened to Yevdokia's unhurried account, trying to envision what Temizhbek had been like back then. I guess that I can't imagine it, not after having seen Temizhbek today. The town has an art school and a music school in addition to regular elementary, junior and senior high schools, plus a polyclinic, a hospital and a cultural center. And Yevdokia's roomy apartment bears no resemblance to the first hut her father put up on the steppe. A lot has changed in 50 years.

Yevdokia can still hear her father's prophetic words: "You can grow a really good crop here. This black soil is exceptionally rich." The earth would stick to her shoes on the way to school. It was smooth and heavy. Beautiful ears of wheat grew from it, ears with large grains that shimmered like ▶

gold. The grain was ground into flour, and crusty loaves of mouth-watering bread were made from it.

When it came time to choose a profession, Yevdokia enrolled at the Agronomy Department of the Stavropol Agricultural Institute without a second thought. The first lecture she attended was given by an elderly professor. "Soil is a miracle of nature," he said. "It is complicated, alive and highly sensitive. Without this thin layer, life would not be possible."

When not poring over textbooks or going to lectures, Yevdokia pondered the everyday practical questions of agronomy. How do you combat the dry winds that ravage Stavropol Region? How do you prevent a crop from bending over to the ground? What varieties of wheat would produce the highest yields in this rich black earth?

After Yevdokia graduated from the institute, she went to work at a branch of a large state farm as an agronomist. She was only 23.

She experimented a lot. Of course, success didn't come immediately. It took years to make the fields respond to her efforts. In 1955 she recorded 30 centners of wheat per hectare."I remember every harvest whether it was good or bad," said Yevdokia matter of factly. "No one is like another. Some years we had an early spring, other years it was late. Sometimes we had warm spells in winter or dry spells in summer. Sometimes the season was rainy."

But the government always came to the rescue when needed, supplying the farm with credits, seed, and fodder for the cattle. In areas that had bad crops two or three years running, state aid was free.

I'm not trying to say that all the hard-won achievements of the Temizhbeksky State Farm were due to the efforts of

g the late twenties ge new state farms ed sovkhozes were set up in Kuban. The soil was rich, re weren't enough people to work it. And so Yevdokia's y and many others moved to Kuban.

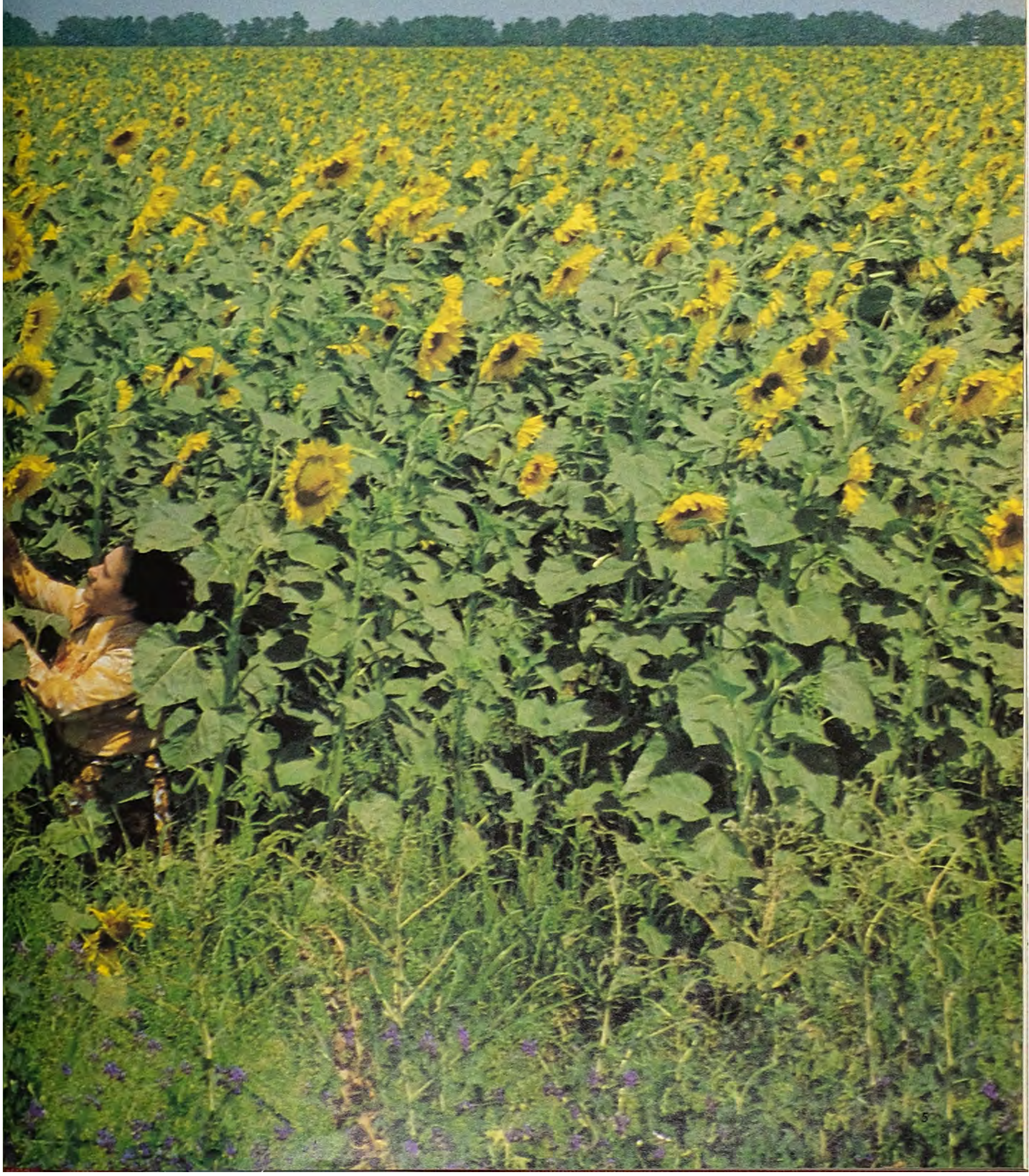
Yevdokia Seliverstova alone. Of course other people also had a hand in planning and carrying out the farm work. Nikolai Dronov, director of the farm, is an experienced organizer and has a doctorate in agriculture. All the workers, mechanics and machine operators are carefully selected. And every problem, be it routine or otherwise, is discussed at regular meetings of the farm's management.

However, Yevdokia's opinions are highly regarded, and her influence holds sway. For several days I observed her in the fields, at management conferences and in her office. Once the stress of the harvesting was over and the grain was being loaded into elevators, it seemed to me anyhow that the time was ripe for Yevdokia to take a break. But she still had plenty to do. She continued her work with researchers at the Stavropol Agricultural Institute on a project titled "Ways and Means of Soil Development for Winter Crop Cultures." She strongly believes that fields lying fallow can be used more effectively. She would like to plant legumes, vetch and oats on these fields for fodder.

"Don't you ever rest?" I asked her one day.

"Just wait until we've finished planting," Yevdokia responded with a smile, "and then I'll go to Sochi on the Black Sea. Our state farm has a share in two vacation spots. One is in Sochi, the other in Yessentuki. Last year I went on a cruise in the Mediterranean."

I was curious about her income after seeing her nicely furnished apartment and the car parked outside. Her base monthly salary is 250 rubles. But after you add in the bonuses that she receives for meeting the state plans, her pay amounts to about 400 rubles a month. Her husband, Boris Tomilin, a retired seaman, is a machine operator at the state farm. He, too, earns a good income. ▶



Fifty years ago the people who settled in Stavropol Region lived in dugouts in the middle of land untouched by a plow. Packs of wolves roamed nearby.

Harvest time is the most stressful of all for wheat growers. Only after every last grain has been loaded into elevators can the farm workers relax. Below: After the harvest Yevdokia and her husband Boris take time to enjoy a long lunch together.

Although Yevdokia is eligible by law to retire in three years (women can retire at the age of 55), she wouldn't think of it.

"Tell me about Yevdokia Seliverstova. What's she like as a person?" I asked several people who know her quite well.

"She's dedicated to her work," remarked Nikolai Dronov, the farm director.

"She's kind," answered Fyodor Kozlov, a coworker.

"She's got a sense of purpose," said Yevgeni Lykov, secretary of the local Communist Party committee.

"She puts her whole heart into her work, and she can do it better than anybody else," commented Anatoli Golovach, a tractor driver.

This seemed to be the unanimous opinion of Yevdokia's colleagues. When talking about her, administrators always mentioned her special talent for organizing.

It seems to me, however, that her greatest asset is her conscientiousness. This explains her dedication to work, her sense of responsibility, her reserved manner and quiet way of speaking.

She can take pride in many things. Yevdokia participates in official conferences and meetings; she helps to outline state agricultural policy. She has received numerous state orders and medals. Recently she was awarded the title of Hero of Socialist Labor.

Despite all this, she still goes on learning. She keeps up with the latest literature on agronomy, takes advanced courses and participates in experience-sharing conferences. Yevdokia Seliverstova knows that there are no universal methods for increasing yields and stabilizing them. After 30 years of harvests she knows that the higher the yield, the more difficult it will be to increase it the next year. ■

A STAR IS BORN

By Anna Frolova
Photographs by Rudolf Alfimov

t astronomer Olga Dluzhnevskaya. She rides, makes f her own clothes, sculpts and draws nimated cartoons. On top of all that, managed to raise on, who is now 21.

TWO OUT OF EVERY FIVE scientists and laboratory workers in the Soviet Union are women. In all fields of science, from nuclear physics, space biology and plasma physics to radio engineering, genetics and philosophy, women play a major role.

Close to 2,400 pages of research material are published in the world each day. New information literally inundates scientists.

How then does a woman scientist stay abreast of the field and still find time for housework, a family and looking good? I asked Olga Dluzhnevskaya, an astronomer. Astronomy, by the way, is a field where men have reigned supreme for 4,000 years.

Olga, who has a candidate of science degree in physics and mathematics, is head of the Astronomical Data Center at the USSR Academy of Sciences. She also represents the Soviet Union in the International Research Council of the Strasbourg Center of Stellar Data. She is a member of the organizing committee of the Astronomical Data Group of the International Astronomical Union, curator of the Soviet-French Commission and scientific secretary of the Soviet-Indian Commission on Bilateral Cooperation in Astronomy.

After hearing about her work experience, I was flabbergasted to meet a petite and quite elegant 42-year-old woman who has a grown son.

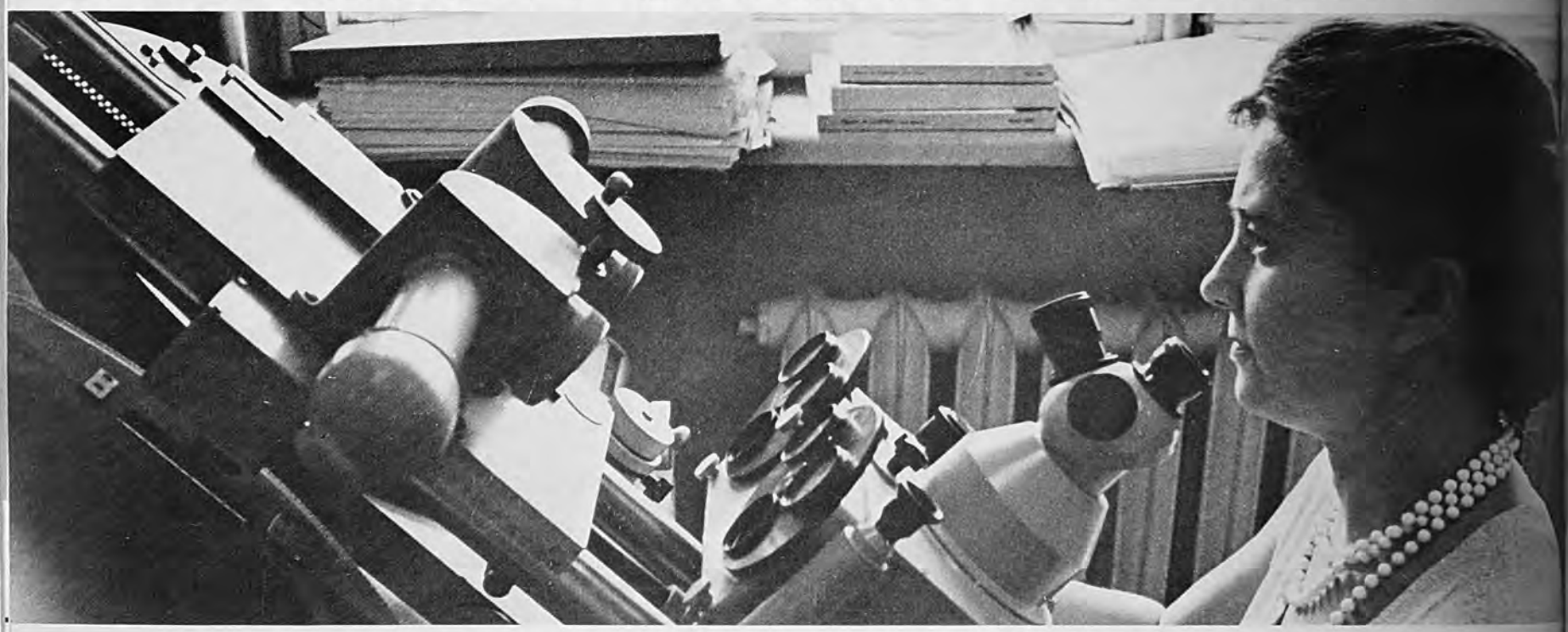
"When do you find the time to do all this?" I asked, fearing that my inferiority complex was showing. "There are only 24 hours in a day!"

"Yes, 24 long hours," she answered, emphasizing the long.

Education

According to the experts on early childhood education, child rearing is divided into two categories: developing intellect and molding character. Both have been cultivated in Olga since she was a young girl.

Olga's father—he's an eminent builder (the foundations of ancient monuments, churches and the Bolshoi Theater have been reinforced in accordance with his methods)—wanted her to become an architect. Her parents wisely and discreetly encouraged her interest in architecture. ▶



Olga and her son Boris are great friends and try to spend as much time as possible with each other. Center: Olga has a patent for this high-precision device, which is used to observe artificial heavenly bodies. Top: On the balcony of the Dluzhnevskys' apartment, behind Olga, is a copy of the Bakhchisaraisky Fountain that Olga made herself. Facing page: Olga models a sari that she got in India while there for a conference.

Tuesdays are reserved for riding. Olga goes in for show jumping. Above: Olga's scientific interests lie in diffuse nebulae.

Her father was happy. She was following in his footsteps. But then one day when Olga was 14 and in the seventh grade, she visited the Moscow Planetarium for the first time. As the great Russian scientist and poet Mikhail Lomonosov said, "The abyss of stars opened" before her eyes. Neither argument (What about all of your training in art?) nor persuasion had any effect. She had made her choice. Astronomy would be her profession. She passed her entrance exams for the Astronomy Department at Moscow State University with flying colors.

Work

After graduation Olga started out as a senior lab assistant at the Astronomical Council of the USSR Academy of Sciences. Five years later she defended her thesis and was recommended for the post of the council's scientific secretary. She held this seat until 1980, when the Astronomical Data Center was founded at the USSR Academy of Sciences.

The center she now heads is a huge memory bank of information that gathers and processes everything known about the stars: their coordinates, spectra, masses, colors, chemical compositions, distances from the Sun, and so on.

"The need for such a center is quite apparent now that astronomy has become an important part not only of science but also of everyday technological life," stressed Olga. "Before, specialists ranging from navigators and geodesists to astronomers and cosmonauts were forced to thumb through thick reference books on astronomy, not one of which was complete. Today computers rapidly sieve through their memory banks and print out the required information on a tape. Each memory cassette contains material from 60 reference books."

"How large is your star farm?" I asked Olga.

"Don't worry, I'll always have a job," she answered in reply, smiling. "There are 260,000 well-known stars alone."

Of course Olga's center has not had time to gather all the existing information about the universe in its short period of existence. Yet it has offered an immeasurable service to scientists and has saved them plenty of time.

The management of such an important scientific center demands not only administrative skill and ability to get along with others, but also a command of astronomy. As testimony to the latter, Olga participated in the creation of the largest Soviet telescope to observe satellites, she is the author of 45 research papers and holds a patent for a high-precision device used to observe artificial celestial bodies.

Since she wrote her thesis, her scientific interests have lain in a sphere enchantingly called diffuse nebulae. Although an astronomer's work cannot be conveniently expressed in the language of popular science, according to Olga, her description presents an accurate picture of what a diffuse nebula is.

"Nebulae are formed in groups, each of them consisting of dozens and perhaps hundreds of interstellar clouds," Olga explained. "Then they scatter, and only some remain in groups. These are the loose stellar clusters."

Is this process slowing down or speeding up? How do nebulae coming into being interact? Does their chemical composition differ? These are the questions that interest Olga.

I asked her to tell me about the international side of her work.

"Astronomy is by nature an international science," she explained. "You see, no matter how high the mountain where your observatory is located and no matter how sensitive your equipment is, you can't observe the stars that can only be seen from the other side of the globe. But if you pool efforts and compare data, the results will unquestionably be quite different. What's more, it is often necessary to make simultaneous observations of the same object from various points on the Earth. All this requires that scientists from around the world work together.

"At the moment we are conducting research on magnetic stars, supernovae and the Sun with French scientists. The Astronomical Council coordinates its work with that of the Paris Astrophysics Institute, observatories in Nice and the Stellar Data Center in Strasbourg. The study of the Sun's pulsation is part of our program of cooperation with the United States. A Soviet-American group has been formed to study the influence of the activity of the Sun on the Earth's climate and weather.

"There's another aspect of cooperation that I would like to mention as well," Olga continued. "Because social and ecological conditions vary from one country to another, people react differently to one thing or another. Astronomers everywhere, however, know that the heavens are for everyone and should be peaceful and tranquil."

As a member of the International Astronomical Union, Olga attends meetings, symposiums and conferences. She has delivered lectures on astronomy in English in Bombay, made reports in French at a scientific conference in Strasbourg and headed the work of the Soviet space pavilion at an exhibition in Mexico.

"How do your male colleagues treat you? After all, astronomy is traditionally regarded as a man's science."

"They treat me very approvingly, I would say," she responded.

Family

There are people who are interesting no matter what they do. Olga is one of them. An enumeration of her hobbies and interests is just as impressive as her résumé.

For starters, she makes many of her own clothes. She has designed and made an exquisite summer evening dress, including the lace.

She also draws animated cartoons and writes the scripts. They're too good, in my opinion, to be shown only on the family's screen.

There are beautiful vases and a tile-covered fireplace in her apartment and an earthenware fountain like the famous Bakhchisaraisky Fountain in the Crimea on the balcony. The walls of the balcony are decorated with large ceramic signs of the Zodiac that she made herself.

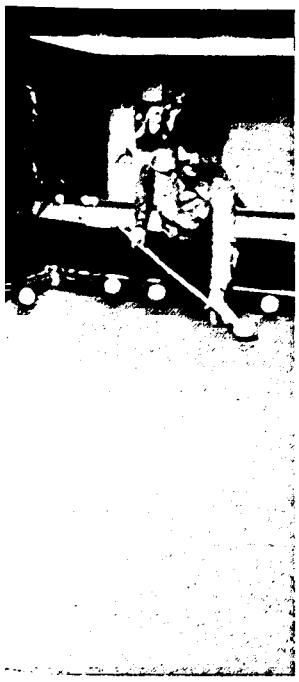
Olga's husband, Lev Dluzhnevsky, is also a scientist. He specializes in thermodynamics. He's a smart, athletic-looking man. Her son Boris, 21, studies at the aircraft institute. He's a good student despite the fact that he is mad about jazz and science fiction, especially Ray Bradbury.

The fourth member of the family is Bonifatsy, a poodle. Bonifatsy is Olga's dog and misses her greatly when she is away, especially on Tuesdays—her day for riding. Back in her student years Olga began to ride, and she still makes time for it today. She specializes in show jumping.

"When do you find the time to do all this?" I couldn't help but ask again. "How is it possible to combine all these things?"

"It's impossible theoretically," she answered, "but when you like what you do, it's possible." ■

The celebrated Soviet astronomer Alla Masevich (right) has been Olga's mentor for many years. Bottom: Olga shares her son's enthusiasm for sports and mes, and Boris shares his mother's interest in physics and mathematics.



REPRESENTING 7,500 WOMEN

By Ada Baskina

The trade union leader (standing at right) can often be found in the factory's lab, where professional skills are taught.

The Second Moscow Watch Factory is being renovated all the time. Nina Tverdokhlebova, who is head of the trade union's Commission on Women at the factory, pays special attention to new equipment and how it will affect the jobs of the 7,500 women workers.

MORE THAN 7,500 of the 11,000 people at the Second Moscow Watch Factory are women. The local trade union ensures that they have good working conditions as well as good living conditions and plenty of recreation. The trade union works with the administration, but sometimes the union finds itself at odds with management.

The watch factory's trade union committee has 13 commissions that deal with labor protection, housing and education among other problems. Twelve of the commissions are your everyday groups, but the thirteenth one, the women's commission, stands alone. In a way, the women's commission controls the work of the whole trade union committee from the point of view of protecting the interests of working women.

Just Like Hundreds of Others

The women's commission is headed by Nina Tverdokhlebova, an economist and engineer. This is the third time she has been elected to this post. Her re-election is explained not only by her personal qualities, her energy, her ability to respond to another person's problems and her kindness, but also by the fact that Nina began her career as a worker and, without skipping a step on the professional ladder, has become a specialist with a diploma.

She came to the capital from the country and started out as a stamper. In the evenings she went to school and studied to become a technician. It was extremely difficult to combine study and work, but, nevertheless, Nina graduated from an institute: She became a designer technician and then an engineer in an instrument shop.

At first Nina lived in the factory's hostel until she married a technology student. After the wedding they moved in with his parents, and later they got a small apartment. In those years there was a housing shortage. Today, however, the Tverdokhlebovs live in a large apartment.

Like everyone else, Nina has done just about everything. She would take her daughter to kindergarten in the morning, then shop for food, prepare meals and clean the house. Of course, Nina was tired a lot of the time because she didn't know how to share her housekeeping chores with her husband at first, though he did his best to help her. Gradually everything came together. They have some free time now, which they spend with their daughter. They enjoy hiking in the country, touring the city and taking trips in the summer.

Nina's life is just like that of hundreds of other women workers at the factory, and this probably explains why the women naturally gravitate toward her. She knows many problems firsthand from her own experience. She understands their worries and knows what needs to be done to make their work and everyday life easier.

Work

"It seems as though the factory is under reconstruction all the time," Nina remarked. "Literally hundreds of production processes have been automated and mechanized, mainly those that involve women."

Women's jobs have become much easier, particularly in the assembly shops. Nadezhda Renard, who has been working as a detail assembly worker at the watch factory for some 25 years, says, "It used to be that after half a shift the women were simply exhausted. Each detail is minute. The women got pains in their muscles, eyes and back. The work has become much easier. I don't think young assembly workers even know what it is to be worn out."

According to Nina, seven million rubles have been allocated to improve the work of watchmakers in the last five years alone. "Most of this money is included in the collective agreement. But there are unexpected expenses all the time. Some new tools, we found, made a lot of noise, and special soundproofing was necessary to absorb it. Additional air conditioners are required as a result of some technological changes. Of course it's not possible to foresee all of this. And then the factory's trade union committee and members of the women's commission go to the management. Sometimes they get what they want, sometimes they have to bargain and negotiate. But more often than not, the management doesn't begrudge the money when the workers' health is involved. So this is probably the simplest problem for the commission."

I asked her to describe more complicated problems. Nina said that they usually concern relations among people. For example, an assembly worker named Irina Kobysheva was supposed to take annual leave in August, and her relief was to go on vacation in July. But Irina's husband unexpectedly got his leave earlier and, on top of that, received two vouchers to a sanatorium in the south.

"Irina came to me in tears. The forewoman wouldn't let her take off a month earlier. So I went to the forewoman. 'How will we get the work out if both take leave at the same time?' she asked me. 'What can I do?' So then I went to the team leader and had a heart-to-heart talk with both women. The result was that we came to the conclusion that Irina could take her vacation while the other workers would do her work in turns for a month."

Study

Should you visit the factory between January and May, more likely than not you'll hear someone talking about grades, tests and exams. Of the 7,500 women at the plant, 712 are students at schools and institutes. If you compare this number to the number of young women at the factory under 30, you'll find that every second one is a student. Those who come to the factory after eight years of schooling usually go on to night schools and institutes. Today 10-year education is compulsory in the Soviet Union. That is why public organizations, including trade unions, take special care of the students attending these schools. The education committee of the factory is in constant contact with the school. It is the first to know if a student is skipping classes or falling behind in a subject. Qualified specialists—engineers, economists or journalists on the factory paper—are always ready to help. But if a young woman simply misses classes because she is lazy, she needs a special talking to, and Nina Tverdokhlebova is just the person for such talks.

"I combined work and school for more than 10 years myself, and I know how difficult it is," she said. "It's easy to understand that it's more interesting for a young girl to go out dancing in the evening than to go to school. Or take a young wife and mother. She has so much work to do at home that it's extremely difficult for her to find time to study. On the other hand, there's no professional growth without education. Few young women think about what they will be in a few years. However, it is our duty to see to it. Otherwise, inadequate education would hinder the careers of our women."

But the atmosphere at a work collective where studying is the norm influences everyone more than any talks. Even the history of the factory helps to create this atmosphere. Numerous engineers, forewomen and shop superintendents went to night school and correspondence courses while working at the factory. For example, two of Nina's best friends, Nadezhda Khaibulina and Valentina Gorlova, came from the country to work at the factory with her. The three of them started out as workers and studied in the evenings. Now all three are specialists with diplomas. Nadezhda is an economist, and Valentina is a quality-control forewoman.

The administration has an interest in raising the qualifications of its workers. Last year 250 women were promoted to higher grades, and 360 mastered a second and for some a third trade. On the whole, forewomen and shop superintendents observe work laws and do their best to help women workers combine work and duty. But sometimes the opposite is the case.

Before graduation from college, Nadezhda D. had to write a thesis and was absent from the factory for four months, something that is allowed by law. After defending her thesis, she requested annual leave. Her forewoman turned her down on the grounds that the team had been working for the girl for four months and so she would have to take her vacation in the winter.

"It was a tough situation," Nina recalled. "It was vacation time, and everyone was impatient for Nadezhda to return. ▶

In the engineering office Nina chats with a colleague about renovations that will make the watch assemblers' work easier. She spends a lot of time there, always asking what else can we do?

At first I supported the forewoman, but after I met the young woman I quickly changed my mind. I could see that Nadezhda was completely worn out from defending her thesis. That is why I was forced to have a conversation with the shop superintendent. Finally we settled the matter amicably."

Everyday Life

It only takes a few minutes in the trade union's office to see that everyday matters and many other problems as well are solved there.

Take housing. Over the last five years alone the factory has built four new apartment complexes that accommodate 700 families of workers at the factory. And although new housing is going up, there still isn't enough to satisfy the demand. This can be explained by three reasons. First, the factory's new workers continue to come to a considerable extent from the country and don't have places to live in the city. Second, standards for creature comforts are getting higher. And third, the factory doesn't free itself of responsibility for a worker's family after it gives it an apartment one day. The family grows, children and grandchildren are born, and the housing problem arises again. Thus, someone at the factory is always waiting for his or her turn to get a new apartment. When considering applications for new apartments, the housing committee takes into account various factors, such as length of service, the number of family members and the size of the present apartment. Hence the principle of priority. However, there are always exceptions to these thoroughly thought-out rules, for human needs are more important than official and formal codes.

Say the name of a valuable specialist or a qualified worker finally comes to the top of the list. The women's commission, however, believes they can wait for a while, whereas a young clerk who is an unmarried mother urgently needs the apartment. When her unhappy romance came to an end, she could have chosen to have an abortion, but she wanted the baby. Her mother helps to take care of the little boy, and the young woman attends night classes at an institute. Life has become meaningful for her again, but the three of them don't have enough room.

A 40-year-old assembly worker has another problem. Although she and her husband have gotten a divorce, both continue to live under the same roof. Of course it cannot go on for long.

A third person who deserves to be considered for a new apartment out of turn is not even a worker but a pensioner. She had worked at the factory, however, for 30 years. Then she shared an apartment with her son. Now he has a family of his own. The woman loves her grandchildren and is ready to take care of them, but wants to live alone, though in the same apartment house.

Nina has made a lot of observations during her many years on the factory's trade union committee. For one thing, she finds that women's needs are changing much more rapidly than ever before. Some things that seemed so all-important a few years ago are of no interest today, whereas those things that were insignificant earlier turn out to be very important now.

One such disappearing problem is allowances for families that earn less than 50 rubles a month for each member. In years gone by the commission would sit for hours deliberating on how to distribute the money allocated for this purpose from the factory's fund. Today this question is solved in a matter of minutes. There are only 20 people at the factory who are in need of allowances.

Quite another problem was overalls. It seems that the factory's young workers saw stylish overalls on television. The young women went to the trade union committee and demanded new overalls.

"When I asked the deputy head of management about new overalls, he just put his head in his hands and moaned," Nina recalled. "Where would so much money come from? Besides, the overalls were not even on the market yet. The overalls they had seen on TV were just an experimental design. Well, we managed to settle this matter directly with the Ministry of the Light Industry of the Russian Federation, and the administration had to foot the bill after all."

Children

If there is no one available to take care of the child at home, the mother has to give up her job. But today's woman usually doesn't want to be only a mother, a wife and a housewife. She doesn't want to give up her work. And the factory in turn doesn't want to lose a worker. This is why large enterprises like the Second Moscow Watch Factory build kindergartens of their own.

One of the functions of the trade union committee is to oversee relations between the administration and the children's institution. If, for example, the kindergarten needs money for new playground equipment or renovating the summer cottages, the head of the kindergarten goes to the committee.

"We have a lot to do, especially during holidays and in the summertime," Nina explained. "We have to get several hundred presents ready for New Year's Day and May Day and as many invitations and surprises for New Year's parties, which the factory always sponsors for the children of its workers. In the summer the children move into summer cottages. These, too, require additional effort and expense. But in this case we know what to do. It's much worse when mothers want to send their children to kindergarten and there are no spaces available."

A new kindergarten building was put up a few years ago.

Labor laws, housing, vacations and recreation all fall on the shoulders of the union and its Commission on Women. However, the most difficult problems to deal with, according to Nina, are relations among people.

After a busy day at the factory, Nina finds nothing more enjoyable than a quiet evening at home with her family.

The building was designed for 450 children, which was thoroughly in keeping with the demographic situation. This was approximately the number of children who always attended the kindergarten. There was no need to increase the size because the experience of the past few years has shown that the birth rate in Moscow was on the decline. But all of a sudden the number of new babies at the factory began to jump. This happy event took the kindergarten by surprise. Soon, mothers were going to the chairwoman of the women's commission with requests to help place their children in the kindergarten.

"A really hard nut to crack!" Nina remarked. "One worker has three children, but her mother can help her. Another woman has only one child but no one to leave him with. Whom do I choose? I just can't wait for an addition to be built!"

Unexpected Problems

Rarely do you see Nina alone. Women workers take their problems to her, sometimes quite unexpectedly. She does her best to listen and help them help themselves. Sometimes she has to deal with very complicated and even dramatic situations.

Anna F., 30, the mother of two children, came to Nina for advice. Her husband, a lathe operator at the same factory, had started drinking heavily. He and his buddies drank away a large part of his money. Quarrels became rather routine in the home. Obviously it was a bad atmosphere for the children. What should she do?

Nina didn't soothe her with meaningless sympathy. The next day she went over to the shop where Anna's husband worked. Their conversation lasted for more than two hours, and the man promised to give up drinking. He was true to his word for six months. Their family life started to get back to normal.

Nina didn't think any more about it until one day Anna came to her in tears again. Her husband was back on the bottle, and there was no peace at home. She had decided to divorce him.

During their second conversation Anna's husband was not so agreeable as before. He was rather arrogant at first but later admitted that his drinking was a problem. He said that he didn't know how to control himself and that he suffered from his drinking too.

Nina threw herself into a frenzy of activity and managed to place Anna's husband in a hospital for alcoholics. He's been on the wagon ever since.

I asked Nina whether settling family problems was a job for the chairwoman of the women's commission.

"Well, I guess that I've never thought about it," she answered. "It just follows naturally. The factory women always come to me with their problems." ■

AN AUTHORITY ON EDUCATION

By Elya Vasilyeva

Photographs by Vladimir Fedorenko and Vladimir Perventsev

Iraida Noskova, principal of Secondary School No. 21 in Novgorod, reigns in a quiet manner. She sets an example for students and teachers alike. Right: Iraida was one of 44 Soviet educators who were delegates to the Twenty-sixth Party Congress in Moscow.

Behind her back students fondly call her "The Queen." There is, indeed, something majestic and unhurried in the way she speaks and uses gestures. Tall, calm, even-tempered, she walks serenely through the whirlpool of school life in the midst of 1,600 children!

RAIDA NOSKOVA is principal of Secondary School No. 21 in Novgorod, an ancient Russian town not far from Leningrad. For many years "her" school has been considered one of the best in the city. Some point to the marvelous teaching staff. Others mention the excellent ipment. Still others call attention to the tempo of the ool. And the tempo is set by Iraida Noskova, who ap- rs, outwardly anyhow, totally unruffled.

Experimenting

wo important changes have been made in Soviet schools ecent years: a transition from the required eight-year ication to 10 years and along with it the introduction of v programs and textbooks. The coincidence of these two nts created some complications and aroused debates in schools. Iraida has no doubts about the need for a 10- r (or secondary) education for everyone. As for the new grams and textbooks, she thought that they "could be proved." "They are frequently too complicated," she plained, "and this is a strain on the children."

his question came up at the Twenty-sixth Party Congress late February and early March of this year. Iraida was there with 43 other Soviet educators. She is satisfied that her point of view coincided with the one expressed at the Party Congress, and now everyone is waiting for Soviet pedagogists to have their say.

"But a lot depends on us as instructors. At the moment we're quite concerned about the problem of teaching literature. We find that our senior students are showing more interest in special technical literature at the expense of the classics. To my way of thinking, this can only have a negative effect on their cultural development. We're trying to get rid of too much theory, and we're changing our methods of teaching literature in the lower grades. This is what we are working on now.

"We are guided in this," Iraida explained, "by the basic principle of Soviet pedagogy, that is, that the school should mold well-rounded individuals.

"One way to achieve this aim is to teach our children how to work. The school must lay the foundations of what Soviet educator Anton Makarenko called the 'habit of constructive effort.' "

Vocational education at Secondary School No. 21 begins with introducing the children to the workshops of the nearest factory. The youngsters find it particularly interesting ▶

Iraida Noskova believes an important part of secondary education is learning how to work. Her school has an interesting vocational education program that operates in cooperation with a factory near the school where many of the parents work.

since many of their parents work there. Senior students have what is known as work practice at the factory and acquire their first skills as workers. Some study auto mechanics and learn to be mechanics or drivers. Upon graduation, the youngsters already have an idea of several trades. Early vocational education gives young people an extra edge when entering independent adult life.

A Second Home

"We try to give our youngsters not only a good education but also a good upbringing. Music, sports, theater, vocational education—where there's a will there's a way to find a place for just about anything in the school system," remarked Iraida.

In School No. 21 this is not just a dream but a reality. The school choir is regarded as one of the finest children's amateur groups in Novgorod. The senior students have a band that plays for all the school dances. Rhythm and dance have been taught at the school for many years.

"Each school year ends with a festival and a concert for the parents. Very often the parents tell me that they hardly recognize their youngsters, who can be so oafish at home," Iraida commented.

One area she didn't have to tell me about was the school's involvement in sports, which could be detected all over the building. A large showcase in the entrance displays winners' cups, pennants and awards. First places were evident in basketball, cross-country skiing, shooting and hockey. In recognition of their outstanding athletic abilities, many of the youngsters at School No. 21 receive vouchers to attend Artek, a summer camp for children on the Black Sea coast.

Iraida still isn't satisfied however. The gym isn't large enough to accommodate all the activities, even though the school rents courts and halls that belong to the city's sports societies. As Iraida sees it, the solution is to build a new gym complex.

The school day for pupils, teachers and the principal begins with physical exercises. "A school that doesn't have morning exercises, in my opinion, has a faulty principal," remarked Iraida. "Sports help to bring children together. In addition to feeling more physically fit, the children are more attentive during classes and, more important, are less tired. This is especially true of the younger ones."

An extended-day program has been set up at the school for youngsters whose parents work late. The extended-day center has comfortable upholstered furniture and carpeting and loads of games. "The surroundings are certainly more like home," said Iraida Noskova. "But this by no means is to say that school can replace home!"

Parents' Complaints

"We get no help from the school whatsoever!" is the main theme running through many letters from parents to editors of newspapers, magazines, radio and television stations.

"Leave the subjects to us. We don't have time to deal with the children's moods. Let the parents handle that!" can often be heard from teachers.

In the final count, who is responsible for the moral, physical and cultural education of the child? The family? Or the school? Iraida Noskova seems to steer a middle course. "It takes both working together to bring up an admirable person," she told me. Yet in further discussion I found that she believes it is the input of the family that is the main determining factor in the education of a child.

"If parents don't teach their children, the school, no matter how hard it tries, cannot produce a sound individual. Take this simple example. We try to teach our youngsters not to speak loudly in public places. But if at home their mothers or fathers raise their voices, all our efforts are usually lost. Children, as a rule, take after their parents."

But what about the school? "We don't deny our responsibility. Ideally, the school staff is composed of specialists in education. So we must be the first to answer for the defects," admitted the principal.

In a year or two these young girls will be out on their own. Iraida Noskova wants to see to it that they are prepared for an independent adult life.

The Importance of the Teacher

"Specialists in education," she said. Do all teachers meet this requirement? An excellent classroom teacher herself (she is the recipient of the title of Merited Teacher, which is only awarded to the country's finest educators), Iraida Noskova tries to help her colleagues find themselves and assert themselves professionally. "Everyone must believe in the power of his or her profession, but this is true of a teacher probably more than anyone else," she said.

"I find that the graduates from teachers institutes come to us well versed in subject matter. But often they don't know how to teach. Our experienced instructors often take the young teachers under their wing. We find that in five or six years the new teachers are excellent. Of course there are failures too. If a teacher doesn't love and respect children, he or she is a detriment to the school, and to such we frankly advise finding a job that would better suit his or her abilities," concluded Iraida. ■

Home economics is more than just learning how to make skirts and bake cakes. The principal often takes time out from her administrative duties to talk with the girls. Above: Inspired by the example of Iraida Noskova, a new teacher directs an enthusiastic class in Russian gramma

WOMEN AND THE LAW

By Professor Raisa Khalfina
Doctor of Science (Law)

Equality is not an end in itself but a vital means for women to express themselves as fully as possible and develop their abilities, gifts and talents to the utmost.

FOR THOUSANDS OF YEARS the law was merciless to women. The earliest codes of civil law in various countries sanctioned women's inequality, lack of rights, oppression and subordination. Even when society reached a high level of development and the ideas of freedom and equality were proclaimed in numerous laws, women remained socially unequal and dependent upon men.

Only in the middle of this century did a few countries pass laws giving women equal rights in labor relations, in public life and partially in the family. However, the adoption of a law is one thing. Enforcement is quite another. Many countries that have adopted the law of equal pay for equal work have not put it into practice.

Equality is not an end in itself but a vital means for women to express themselves as fully as possible and develop their abilities, gifts and talents to the utmost.

Vladimir Lenin attached particular importance to equal rights and women's participation in public affairs. He repeatedly pointed out that the level of democracy in a society could be judged by the status of the women in it. In the trying spring of 1918, when the young Soviet Republic was fighting for survival, a number of laws were adopted that established genuine equality for women in all spheres of life. They included the right of women to receive equal pay for equal work.

It is important to mention here the plight of women in czarist Russia before the 1917 October Revolution. The overwhelming majority of the people enjoyed limited political rights, but women were even deprived of those rights. Women's civil rights, too, were restricted. Married women could not choose their place of residence. Nor could they dispose of their property even if it had belonged to them before marriage and had been given to them as a dowry. All affairs of family life were decided by the husband. It was also the husband who decided the future of the children.

Women were barred from practically every area of intellectual life. Illiteracy among women reached almost 90 per cent, which was much higher than that among men. Educational standards for women were much lower than that for men. Women were permitted to work in only a few branches of industry—the lowest paid and unskilled jobs.

Naturally it was imperative to put into practice the new laws that opened the way for women's active involvement in the life of society. Special committees to work with women were set up in cities and villages. Almost everyone who was literate, including schoolchildren, took an active part in abolishing illiteracy. Women were admitted to all specialized vocational schools and institutions of higher learning, and preparatory courses were introduced too. The state organized various refresher courses, programs for training women for skilled work, and so on. Women were regularly promoted to responsible posts in government and industry, and they did credit to the tasks set before them.

Over the years several generations of Soviet women have grown up for whom equality in work, public affairs and the family are the only known way of life. From early childhood little girls, like little boys, understand that they are equal members of society.

The Soviet Constitution adopted in 1977 states in Article 35: "Women and men have equal rights in the USSR." The same article includes the means that enable women to exercise these rights. They accord women equal access with men to education and vocational and professional training, equal opportunities in employment, remuneration and promotion, and in social, political and cultural activity.

The law outlines special labor and health protection measures for women. Exercise of these rights is also ensured by providing conditions enabling mothers to work; by legal protection and material support for mothers and children.

It's interesting to see how the given article of the Constitution was edited. The draft kept the wording of the previous Constitution, the 1936 one, which said that women have equal rights with men. When the draft was published for nationwide discussion, the editorial board received numerous letters sharply criticizing the wording. Both men and women wrote that the rights of men should not be regarded as the norm for which women's rights were to be equated. Thus, the above-mentioned wording was adopted.

The rights guaranteed by the Constitution are implemented by the laws concerning various spheres of social life: labor laws, legislation on public education, health protection, on marriage and the family, civil legislation, and the like. All these laws not only proclaim but guarantee women their rights.

Women account for 32.5 per cent of the deputies elected to the USSR Supreme Soviet, the highest body of state power, and for almost half of the deputies to the local Soviets in areas, districts, cities and villages. Women are engaged in almost every field of endeavor: 69 per cent of all doctors are women; 74 per cent of all educators; 51 per cent of all industrial and office workers, including engineers, managers and directors of large enterprises; 40 per cent of all scientists.

Women's active involvement in the life of society and their interest in work and public activity call for the solution of a new problem, that of combining work with family duties and motherhood.

The Soviet Constitution devotes a special section to the family. Article 53 states that the family enjoys the protection of the state. Marriage is based on the free consent of the woman and the man; the spouses are completely equal in their family relations. The article also points out that the state helps the family by providing and developing a broad system of child-care institutions, by organizing and improving communal services and public catering, by paying various allowances and benefits. Thus, the law proceeds from the fact that the raising of children and household duties are the concern of husband and wife alike. This is often the case in the Soviet Union. For example, in every city you'll see fathers pushing baby carriages. Schools for young mothers were set up some time ago that gave instruction on the care of newborn babies. However, the programs and classes were attended by mothers and fathers alike and so were soon renamed schools for new parents.

Although the state regards child rearing and domestic chores as the common concern of the family, it pays special attention to the protection of pregnant women. Women's centers keep a check on the health of future mothers from the very beginning of pregnancy and after birth. Nurses and doctors visit young mothers at home and instruct them on the care of babies. Local children's clinics keep a check on the child's health.

Women are granted a paid leave of four months before and after giving birth. On request, any woman may be given additional leave without pay until the child reaches the age of one year; her job will be kept for her.

The numerous kindergartens and nurseries all over the country provide for the care of children and their physical and mental development. Parents pay very little for tuition at these institutions. The cost depends upon the family's income and is never more than 12 rubles a month. This amounts to less than 20 per cent of the child's upkeep in the kindergarten. The remaining 80 per cent is covered by the state. ■

LENIN ON TERRORISM

By Ernst Henry

Ernst Henry is the pen name of Semyon Rostovsky, a prominent Soviet writer. Born in 1904, Henry is a member of the Writers Union of the USSR and a laureate of the Vorovsky Award. He is the author of many books on international politics and modern history. He worked abroad for many years.

FOR 36 YEARS the world has not had a major war. But that doesn't mean that people aren't being killed, innocent people, even children and helpless old men and women. The culprit is terrorism. Thousands of terrorists are in jail, but neither police nor legal measures can wipe out this evil.

What is the cause of the upsurge of terrorism in the modern capitalist world? Some Western ideologists and politicians say that terrorism is rooted in communism and that its current upsurge has been provoked by Moscow.

Nothing can be further from the truth. Terrorist ideology and tactics are incompatible with communist ideology and tactics. They are diametrically opposite. Throughout his revolutionary career, Vladimir Lenin emphatically condemned terrorism. He said that terrorism only harmed the cause of revolution.

Long before the October Revolution he had to wage a relentless struggle against the petty bourgeois party of the Socialist-Revolutionaries, who made terrorism the pivot of their policy. The Socialist-Revolutionaries hated Lenin as much as the latter-day left extremists hate the Communists. The parallel is not accidental.

Let us now turn to Lenin's work in which he substantiates the consistent opposition of Communists to terrorism. He wrote about this so often that there can be no doubt or misunderstanding about his position. His stand is consistent and absolutely clear.

In May 1901 Lenin wrote an article called "Where to Begin," in which, dealing with individual terrorism, he wrote:

> We . . . declare emphatically that . . . such a means of struggle is inopportune and unsuitable; that it diverts the most active fighters from their real task, the task which is most important from the standpoint of the interests of the movement as a whole. . . . Is there not the danger of rupturing the contact between the revolutionary organizations and the disunited masses of the discontented, the protesting, and the disposed to struggle, who are weak precisely because they are disunited? Yet it is this contact that is the sole guarantee of our success. . . . It is our duty to sound a vigorous warning against becoming infatuated with terror, against taking it to be the chief and basic means of struggle. . . .[1]

At the end of 1901 and the beginning of 1902 Lenin wrote a book called *What Is to be Done? Burning Questions of Our Movement.* On the question of terorrism, he emphasized once again that replacing political agitation with terrorism was a step backward for revolutionaries.

In May 1902 the Socialist-Revolutionaries in Russia went on a rampage. They committed their first major act of terrorism, the assassination of czarist Minister of the Interior Sipyagin, who initiated a massive campaign of reprisals against workers, peasants and students. This is what Lenin wrote in an article titled "Revolutionary Adventurism":

> Everyone knows and sees perfectly well that this act was in no way connected with the masses . . . —that the persons who committed this terrorist act neither counted on nor hoped for any definite action or support on the part of the masses. In their naivete, the Socialist-Revolutionaries do not realize that their predilection for terrorism is casually most intimately linked with the fact that, from the very outset, they have always kept, and still keep, aloof from the working-class movement. . . .[2]

The creation of the Bolshevik party was consummated at an underground congress held abroad in the summer of 1903. Lenin wrote a special resolution on terrorism for the congress, which stated that the congress vigorously rejected terrorism, that is, a system of individual political assassinations as a means of political struggle. The resolution condemned terrorism as an extremely unsuitable method, diverting the best forces from the urgent and vitally necessary task of conducting organizational and agitation work, disrupting links between the revolutionaries and the masses of the revolutionary classes of the population and implanting in the minds of the revolutionaries themselves and the population as a whole the most erroneous ideas about the tasks and methods of a struggle against autocracy.

This is what Lenin wrote in an article called "The Autocracy and the Proletariat" when Socialist-Revolutionaries assassinated the czarist Minister of the Interior and Chief of Police Plehve in July 1904:

> The assassination of Plehve evidently cost the terrorist organization tremendous effort and involved long preparation. The very success of this terrorist act bears out all the more strikingly the experience of the entire history of the Russian revolutionary movement, which warns us against such methods of struggle as terrorism. . . . Individual assassinations have nothing in common with the forcible actions of the people's revolution.[3]

Although Lenin was against individual terrorism, he was not against massive revolutionary action provided the time was ripe for it. When the first Russian revolution broke out in 1905, he wrote an article called "Tasks of Revolutionary Army Contingents," in which he dealt with the practical problems of combat operations, arms, the rescue of prisoners and wounded, fighting against troops from the upper stories of buildings, and so forth.

The Bolsheviks did not use terror to seize power during the October 1917 Revolution. In 1918, when counterrevolutionaries led by the Socialist-Revolutionaries launched a campaign of terror, making an assassination attempt on the life of Lenin and killing two Soviet leaders, Moisei Uritsky and Moisei Volodarsky, the Soviet Government resorted to a policy of harsh re[pressure]. But this was a countermeasure. There wa[s no] other way of defending the Revolution.

Lenin never regarded extremism as a man[ifestation] genuine commitment to the cause of revolut[ion]. This is what he wrote in his book *"Left W[ing] Communism—An Infantile Disorder:*

> It is far more difficult—and far more precious—to be a revolutionary when the conditions for direct, open, really mass and really revolutionary struggle *do not yet exist,* to be able to champion the interests of the revolution (by propaganda, agitation and organization) in nonrevolutionary bodies, and quite often in downright reactionary bodies, in a nonrevolutionary situation, among the masses who are incapable of immediately appreciating the need for revolutionary methods of action.[4]

Exposing the social and political nature of le[ft]-wing extremism, Lenin wrote in the same boo[k]:

> Bolshevism took shape, developed and became steeled in the long years of struggle against petty-*bourgeois revolutionism,* which smacks of anarchism, or borrows something from the latter and, in all essential matters, does not measure up to the conditions and requirements of a consistently proletarian class struggle. . . . A petty bourgeois driven to frenzy by the horrors of capitalism is a social phenomenon which, like anarchism, is characteristic of all capitalist countries. The instability of such revolutionism, its barrenness, and its tendency to turn rapidly into submission, apathy, phantasms, and even a frenzied infatuation with one bourgeois fad or another—all this is common knowledge. However, a theoretical or abstract recognition of these truths does not at all rid revolutionary parties of old errors, which always crop up at unexepected occasions, in somewhat new forms, in a hitherto unfamiliar garb or surroundings, in an unusual—a more or less unusual—situation.[5]

Some people predict that terrorism will be a continuation of politics. Others say that terrorism will never be wiped out but that it can be controlled.

This is wrong. Terrorism can be eliminated. But this can only be done by a society that is able to cut the social roots of extremism, a society capable of eliminating unemployment, wiping out fascist organizations, providing a future for despairing youth and broad opportunities for development, thus proving the futility of left-wing extremism.

Terrorism is still alive. But it is doomed.

Lenin is the real author of this article. The excerpts from his works expose the dishonest behavior of the ideologists and leaders of the modern extremists who are trying to cover up their crimes with the name of Lenin and communism. Lenin and his followers have never had anything to do with terrorism.

[1] V. I. Lenin. *Collected Works,* English edition (Moscow: Progress Publishers, 1964) vol. 5, p. 19.

[2] Ibid., vol. 6, p. 189.

[3] Ibid., vol. 8, p. 22.

[4] Ibid., vol. 31, p. 97.

[5] Ibid., p. 32.

THE FINAL DAY OF THE NUREMBERG TRIALS

Trials, the likes of which history has never known, ended in Nuremberg 35 years ago this month,

as the first time that an international military tribunal indicted and tried criminals who had made a state a tool in their crimes. The crimi- were Adolf Hitler's associates. The state was nazi Germany. Arkadi Poltorak, a former secretary for the Soviet delegation at Nuremberg, te a book about the trials called *The Nuremberg Epilogue.* This is a digest of the concluding chapters, which describe the retribution.

CTOBER 1, 1946. At 1450 hours the Interna- tional Military Tribunal opened its last on.

e situation in the courtroom had changed ically.

e floodlights, which had been switched on time to time to enable cameramen to work e courtroom, had been removed (no photo- hs were allowed during the last session). the bluish light of the neon lamps fell owlessly on the walls and the faces of the ecutors, defense counsels, members of the nal Secretariat and the numerous guests.

ie dock was empty. In the courtroom it was uiet as in an operating room. Now and then ebody coughed, and it sounded like a battle- unexpectedly firing a broadside.

the morning session the judges had read general part of the sentence. Now everybody ed for the Tribunal to pass its sentence on of the defendants separately. All eyes were on two doors—the one through which the ges would enter and the door through which defendants would be led singly into the court- n.

ie Judges entered. At a slight nod from Lord ice Geoffrey Lawrence, the British member, presided, everyone took their seats.

he last, sentence-containing part of the judg- it was to be read by the President himself. a habitual movement he adjusted his ses, and in that instant, as though without g touched by anybody's hand, the door be- the dock slid open. Out of the dark cavity the iliar figure of Hermann Goering, the No. 2 man itler's Reich, stepped into the lighted court- n. On either side of him was a soldier.

oering swept an anxious glance over the ely quiet courtroom, at the Prosecutors and ped at the Judges. He was pale, his face had wn more pinched than before. The month nt in waiting for the sentence had not passed ain! The bravado, which he had endeavored reserve throughout the trial, had vanished. He given earphones, although his knowledge of lish was adequate to enable him to under- nd the few words of the sentence: death by ging.

fter hearing it, he cast a vindictive look at the ges and the courtroom. There was a world of red in his eyes. Silently he removed the ear- nes, turned and walked out of the courtroom. door closed behind him, only to open again a few seconds.

Rudolf Hess appeared. He had been the Füh- 's deputy in the nazi party. He did not take the phones proffered to him. Even at this solemn moment he looked a mountebank. The President read the sentence: life imprisonment.

Once more the door closed and opened again. This time Joachim von Ribbentrop, the diplomat of aggression, walked through it. His face was ashen. His eyes were laden with fear and were half-closed. I was astonished to see him carrying a briefcase. He did not need it any longer.

"Death by hanging," Lawrence read.

Ribbentrop's legs sagged. An effort was required by him to turn and walk back into the darkness of the corridor.

Field Marshal Wilhelm Keitel was led into the courtroom. He walked with his back straight. His face was inscrutable.

"Death by hanging," said the voice in the earphones.

Then Hans Frank, the former governor of occupied Poland, came through the door. The expression on the face of this butcher, who had promised to "make mincemeat out of all Poles," begged for pity. He even stretched out his hands as though that gesture could change the signed sentence: death by hanging.

Julius Streicher, the "ideologist" of anti-Semitism, rather ran into the courtroom. Standing with his legs apart and his head stretched forward, this killer and seducer of the minds of thousands upon thousands of Germans gave the impression of a man expecting a blow. And he received it, hearing the same few words that Frank heard.

Streicher was followed by Fritz Saukel, the chief slave trader of the nazi Reich. He got his due: death.

Then came Walter Funk, the former Minister of Economics. He remembered well the gold teeth wrenched out of the mouths of the Oswiecim victims and kept in the safes of the Reichsbank, and he therefore did not expect any other sentence save death. But unexpectedly he heard the words: "life imprisonment." It seemed as though he were sobbing and making a hopeless attempt to bow to the Judges.

The door behind the dock opened and closed eighteen times. I glanced at my watch. Its silver hands showed that it was 1540 hours. The trial had ended.

The corridors of the Palace of Justice were filled with a swelling hubbub. This was the multilingual crowd of journalists rushing to the telegraph office and the telephones. Overtaking one another and nearly knocking each other over, they hurried to report the results of the almost 12-month-long work of the International Military Tribunal to their newspapers and agencies: twelve of the defendants—Hermann Goering, Joachim von Ribbentrop, Wilhelm Keitel, Alfred Rosenberg, Ernst Kaltenbrunner, Wilhelm Frick, Hans Frank, Julius Streicher, Fritz Saukel, Alfred Jodl, Arthur Seyss-Inquart and, *in absentia*, Martin Bormann—were sentenced to death by hanging; three—Rudolf Hess, Walter Funk and Erich Raeder—were sentenced to imprisonment for life; two—Baldur von Schirach and Albert Speer—to twenty years' imprisonment; Konstantin von Neurath to fifteen years, and Karl Doenitz to ten years. Three—Hjalmar Schacht, Franz von Papen and Hans Fritzsche—were acquitted by a majority vote of the Judges.

Meanwhile, Dr. Gilbert, the prison psychiatrist, attentively observed the conduct of the sentenced men, and the results of these observations were given in his diary.

As soon as Goering was escorted back to his cell, he threw himself on the cot. It seemed that he had only this minute realized the horror of the words: "Death by hanging."

When Dr. Gilbert walked into Keitel's cell, the latter turned and exclaimed with a voice filled with horror:

"Death—by hanging! . . . That, at least, I thought I would be spared."

Why? What grounds had Field Marshal Wilhelm Keitel for believing he would be spared? Had he not signed scores of directives ordering murders on a massive scale? Had he not recommended using "all means without restriction" against even women and children, "if only these means facilitate success"? In the margin of a report from one of his subordinates about the brutal extermination of Soviet people he had written with his own hand: "We are dealing here with the destruction of an ideology and, therefore, I approve such measures and I sanction them."

And this man expected mercy from the Tribunal of Nations!

On October 9 and 10, 1946, the Control Council for Germany examined and denied the petitions from the condemned men for a pardon. Everything was now in the hands of U.S. Master Sergeant John C. Woods, who had been assigned to carry out the sentence.

In the early hours of October 16, 1946, the execution was witnessed by representatives of each of the Four Powers. The press was represented by only eight newsmen—two each from the USSR, the USA, Britain and France. Nobody was allowed to take photographs.

The bodies were taken to a crematorium in Munich and the ashes were scattered. Rudolf Hess, Walter Funk, Karl Doenitz, Erich Raeder, Baldur von Schirach, Albert Speer and Konstantin von Neurath were taken to the Allied prison at Spandau to serve their sentences. ■

THEMIS REGAINS HER SIGHT WITH THE HELP OF A BLIND MAN

By Ilya Gitlits
Photographs by Sergei Grigoriev

The P... of ... Mikhail ... (c... everyth... to prov... Innoce... e... circ... Levush... s... W...

THEMIS, the ancient Greek goddess of law and justice, is usually represented as a woman with a blindfold over her eyes, a sword in one hand and a pair of scales in the other. The whole legal process boils down to tipping the scales toward a verdict of guilty or not guilty. Mikhail Levushkin, a Moscow lawyer, has given 25 years of his life to the job of tipping the scales toward the verdict of not guilty despite the fact that he has been blind for the last 30 years. Mikhail is so brilliant, sophisticated, quick-witted and eloquent in the courtroom that he seems all-seeing.

"A blind man is not someone who cannot see, but someone who does not want to see," says Mikhail. "A lawyer, even if he is blind, must not only hear but also see everything that goes on around him."

The First Commandment

Ne nocēre (Do not harm) is this lawyer's first commandment. Although Mikhail may sometimes disagree with clients, he is always determined to prove their innocence or find extenuating circumstances.

"It is my duty to protect the interests of my clients," Mikhail explains.

When 18-year-old Alexander Petrov of Moscow was charged with assault and battery, his case seemed already decided. Everything was against him: material evidence, witnesses' testimony and his own confession.

"I had to talk to many people before I learned all the facts that, like a mosaic, formed the whole picture," Mikhail recalls. "You cannot make a final decision until you have restored the entire picture."

Alexander Petrov had gone to a village to visit some friends, and that evening they went to a dance at the community center in the village. The girls were all eager to dance with the young Muscovite, and the local boys decided to teach him a lesson. As it turned out, they were the first to attack him according to witnesses, and Alexander fought back in self-defense.

At the trial the prosecutor asked for a prison sentence for the defendant, while the counsel for the defense argued that the defendant acted in self-defense. The court sided with the defense counsel and gave Alexander a suspended sentence.

Mikhail Levushkin hates to hear anyone use the phrase "win a case."

"I simply try to help my clients and see to it that the truth is established," he says.

There was one case, however, that Mikhail truly did "win." It concerned him personally, and he won it even before he was a lawyer.

His First Case

Mikhail was the next to the youngest son in a large family. His father was a freight handler, and his mother augmented the family's income by working as a cleaning woman. She died when Mikhail was 12.

Although he was a first-rate student, Mikhail had to quit school to help support the family. At the age of 19, by then already a good turner, Mikhail, like millions of other young men his age, was called up when the war began. On August 4, 1943, he was seriously wounded at the Battle of Kursk and lost his sight.

From Kursk he was sent to a hospital in Moscow, where doctors tried to restore his vision. He had numerous operations, but nothing helped.

Nevertheless, Mikhail was determined to continue his education. During the year he spent in the hospital, Mikhail studied the entire secondary school program. He had many friends who volunteered to read textbooks to him. There were no talking books at the time, and he barely knew Braille.

It was in the hospital that Mikhail decided to become a lawyer. His ability to debate (many of the patients in the hospital used to stay up late at night talking and arguing) was one reason why he chose law, a profession that requires the ability to think clearly and logically and to argue convincingly.

At the age of 27 and still in the hospital, Mikhail sent his diploma (he received a silver medal) to Moscow State University (MSU). The medal entitled him to enter an institution of higher education without taking entrance exams. Along with his diploma he sent an application to the School of Law. He did not mention his blindness however.

On Mikhail's first day at MSU the dean called him into his office and told him that the Ministry of Education had a policy against admitting blind people to law schools.

"You can choose any other major," the dean told him.

Mikhail went to see the Minister of Education himself.

"Tell me, doesn't the Constitution guarantee me the right to an education?" he asked the minister.

"Yes, it does."

"Nevertheless, you issued a policy that bars the blind from entering the legal profession. I think it's in violation of the Constitution."

I don't know whether the minister was convinced by the argument or not, but ultimately Mikhail was admitted.

He found studying at the university no easy task. He couldn't take notes during lectures and later read them back. True, he received a grant to pay a reader. And his fellow students helped him a lot.

Mikhail graduated from MSU with straight A's. He was offered a post-graduate course but declined the offer. He wanted to be a practicing lawyer.

A Man Who Cares

Although Mark Twain said that every man, like the Moon, has a dark side that he doesn't want to show anyone, people usually unload their innermost thoughts on a lawyer. A lawyer really has to care to defend some clients.

"A blind man is not someone who cannot see, but someone who does not want to see," says Mikhail Levushkin. "A lawyer, even if he is blind, must not only hear but also see everything that goes on around him."

When he's not defending clients, Mikhail Levushkin enjoys strumming the guitar and writing poetry.

A college student in Moscow was caught stealing a suit. Mikhail Levushkin took the case, but he couldn't understand why an intelligent young man would steal something he didn't even need. The student himself couldn't explain why he had taken the suit. Interviews with the defendant's relatives and friends offered no help either. They were all at a loss.

Many long talks with the defendant enabled the blind lawyer to perceive what others, including the young man's relatives, could not: The young man had a mental disorder.

At the trial Levushkin requested that the defendant undergo psychiatric examination. Reluctantly the court complied with the request. An examination at an out-patient clinic found the defendant sane. Then the lawyer requested a psychiatric examination at a mental hospital. The psychiatrists there found the young man unaccountable for his actions and in need of therapy.

Vladimir Popov, 52, had worked for 20 years at a confectionary factory as a stoker. Shortly before his silver wedding anniversary, he decided to buy a present for his wife. However, his wife handled the family's budget and paid the bills. So he stole several big boxes of chocolate from the factory, sold it and bought a present for his wife. He was caught and legal action was taken against him.

Popov and his wife went to Mikhail Levushkin's office. The lawyer knew that the man was guilty, so he decided to look for extenuating circumstances. He noticed that the defendant had an unhealthy look. The defendant's wife told him that her husband had a stomach problem. When Levushkin consulted the Popovs' doctor, he learned that the man had cancer.

Levushkin asked the court to take this fact into account but not to tell the defendant since neither he nor his family knew that he had cancer. Although the disease had nothing to do with the crime, the court gave Popov a suspended sentence.

His Closing Argument

A defense lawyer's closing argument is the climax of his case. The defense lawyer takes the floor after the prosecutor. This presents him with the formidable task of defending the accused person before a hostile courtroom.

Unlike some lawyers, Mikhail Levushkin makes no habit of speaking at length about nothing. He doesn't like to make long speeches. Of course there are times when he may speak for hours before resting his case, but more often it takes him several minutes.

Shades of Erle Stanley Gardner

For 20 years Mikhail has been married to a woman who is both his wife and assistant.

"She's no worse than Della Street, Perry Mason's secretary," Levushkin says with a smile. "But believe me, the wife of a blind lawyer faces tougher problems in life than Della Street ever did."

His colleagues say he is the personification of perfection. Indeed, Mikhail Levushkin seems to have no flaws. His only foibles seem to be playing the guitar (badly) and writing poetry (amateurish). These are pardonable failings since he never plays or recites in public.

His main trait is that he treats all his clients like human beings no matter what crime they have committed or what kind of people they are. ■

The Moscow Theater of Mime and Sign Language is the world's first company of deaf actors. Its repertoire includes Shakespeare and Schiller, as well as modern plays and musical comedies. The actors give such fine performances that even the most sophisticated theatergoers find it hard to believe that none of them can hear the orchestra.

THE MOSCOW THEATER OF MIME AND SIGN LANGUAGE

A scene from *The Knight in a Tiger's Skin.*

By Eduard Alesin
Photographs by Yuri Polkhovsky

THE IDEA of setting up a theater of deaf actors orig-inated more than 15 years ago. The All-Russia Society of the Deaf asked the Shchukin Drama School to set up a special studio for the winners of the countrywide amateur acting contest held for gifted deaf people. The school's instructors agreed to the project. Under the guidance of People's Artist of the USSR Boris Zakhava, they taught the deaf students for four years with the help of interpreters along the lines of the regular curriculum. The studio's first graduates became the company of a new theater for which a splendid modern building was erected.

Very soon the new theater gave its first performance—a play called *There Lived People,* based on several stories by Maxim Gorky. It was one giant pantomime with a single plot full of dramatic action. The audience was moved and im-pressed by the actors' extraordinary gift of mimicry, their ability to express the finest nuances of the heroes' emotions without saying a word.

The theater company, however, did not rest content with only the genre of pantomime, ostensibly the most suitable for it. It began to do comedies and tragedies, dramas and vaudeville shows. The actors gesture in sign language. At the same time they soundlessly say their lines. The voices of other actors are carried by special microphones to the audience through loudspeakers. The impression is the same as the one you get when seeing a dubbed film. You just for-get that it's not the actor speaking. However, in a movie there are as many voices as there are characters. Here there are usually only two—a man's voice and a woman's voice.

The actors who do the speaking for the theater company are among the best. In some performances they have to produce as many as a dozen absolutely different, entirely individual voices. More than a dozen women take part in one scene of the musical comedy *At That Time in Seville.* They all talk at once, interrupting one another. And they are all dubbed by only one actress.

The most awe-inspiring productions of the Theater of Mime and Sign Language are undoubtedly the musicals. One of the company's first performances was *Lev Gurych Sinichkin,* a vaudeville show with funny routines, songs and dances.

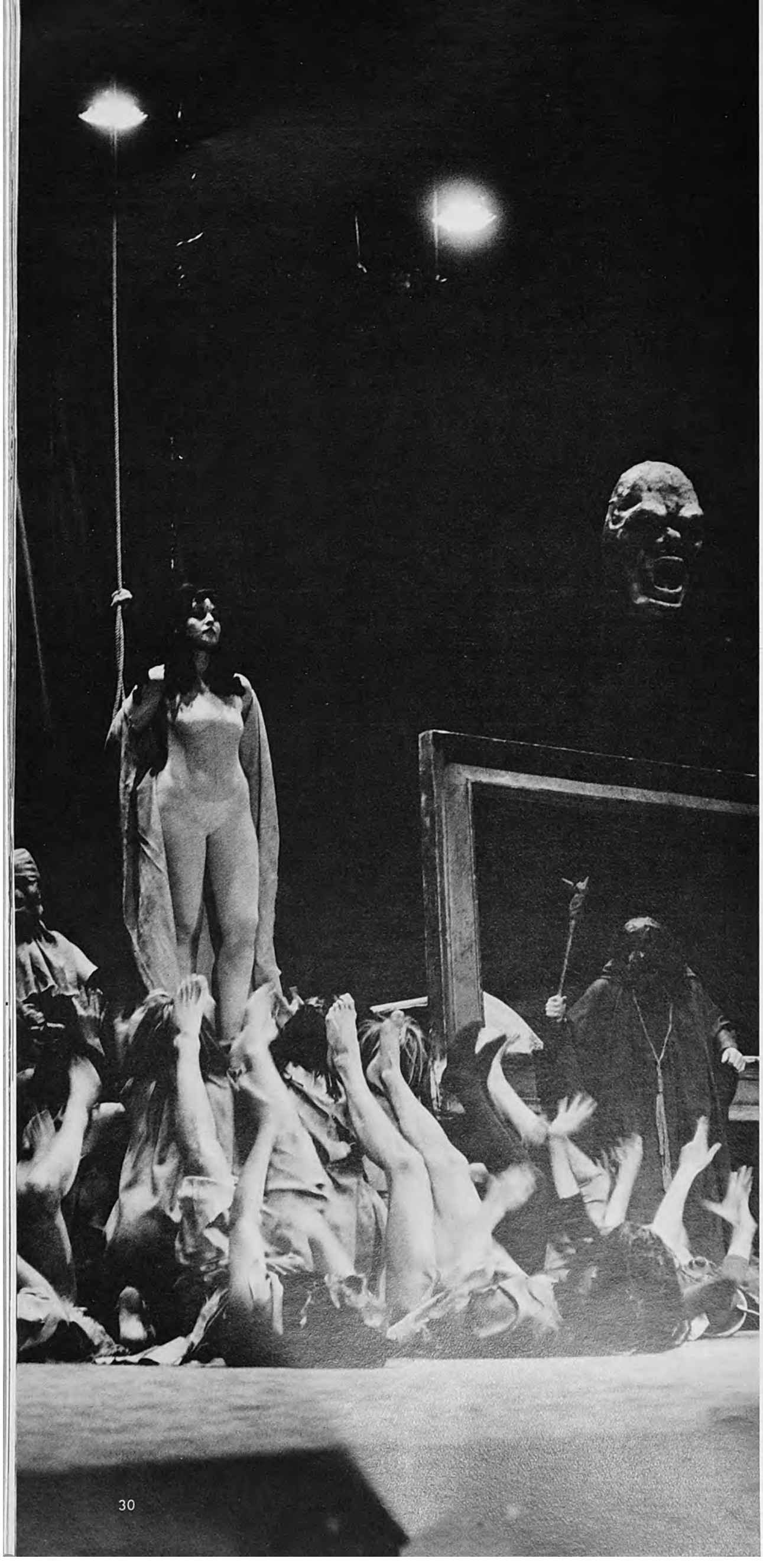
Many people who see the theater company for the first time can't help but ask how the actors manage to dance in time with the orchestra. To understand that, one must attend a rehearsal.

With their hands lightly resting on the top of a grand piano, the actors attempt to catch the rhythm of the melody. (The deaf hear with their bodies.) The pianist plays the tune over and over again. Then the actors step aside and try to dance the melody. Once having learned the rhythm, deaf actors follow it unmistakably. Even the orchestra members are more likely to get out of time than they are.

It's important to catch not only the rhythm of the music but also the mood. The stage director tries to explain the piece, frequently resorting to comparisons and associations.

The ability to translate music into movements helped the deaf actors stage *The Queen's Pendants,* a musical comedy by the well-known Soviet song writer Vasili Solovyov-Sedoi based on Alexandre Dumas' *The Three Musketeers.* It was a brilliant and uproarious production. *The Queen's Pendants* was a big step forward after *Lev Gurych Sinichkin,* in which only simple little songs and dances were performed. The music was far from easy and rhythmically very diverse.

Above: A scene from the musical *Russian Souvenir*. Center: Actress Marta Grakhova, a graduate of the first class of deaf students at the Shchukin Drama School. Below: A scene from a humorous sketch describing *The Village Vet*.



Left: A scene from Aeschylus' *Prometheus Bound*, one of the most popular productions of the Moscow Theater of Mime and Sign Language. Above: World-famous deaf American actor Bernard Bragg of the National Theater for the Deaf played the role of Hermes.

n Lesnikov as d'Artagnan and Tatyana Petukhova as lance Bonacieux (both are young actors) were espe- good. Their splendid dance—the declaration of love— he highlight of the performance. At times it was almost robatic act, although remaining expressive, emotional xtremely musical throughout. Each minute of dance is ded by hours upon hours of rehearsal.

his dance was a double victory," remarked Gennadi rson, director of the production. "The strong, coura- s and noble d'Artagnan won the heart of his beloved, the actor triumphed over his handicap. His triumph my best reward. I'm often asked what induced me to ot the director's role in this particular theater, which is more difficult than in an ordinary one. My answer is ctors. They are exceptionally gifted people. I want to them as much as I possibly can."

t's look at one of the actresses in *The Queen's Pend-* Olga Garfeld (Milady). A world without sound has sur- ded her since early childhood. Olga cannot recall the d of a human voice or a bird's song. The only thing she s to have a vague memory of is her mother anxiously ing over her little bed. That was many years ago in a Byelorussian town. Olga was three years old. Her er had taken her there to visit relatives. A few weeks World War II broke out. They couldn't return to Moscow found themselves on German-occupied territory. The s searched high and low for Jews, carting off every one en, women, children, old people. Olga and her mother n a damp cellar, where the little girl developed menin- As a result, she lost her hearing.

ter the war Olga's father, stage actor and director id Garfeld, often took her along with him to rehearsals performances. She would follow the action with bated th, agonizing over what it was all about. Later it became er after she learned to read lips at a special school for children.

e desire to act was born in her. It might have become ing but an empty, bitter dream had it not been for her ature teacher, Klavdiya Litvinova, a devoted theatergoer. organized a drama group at school, and the first one to ll was Olga Garfeld, who was in the fifth grade at the . Olga played in many productions, which were staged success not only at school, but also at houses of cul- and clubs for the deaf.

he years flew by, and soon Olga was a senior. Every so n she would catch herself thinking sadly that soon she'd e to give up the children's theater and her childhood am of becoming an actress. Then one day at school she a flyer on the bulletin board announcing that the hukin Drama School had openings in its studio for the f.

or the tryouts Olga did a pantomime of Yuri Krylov's fable e Fox and the Crow." She was accepted on the spot. The hardest thing of all," Olga recalls, "was to learn dance to music. One thing that helped was a small oon. When I would hold it close to my ear, I ld feel the beat."

Olga Garfeld is an extraordinarily gifted ac- ss and plays the lead in many produc- s. She has done Olivia, the re- d aristocrat in *Twelfth Night,* excitable Don Juan in *At That e in Seville,* Natalya in Gor- s *Vassa Zheleznova* (a tragic d psychologically very difficult part) as well as the od Fairy in *Cinderella.*

The theater regularly adds new plays to its repertoire. ish director Bogdan Glushchak recently staged *Ca- ccios,* a pantomime based on Leon Feuchtwanger's ya. The production centers around the artist, bound nd and foot by the despotic rule of the monarchy, which gards him as no more than a piece of property. Goya's nous etchings, his "capriccios," come alive in the scenes the pantomime.

For two years now Bertolt Brecht's *The Rise of Arturo Ui* s been drawing full houses. Jean Cocteau's *Le Bel Indif- ent* was performed on the stage of the Moscow Theater Mime and Sign Language for the first time in the country. is a play for one actress—a monologue written for Edith af. Marta Grakhova, who starred in the part, was one of the st graduates of the Shchukin Drama School.

Eduard Fedotov, a Moscow playwright, wrote a play spe- ally for the theater company called *The Laughter and Tears the Comedy King* about Charlie Chaplin that opened not ng ago.

The Moscow Theater of Mime and Sign Language plays t only on its own stage but also on stages throughout the untry. The company has toured over 200 cities, entertain- g houses of culture and clubs for the deaf. ■

The mask of the clown Pierrot is symbolic for every mime theater in the world.

LIVING FOR OTHERS

By Sergei Sirotkin

EVERYONE dreams of finding happiness. Some people think that it falls to a chosen few the way it does in fairy tales, thanks to the good will of someone else. Others believe that it comes from within. I share the second point of view.

I was born both blind and deaf. I could see a little until the age of five, but then I completely lost my eyesight. I have only a few visual impressions of some colors and certain features of my parents' faces, which have become dim over the years. I discovered traces of hearing much later, at school when I began to receive treatment for my deafness. Due to the persistence of my mother, I later learned to distinguish by ear very loud words and phrases. However, even now I can understand only my mother and my wife when they speak loudly or through a hearing aid.

My preschool years were spent in children's groups. One special kindergarten for youngsters who could neither speak nor hear left a particularly deep impression on my mind and heart. There, even after the complete loss of my vision, I became part of a crowd in which I was a real member and not a "white crow." Often I was the ringleader in games and assorted antics. It was seventh heaven for me—being in the midst of things and being treated as an equal among other children of my own age.

I also had the good fortune in kindergarten to make friends with a similarly handicapped adult, a well-known blind and deaf scholar and writer named Olga Skorokhodova. I was fascinated not by her fame, for I was only five at the time, but by her astute understanding and sensitivity toward me. Skorokhodova became my first great friend and teacher. When I initially met her, I didn't realize that she too was blind and deaf. She had to explain this to me later.

This friendship played a very important part in my life. I readily told her everything that I learned in kindergarten. Individual tutoring was arranged for me there under the supervision of Professor Ivan Sokolyansky, creator of a special method of teaching the blind. Sokolyansky himself was very kind and attentive to me during our meetings at the Institute of Defectology, where I went for consultations.

After kindergarten I entered a school for the blind. I was taught individually because my speech and hearing impairments were such that I was not able to study in a regular class. This prevented me from coming into contact with blind children of my own age since it was difficult for me to communicate with them, which naturally excluded their interest in me.

So the next six years at the school for the blind were years of intense intellectual concentration. I mastered various habits and skills, developed a passion for reading, particularly fairy tales, continued to meet with Olga Skorokhodova and corresponded with new blind and deaf friends—Yuri Lerner and Julia Vinogradova, a student of Professor Sokolyansky. At home I enjoyed playing with my new sister who, at my insistence, was named Olga. All of this, to some extent, compensated for the lack of friends of my own age. However, memories of that wonderful kindergarten period sometimes made me feel sad and lonely.

I was surrounded by children again when I entered the Children's Home for the Blind and Deaf in Zagorsk, not far from Moscow. Life at the home was a renewed time of happiness and making friends. My main character and personality traits were largely molded among the blind and deaf children of my age. Our intellectual development, of course, was directed and corrected by the teaching staff, among whom we had our favorites. Of all the children, Vladimir Pudovkin was my best friend. Thanks to him, I I learned sign language.

The children at the Zagorsk Home made friends by helping one another. For instance, Vova Trofimov, who had normal eyesight, liked to amuse me with manual language. I would touch his hands and laugh and then treat him to some of the goodies that my parents and relatives brought me from Moscow. I liked to treat my friends. Knowing that they enjoyed the sweets made me happy. Most of the youngsters had come to the home from distant cities and towns. Their parents were unable to visit them often and bring them special things to eat. In return, the other children helped me. They took me for walks with them and actively communicated with me. Vova made relief drawings, plans and diagrams for me. He was very proficient at this. First he would draw a picture on paper with a pencil. Then he would punch in the outline of the drawing with a lead pencil. He would also type articles from newspapers and magazines and sometimes even whole books in Braille. Of course, we shared this with our classmates and other friends.

Gradually, the more we helped each other, the more we needed each other. I found myself looking for opportunities to assist the other children. They also started treating me like a friend and helper. When I went to Moscow for the holidays, they always asked me to buy souvenirs for them. They knew that I would carry out their requests no matter what. They knew, too, of course, that I couldn't go out and buy the things by myself. I did it with the help of my relatives and later, when I became a student at Moscow State University, with the help of secretaries. It felt good to know that other people regarded me not as a helpless invalid, but as a person who could do many things.

At the children's home the senior students who were Young Communist League members guided the younger children. They encouraged them to keep diaries, helped them with their math homework and taught them how to serve as room monitors. I did this too, but I wanted to do more. So I invented games and contests for the children—math puzzles, spelling bees and games of wit. After observing the youngsters' interest in these pastimes, I was inspired to do more, to teach my friends everything I knew in an interesting way. Thus, I tried to influence the children of my age as they tried to influence me.

Sergei Sirotkin is chairman of the Council for Work with the Blind and Deaf under the Presidium of the Central Board of the All-Russia Society for the Blind.

The move from Zagorsk to Moscow in order to prepare for college was eer delight for my classmates Natasha Korneyeva, Yuri Lerner, Sasha vorov and myself. It was a dream come true. Although I knew down ep that this was a great opportunity for all of us, I still missed my nds in Zagorsk. I must confess that there were moments when I ubted the need for a college education. It seemed to me that I could do hout college and just live among friends, work with them and help im. But as time went on I began to understand the importance of a her education for my further work with the blind and deaf. At Moscow ate University (MSU) I learned how to teach and studied the works of kolyansky and Alexander Meshcheryakov, who, after the death of ofessor Sokolyansky, headed the laboratory for the education of the nd and the deaf at the Institute of Defectology. Olga Skorokhodova's ok in which she describes the special problems of perception, thinking d understanding encountered by the blind and deaf was a great help to . I concentrated on the study of the formation and development of the man psyche in blind and deaf people. I chose the problem of the velopment of word thinking and speech in the blind and deaf and the oblem of transition from communication by means of manual language that by means of the oral method for my course and graduation theses. By the end of my years at MSU I was great friends with Elvira akenova, a young woman with normal eyesight. She became interested the problems of teaching the blind and deaf after reading a great deal lout research in this area. She lived in Alma-Ata, the capital of Kazakhan, which is 3,000 kilometers away from Moscow, and worked in the manities. (She now has a master of arts degree in philosophy and is a ember of the USSR Writers' Union.) She met my friends and me during business trip to Moscow. While she was in Alma-Ata, she wrote regularly to my dear old friends from Zagorsk. This particularly pleased me.

Friendship with Elvira brought my Zagorsk friends and me to Alma-Ata, a city of sunshine. Our trips there will always be remembered fondly. We were greeted with such warmth, and numerous activities were planned specially for us. We went to museums and the mountains. We rode on cable cars. We examined the many fountains and flower beds.

My long and intense correspondence with Elvira made us quite close. Gradually we realized that our goals were the same—to work with the blind and deaf. Three years later we were married.

At the time my fellow students and I were working as junior researchers at the Institute of Psychology. There we continued to study the problems of educating and raising blind and deaf children, something we had begun at MSU.

Later I left the Institute of Psychology and went to work for the Central Board of the All-Russia Society for the Blind, which had a division for the social, psychological and work rehabilitation of the blind and deaf. Elvira was in charge of the division. I didn't completely leave the Institute of Psychology. I still worked there on the same problems.

Although the division in which Elvira and I work is only two years old, we already have some results to show. We are gathering statistical data on blind and deaf people and researching the problems of finding work for them.

Today there is a special center for the blind and deaf not only in Zagorsk, but also in the city of Sarapul, Udmurtia, near the Urals, at a large plant run by the Society for the Blind. A special shop for the blind and deaf is being organized there too.

Living for others—that is the key to happiness for the blind and deaf, just as it is for everyone else. ■

PHOTO QUIZ ANSWERS

LAST MONTH in our silver anniversary issue we published five photographs that appeared in earlier issues of SOVIET LIFE. Were you able to recall the events and faces of those people? The correct answers are under each photo.

The Twenty-Sixth Congress of the Communist Party of the Soviet Union.

Composer Sergei Prokofiev wrote the *Romeo and Juliet Suite.*

The late Yuri Gagarin, profession—cosmonaut.

Olga Korbut married a member of the Pesnyary (translated Singing People) Folk Group from Byelorussia.

American economist Parley P. Christensen (center) spoke with Vladimir Lenin back in 1921 about establishing mutually profitable Soviet-American trade relations.

"WORKING HERE IS A PLEASURE"

By Ilya Lvov
Photographs by Boris Babanov

In the Soviet Union the physically handicapped are encouraged to do socially useful work, and conditions are being created so they can. The Pobeda Clothing Factory in Moscow illustrates this well.

THIRTY-TWO-YEAR-OLD Vladimir Vasiliev is a sewing-machine operator at the Pobeda Clothing Factory in Moscow. The shop he works in is quiet and well-kept. There's none of the noise of machines and air conditioners.

"Working here is a pleasure," says Vladimir. You probably wouldn't be surprised to hear this coming from a woman who enjoys sewing, but it may sound unusual to hear this coming from a young man. As soon as Vladimir gets on his feet and takes a few steps, you notice that he moves with great difficulty.

Vladimir is handicapped. Seven years ago he worked as a fitter. Unfortunately, a serious disease of the joints put him in bed for two years, most of which was spent in hospitals.

"That was the most difficult time for me," Vladimir explained. "Although my friends and relatives were always around to offer support, I still felt lousy. But as soon as my doctors recommended that I start working, my outlook changed immeasurably."

"Just the Place I Needed"

Leo Tolstoy wrote: "Without work man cannot keep up his human dignity." Does this apply to the disabled? No matter what the handicap, everyone seems to be in agreement. For them the right to work offers more than an opportunity to improve living conditions. Of course, an individual who is absolutely helpless doesn't think about work. However, most of the disabled can work and want to. First they must find a job that they can handle.

In the Soviet Union the physically handicapped are encouraged to do socially useful work, and conditions are being created so that they can.

Soviets physicians believe that work has great curative effects and can restore physical and mental health. Some of their colleagues in other countries agree. Dr. Howard A. Rusk, director of the Institute of Rehabilitation Medicine at New York University, is one who does.

But let's return to Vladimir Vasiliev. After two years of therapy and treatment doctors told him that he would not be able to go back to his work as a fitter and recommended that he find an easier job. Vladimir was given a work recommendation card that specified what kind of work he could do, what conditions he needed and where he should work—at a plant or at home. No manager will hire a handicapped person without a recommendation signed by a doctor.

So Vladimir had to decide for himself where to work. He knew that he could choose any enterprise that had special workshops for the handicapped, but he preferred a clothing factory, where the handicapped are often employed. Enterprises with special workshops can be found in almost every large manufacturing center in the Soviet Union.

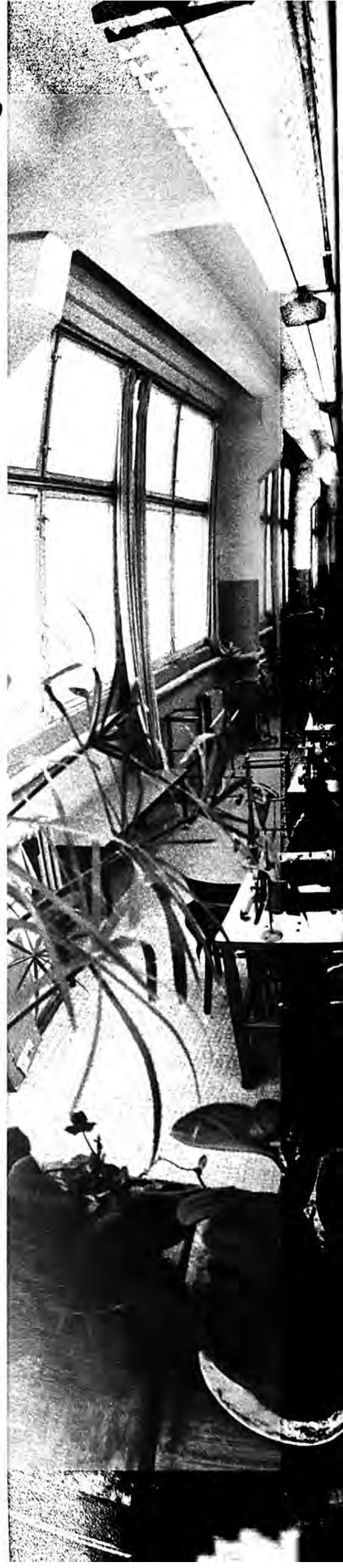
If the manager of the factory had refused to give Vladimir a job, he would have unquestionably found himself in hot water. Why did Vladimir pick the Pobeda Clothing Factory? "The first time I entered the factory I knew it was a very special place," he said. "I got such a warm welcome that I knew at once it was just the place I needed."

Comfortable Working Conditions

The Pobeda Clothing Factory opened its doors seven years ago. Long before the first brick was laid, however, architects, planners and other specialists did their best to create the most comfortable conditions for the handicapped who would work there.

The temperature in the workshops is kept at 20 degrees centigrade. The fresh air cycled into the plant is either heated or cooled. The steady flow prevents dust buildup on lamps, which are usually dust traps, and ensures bright light, which lowers eye fatigue. The humidity is maintained at 50 per cent. The five-story factory is equipped with cargo and passenger elevators. The furniture has been specially designed to reduce fatigue.

Well-equipped doctors' offices are located on the first floor of the factory. Every three months the workers are given free medical checkups.



The factory is only seven years old. Long before the first brick was laid, however, architects, planners and other specialists did their best to create the most comfortable conditions for the handicapped who would work there. Right: Vladimir Vasiliev.

I was curious about how much the building cost the state. "The total was 1.8 million rubles," answered Polina Bylinina, the factory's manager. "Apart from that, each year we can use anywhere from 35 to 50 per cent of our profits to expand and improve production facilities."

Training at Work or at Home

The Pobèda Clothing Factory offers 13 different trades for the handicapped. A trade can be learned at home or in a training workshop.

Fifty-year-old Zoya Klimova was a librarian until she came down with a serious disease that left her partially paralyzed. Doctors recommended that she work at home. Soon an instructor named Yekaterina Grigor and a sewing machine appeared at Zoya's door. Shortly thereafter, Zoya, who had never sewed in her life, was sewing her first seam. "I was as happy as if I had made an important discovery," she remarked.

Zoya's training was free. While she was learning, she received a scholarship and was paid for each piece she sewed. Now every two weeks fabric is delivered to Zoya's house and the finished pieces are picked up.

Better Than Medicine

Once a month all 65 of the handicapped people who work for the Pobeda Factory get together. Special arrangements for transportation are made for those who need it.

"These gatherings are like holidays for me," Zoya said. "It's good to meet other people and know that you're not alone and that people remember you."

Instructor Yekaterina Grigor believes that these outings are important psychologically and in many respects better than medicine. "The first time any handicapped people come to our training workshop, they are likely to feel shy and uncertain," she explained. "But once they get to know other people like themselves, they literally change before your eyes."

Salary Plus Pension

"I work as much as my health permits," commented Andrei Belov, a World War II veteran. Because he likes variety, Andrei has mastered several trades. Since he is a war veteran, Andrei receives his full salary plus a pension. He is entitled to three months of leave a year, one month of which is fully paid.

Anna Moiseyeva, who works in a shop with Andrei, has been deaf since childhood. Under the terms of an agreement with the local trade union committee, the factory's management has set a special quota for her that is 10 per cent lower than the norm. But she receives full pay for her work.

"If I feel bad," says Anna, "I work four hours instead of seven."

Knowledge, Health and . . . Beauty

Without even leaving the factory a worker can gain knowledge, improve his or her health and become more beautiful.

Let's start with knowledge. The factory has evening classes for young workers who want to finish their secondary education. Many go on to college to become engineers or economists. The handicapped in our country have access to both work and higher education. As one young girl told me: "I know that examiners won't make any allowances for the fact that I'm disabled if I decide to apply to a college, so I must have the same training as other graduates. Then our chances will be equal."

If you want to consult a doctor, again you don't have to leave the factory building. There are well-equipped doctors' offices on the first floor where specialists see patients. In addition, medical checkups of all workers are conducted every three months. "We try not to think about our health, but management keeps reminding us of it," joked one worker.

As for becoming more beautiful, a beauty salon and a barber shop are located on the factory's first floor.

Unfortunately, it is often the case that nothing can restore a person's health. But when the handicapped have opportunities to work and study, their sense of dignity is heightened. Even the name of the factory, Pobeda, is symbolic. It means Victory. And who could be more victorious than someone who has overcome a handicap? ■

In the cafeteria workers enjoy an inexpensive hot lunch.

The factory offers 13 trades for the handicapped, which can be learned in a training workshop or at home. No factory or office manager will hire a handicapped person without a work recommendation card signed by a physician. Below left: A quick cut and set in the factory's first floor beauty salon will boost any woman's spirits.

WAR VETERANS

It's our duty to give them every care

The austere years of World War II are farther and farther removed from us. Generations which did not know it have grown up; the towns and cities ruined by it have been rebuilt. Thirty-six years ago those who defeated fascism returned to peaceful work. But age and old wounds do not permit many of them to work at full capacity.

IN TIME OF WAR they gave their all. And now they are due consideration and care.

With great warmth Leonid Brezhnev, General Secretary of the Central Committee of the Communist Party of the Soviet Union and President of the Presidium of the USSR Supreme Soviet, wrote about veterans in his book *Malaya Zemlya (Small Land),* which describes one of the battles of World War II.

> And today, many years after those battles, no matter how busy we may be with other things, it is our duty constantly to remember war veterans. Give them every care and attention, help them in their daily lives—that is the moral obligation of our government bodies and of all our citizens: it is a guiding law of our life.

A Novosti Press Agency correspondent asked Pavel Batov, chairman of the Soviet War Veterans Committee, about how society takes care of the veterans of World War II and what privileges they enjoy in the Soviet Union.

Army General Pavel Batov is 84. He served with the Soviet Armed Forces for more than 60 years. He participated in the Civil War (1918-1921) when the new Soviet Republic had to defend itself against the united forces of foreign intervention and internal counterrevolution. In the late thirties he joined the volunteers who fought against the fascists in Spain. He was at the front all four years of the Great Patriotic War (1941-1945). He was twice awarded the order of Hero of the Soviet Union.

"First, I would like to point out," the General remarked, "that the care given to war veterans is closely coupled with the well-being of all Soviet people. Our standard of living has grown steadily during the postwar period. Thus, privileges for veterans have also been extended. The Law on State Pensions, for example, has been supplemented more than once, always with the aim—among others—of improving the position of the war disabled. They get higher pensions than other disabled people, and the amount is fixed regardless of length of military service. On top of this, you must remember that veterans, like all other Soviet citizens, make no contribution to the social security fund. The money comes from state budgetary allocations and contributions of enterprises.

"A joint decree of the Central Committee of the Communist Party and the Council of Ministers envisaging improved living standards for war veterans considers it necessary, among other things, to exempt invalids of Groups I and II* from the agricultural tax, the tax on buildings and land rent."

"What about income tax?"

"Groups I and II are already exempted from it. The exemption applies to all their earnings regardless of amount."

"Is this true for all those who were disabled during the war?"

"Not necessarily at that time. Wounds or ailments incurred at the front could make themselves known later. The effects might also show up now or sometime down the road. Each individual case is studied by a medical commission and then assigned to Group I, II or III.

"Of course invalids in the first two groups, who cannot work, enjoy more privileges as well. For example, those with restricted ability to move can get a Zaporozhets car with hand controls or a special car free of charge. Exactly which is decided by a commission of medical experts.

"Health services are free in our country. Although most people pay for medicines at drugstores, disabled war veterans do not. The same is true for all types of prosthetic and orthopedic appliances, including dental prostheses and various devices that lighten their work.

"The disabled in Groups I and II receive free round-trip tickets to sanatoriums and health resorts if treatment is indicated. Should they require the services of nurses or attendants, their transportation to the sanatorium and back is also paid for."

"You mentioned earlier that the war disabled are entitled to pensions. But there are many among them who can and want to work."

"They do work, and they still keep their full pensions. Soviet offices and factories have a set quota of jobs reserved for the handicapped. It now stands at two per cent. Of course, it is always taken into account how much the applicant's work can be used. But when it is technically feasible, plant managers must create conditions for them and organize special workshops, departments and sections. The disabled can work shorter hours, and they are given lower production quotas plus other privileges.

"Care for veterans and constant attention to them—this is truly an immutable fact of life in our country."

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* Invalids are classified in groups designated by the numbers I, II or III depending on the extent of the disability. Group III invalids (they constitute the majority) are not invalids in the generally accepted sense of the word. They are people who must, on the recommendation of doctors, restrict their occupational activity.

Army General Pavel Batov, the fourth from the left, with members of the Massachusetts Honorary Artillery Company and fellow members of the Soviet War Veterans Committee. 1974 photo.

The Soviet Constitution is the only constitution in the world that guarantees the right to housing.

HOUSING—A RIGHT, NOT A PRIVILEGE

Gennadi Pisarevsky
'IET LIFE Commentator

HE SOVIET CONSTITUTION is designed to bar all attempts to exploit the freedom of speech and other political freedoms to the detriment of the community. In particular, Soviet law prohibits propaganda on war, racism, national prejudice, antihumane and antisocialist views. Be it good or bad, that is how it is. The reader can ge the merits and demerits of socialist democracy for himself. It's my sonal feeling that at the present level of arms buildup, war propaganda vhich is, in point of fact, propaganda for annihilation—must be banned ll countries.

he most important achievement of socialist democracy has been the vision of economic conditions to ensure the exercise of the social nts of the individual: the right to work, rest and recreation, health care, ıcation, old-age and disability allowances. These rights are being conntly expanded and their substance renewed as public wealth grows. s is something that can best be seen by looking at the history of the nt to housing.

lousing was begun to be distributed free after the 1917 October Revolun in Russia. Rental costs have remained unchanged since 1928. Rent ounts to no more than three per cent of a worker's family budget. Utility ces—central heating, electricity, gas, hot and cold water—are also very and have not been raised since 1948. On the other hand, real incomes ve been growing all the time. It stands to reason that, with prices so ble, rent and utilities are not a financial problem for any family.

Home rentals have always been regarded as a social service in our untry, never a commercial enterprise. We have made a fairly long and stained effort to provide every family with housing complete with all the enities. We could have officially proclaimed the right to housing and ve had it written into the Constitution a long time ago. But in earlier ys that would have been nothing but rhetoric. Not until every family had ome or apartment was the right to housing included in the Constitution. at was in 1977.

The right to housing is guaranteed in substance by:

The construction of over two million apartments a year (71 per cent of housing is federally financed; 4 per cent is built by collective farms; 7 r cent by cooperative organizations; and 18 per cent by individual home ilders, who get loans for this purpose at 0.5 per cent interest rate).

A fair and democratic procedure for the distribution of housing regardss of family income or social standing.

The maintenance of an extremely low federally subsidized rent (twords of the expenses involved in home maintenance are covered by deral subsidies and one-third by rent payments).

Let me point out right away that not every family has housing facilities at have all the amenities and comforts. In urban areas, for example, 89 r cent of all apartments and single-family units have running water; 87 r cent have sewerage facilities; 86 per cent have central heating; and per cent have gas hookups. All of these facilities will have to be ought up to 100 per cent, as you understand. It's not fair for a majority enjoy all the conveniences of modern life and for a minority to be underrviced. Rural areas have even fewer services than urban ones. Of urse, country living has its own rewards—orchards, gardens, flower ds, livestock. But they don't compensate for the lack of comfort.

We would have solved many of the problems still staring us in the face a long time ago—housing among them—had it not been for World War II. What I, like millions of my fellow countrypeople, want more than anything is to know that there will never be ruin and destruction like it again on this Earth. The village where I was born is cut right down the middle by a deep ravine. During the war one side of the village was burned out as the result of a German air raid. The other side, fortunately, was untouched. For several years the people of the village lived huddled in dugouts.

We had to spend years rebuilding the war-ravaged cities (1,710 cities!) and villages (70,000!). The aftermath of the war had to be undone twice. First, makeshift housing had to be built to provide some sort of shelter for the homeless. Then this was demolished so that modern apartment houses could be put in its place.

Each year 10 million people move into better housing. Large families and newlyweds are given preference in the distribution of housing. There's a new tradition in the making for many young couples to get the keys to their apartments or houses on their wedding day. True, there are still quite a few young couples who live in rather crowded conditions. Unmarried mothers also get priority treatment for improved housing.

The draft bill on fundamental housing was published in May 1980, and discussed throughout the country for 13 months. The USSR Supreme Soviet received more than 20,000 proposals, comments and amendments that were all carefully studied and considered before the act was finally ratified.

One factor that affects housing construction in our country during the eighties, and, indeed, everywhere else in the world, is the energy conservation problem. Our architects, like their colleagues in the West, have been carried away too much by their preference for glass, aluminum and other materials without due regard for proper insulation. This has created another problem for us. Home heating in the Soviet Union in 1980, for instance, meant burning 1,033 kilograms of reference fuel for each person, or an equivalent of 700 kilograms in terms of oil. That is fantastic waste by the standards of the eighties. Nothing, not even our rigorous climate, can justify it today. Our ancestors knew how to keep their homes warm better than we do, and, in many ways, they built them better. New residential districts, be they in Paris, Tokyo or Moscow, are overstandardized. The old ones somehow offer more comfort, warmth and individuality.

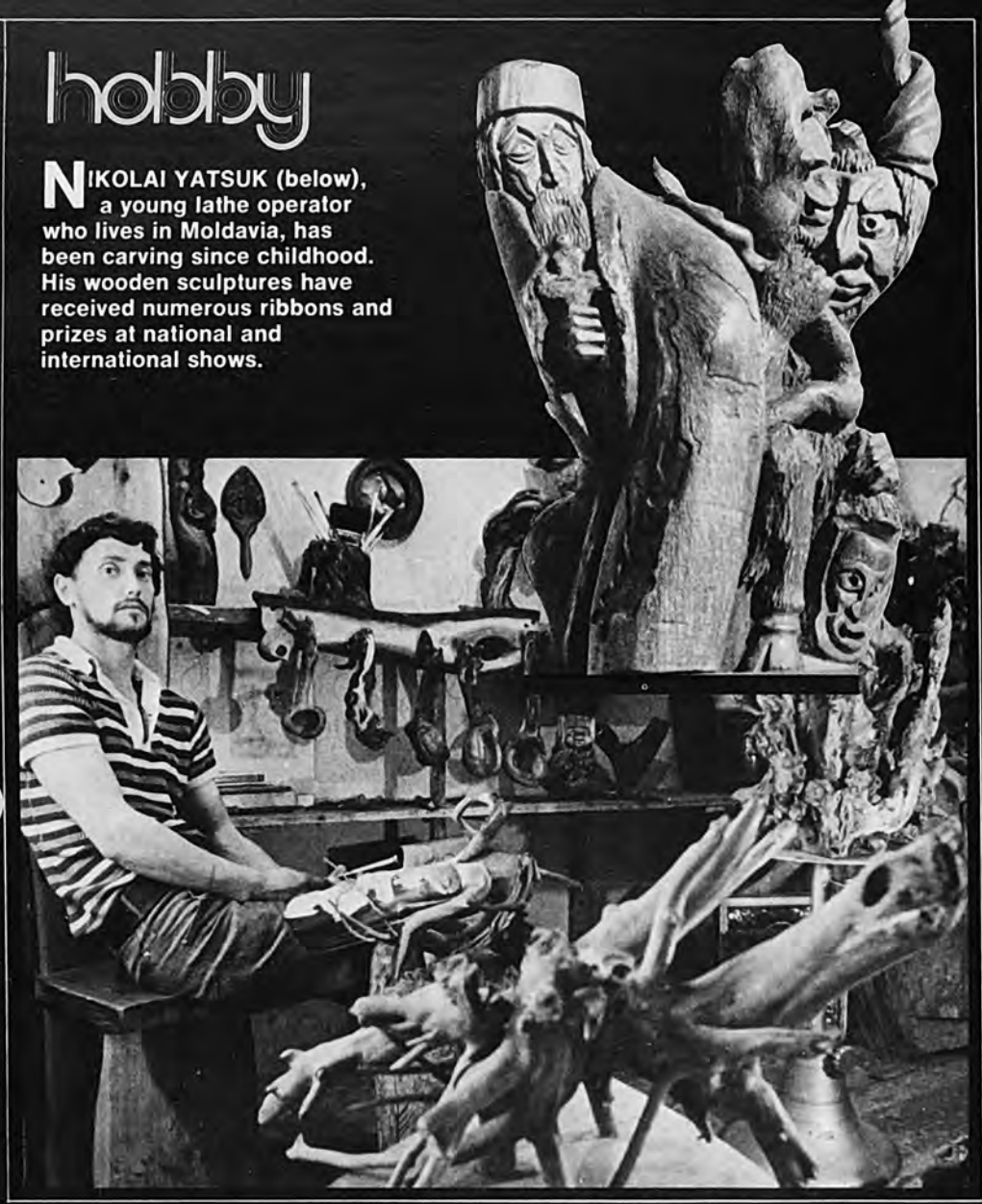
New apartments in our country are up to world standards, experts find, and even superior to some, in size for instance. But these are not the standards to go by, in my conservative view. We must have our own national standards and take into account many factors like customs and traditions, modern requirements and climate. In short, architects have their work cut out for them if they are to meet the challenge. I must say, though, that they are to be congratulated on Zelenograd, a suburb of Moscow, and Lasdinaj District of Vilnius, the capital of Lithuania.

Let me conclude by giving a few figures to show the rate, scale and implications of the construction boom in the Soviet Union. Close to 6,000 apartments are finished every day. The annual federal investment in home building and maintenance is 21 billion rubles. (One ruble is roughly equivalent to 1.40 U.S. dollars at the official rate of exchange.) The worth of available housing is estimated at 350 billion rubles.

things cultural

hobby

NIKOLAI YATSUK (below), a young lathe operator who lives in Moldavia, has been carving since childhood. His wooden sculptures have received numerous ribbons and prizes at national and international shows.



MOVIES

YOU'D NEVER DREAM IT is the title of a directed by one of the oldest Soviet f Ilya Frez, who has been making motion p young people all of his life. The film is base written by Galina Shcherbakova about h students and their relationships with each their parents. Touching on the delicate th love, the director presents with tact and problems young people come up against. refusal to take a child's love seriously of tragedy. There is no tragic finale as suc film allows viewers to draw their own

CIRCUS

SOVIET circus artists are immensely popular abroad and all the rage at home. In the ring here under the big top is the Zapashny family, which is internationally famous for its wild-animal acts.

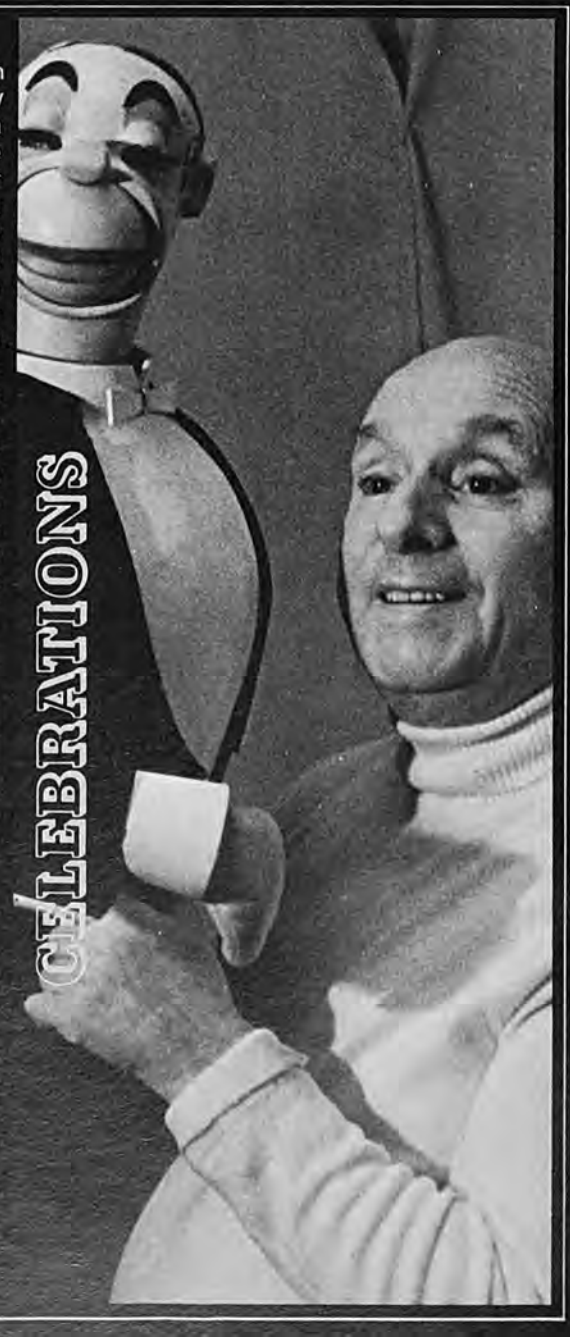
BALLET

KHLESTAKOV, the hero of Gogol's immortal comedy *The Inspector-General,* has now joined the ranks of literary characters who have been put to music. Boris Tchaikovsky has composed music in tune with the satirical character of the play. The Kirov Opera and Ballet Theater in Leningrad has shown a great deal of imagination in staging the ballet.Choreographer Oleg Vinogradov has tried to stay as close as possible to the story and preserve the spirit of the play. The excellent performance of Vadim Gulyaev as Khlestakov did much to make the ballet a success.

TALLINN, the capital of Estonia, is the first Soviet city to receive the gold medal of the Europa Prize for the Preservation of Historic Monuments. The award was established in 1973 in West Germany by the Hamburg Fund and is designed to recognize a community's exemplary care of its architectural heritage. The old center of Tallinn was proclaimed an historic preservation area in 1966. It has more than 150 monuments of architecture.

ARCHITECTURE

PUPPETEER Semyon Samodur (right) recently celebrated his seventieth birthday. Samodur is the leading actor and director of the Central Puppet Theater in Moscow, which is supervised by the celebrated Sergei Obraztsov. There's hardly a role that Samodur has not played in his 50 years with the company. Among his best-known shows is "An Extraordinary Concert," which he created with Obraztsov. The "Concert" has toured 60 countries. Samodur poses here with a puppet called the Master of Ceremonies from the "Concert."



CELEBRATIONS

Paul Morphy has been acclaimed by some to be the most brilliant chess player of all time. Born in New Orleans in 1837, Morphy had a brief public career as a chess master in the mid-eighteen hundreds. Although he did not leave a school behind him, his strategy of development before attack has influenced many a chess player.

PAUL MORPHY'S INFLUENCE ON RUSSIAN CHESS PLAYERS

By Isaac Linder
Candidate of Science (History)

American ch wiz Paul Mo He learned the game at age of 10.

THE CHESS WORLD was awed by Paul Morphy's wins in New York, London and Paris during his short and meteoric career from 1857 to 1859. He toppled outstanding players like Adolf Anderssen, Janos Jacob Lowenthal and Daniel Harrwitz.

Interest in the game heightened in Europe. Chess players in Russia, too, warmly applauded Morphy. Unfortunately, at that time Russian chess masters didn't have opportunities to face the major players in the West in matches and tournaments.

When Morphy performed in London and Paris, Russia's first chess master, Alexander Petroff, was living in Warsaw, having abandoned an active chess career. Nevertheless, he wanted more than anything else to see Morphy play.

However, Petroff's dream didn't come true. Petroff wrote:

> My official duties prevent me from having the time or the money for such a trip abroad. I haven't even been to the London tournament, and I didn't go to Paris to marvel at Morphy's play.

Petroff's keen interest in the American master's games is also evidenced by the fact that he not only thoroughly analyzed Morphy's games printed in Moscow's *Shakhmatny Listok (Chess Leaflet)*, but also made notes in the margins. Proof of this are issues of two years of the journal (for 1859 and 1860) that belonged to Petroff and which I had the good fortune to discover in the private library of a Leningrad collector. An example follows.

Philidor Defense
Paris, 1858

White Morphy	Black Harrwitz	White Morphy	Black Harrwitz
1. P-K4	P-K4	6. BxN	BxB
2. N-KB3	P-Q3	7. B-N5	P-B3
3. P-Q4	PxP	8. B-R4	N-R3
4. QxP	N-QB3	9. N-B3	Q-Q2
5. B-QN5	B-Q2	10. 0-0	B-K2
11. QR-Q1	0-0	24. R-B2(c)	P-QR3(d)
12. Q-B4ch	R-B2	25. NxBP	R-B1
13. N-Q4	N-N5	26. N-Q5	BxN
14. P-KR3	N-K4	27. PxB	R-B2(e)
15. Q-K2	P-KN4(a)	28. P-B4	B-K2
16. B-N3	R-N2	29. R-R5	Q-K1(f)
17. N-B5	R-N3	30. P-B5	RxP
18. P-B4	PxP	31. RxPch	KxR
19. RxP	K-R1	32. Q-R5ch	K-N1
20. R-R4	B-B1(b)	33. NxBch	K-N2
21. BxN	BPxB	34. N-B5ch	K-N1
22. R-KB1	Q-K3	35. NxP	Resigns
23. N-N5	Q-N1		

Petroff's Game Notations

(a) To prevent White from playing P-B4.
(b) White threatens 21. BxN, BPxB. 22. RxPch, . . . and 23. Q-R5ch.
(c) Needed for protection.
(d) BxN would have been a better move.
(e) 27. . . . QxP; would have been followed by 28. RxPch, KxR. 29. Q-R5ch, B-R3. 30. NxB, RxN. 31. Q-B5ch, . . . and 32. QxR.
(f) A better move would have been 29. . . . B-N4.

For some unknown reason, these notations did not appear in the magazine. It's interesting that in the same year, 1860, *Shakhmatny Listok* carried Petroff's response to an article by Sergei Urusov in which considerable space was devoted to Morphy. Urusov, a prominent Moscow player of the period, in his "Notes on Games with A. D. Petroff" (*Shakhmatny Listok*, No. 12 for 1859), pointed out his opponent's great mastery in endings, the fact that he concentrated his attention on every stage of the game, and so on. He concluded that Petroff could beat Paul Morphy. According to Urusov, Petroff "matches Morphy in everything, but has the advantage of age." (Petroff was three times older than Morphy!)

Urusov seriously believed that despite the great difference in ages, it was necessary to organize a match between the two chess wizards. And, as he wrote in his article, he decided to offer Petroff "and himself an opportunity to engage in a test of strength with the strongest player of our time—Morphy. If Morphy comes Russia, . . . then . . . , undoubtedly, Petroff, l will battle it out against him; he has alrea given, in the presence of several witnesses, consent to this."

I don't know what happened to Urusov's let inviting Morphy to visit Russia. As for Petro he wrote in an article (which served as a re to Urusov's article) the following:

"As far as a match with Morphy is concern why shouldn't we have it? I'm ready to pla But, he added, with his usual modesty, "I do regard myself as Morphy's equal in strength."

Later Petroff had the good fortune to meet t American. The meeting occurred in 1863, duri the Russian master's trip to France. Morphy w also visiting there. The French magazine *Nouve Regence* expressed the hope for a match b tween the two great chess players:

> We have heard talk of a forthcoming match be tween M. Petroff and M. Morphy. This will perhaps, be one of the most remarkable battle ever to take place. It will be a fine day for chess

However, Petroff was only in Paris for a sh time with his daughters. They were all on th way to a health resort. And by that time Morp had already abandoned participation in seri competitions.

Nonetheless, Petroff and Morphy agreed t meeting. Petroff wrote to Victor Mikhailov, editor of *Shakhmatny Listok*, "I've called Morphy twice, and he, too, has visited me. D zans [a staff member at *Nouvelle Regence*—I has told me that he [Morphy] flatly refuses play."

It's too bad that we are unable to give m details about what the few short lines implied what the remarkable chess masters talked abo Nor do we have any reminiscences left by famous Russian novelist Ivan Turgenev about personal acquaintance with Morphy. Yet an graving from that time depicting the hall of Café de la Regence in Paris shows Turgen

(2) Очень хорошій ходъ; конь на e8 значительно укрѣпляетъ позицію черныхъ.

№ 6.

ФРАНЦУЗСКАЯ ЗАЩИТА НА ВЫХОДЪ КОНЯ.

Морфи. (Бѣлые)	Гаррвитцъ. (Черные)			
e2—e4	e7—e5	18)	f2—f4	g5—f6°
g1—f3	d7—d6	19)	f1—f4°	g8—h8
d2—d4	e5—d4°	20)	f4—h4	e7—f8
d1—d4°	b8—c6	21)	g3—e5°	f6—e5°
f1—b5	c8—d7	22)	d1—f1	d7—e6
b5—c6°	d7—c6°	23)	♘3—b5	e6—g8
c1—g5	f7—f6(1)	24)	f1—f2	a7—a6
g5—h4	g8—h6	25)	b5—c7°	a8—c8
b1—c3	d8—d7	26)	c7—d5	c6—d5°
0—0	f8—e7	27)	e4—d5°	c8—c7
a1—d1	0—0	28)	c2—c4	f8—e7
d4—c4+	f8—f7	29)	b4—b5	g8—e8
f3—d4(2)	h6—g4	30)	c4—c5(3)	e7—c5°
h2—h3	g4—e5	31)	h5—h7°+	h8—h7°
c4—e2	g7—g5	32)	e2—h5+	h7—g8
h4—g3	f7—g7	33)	f5—e7°+	g8—g7
d4—f5	g7—g6	34)	e7—f5+	g7—g8
		35)	f5—d6° и черные сдались.	

Примѣчанія къ партіи No. 6.

(1) Намъ кажется, что 7) ...e8—f6 какъ сыграно было въ предыдущей партіи,—лучше.

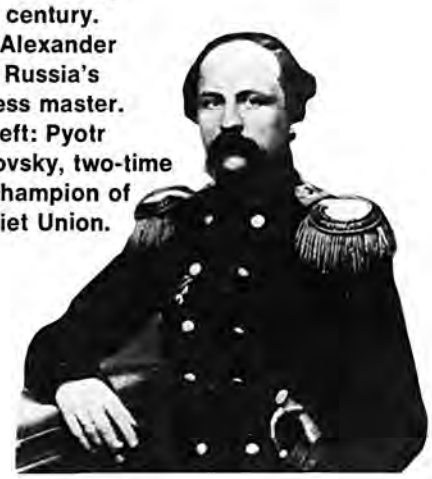
(2) Трудно понять, какъ Морфи упустилъ изъ виду сильную атаку посредствомъ 13) e4—e5.

(3) Прекрасное пожертвованіе. Умѣніе жертвовать кѣмъ и пѣшками для поддержанія сильныхъ атакъ офицерами.

nder Petroff's
ons of a
between Morphy
aniel Harrwitz.

Café de la
nce in Paris.
hy is the
nd man on the
and Ivan
enev is the
h on the right.

Sergei Urusov, a prominent player in Moscow during the last century. Below: Alexander Petroff, Russia's first chess master. Below left: Pyotr Romanovsky, two-time chess champion of the Soviet Union.



who was a fairly strong player, engaged in a game of chess there with Morphy, Lowenthal and other prominent masters.

But we do have factual information on the interest shown in Morphy's games in those years by another famous Russian writer, Leo Tolstoy. During a visit to London in 1861, he bought a book on Morphy. Tolstoy took the volume home, and it is now kept in the writer's private library at his estate, Yasnaya Polyana.

Dedicated to Morphy

This story about Morphy's influence on his Russian contemporaries would be incomplete without reprinting at least one of the two chess compositions dedicated to him. The author of the one below was Alexander Petroff. The game was published in *Shakhmatny Listok*.

A. PETROFF, 1859
Delicated to Paul Morphy
(Diagram No. 1)
White to play for selfmate in 40 moves.

1. Q-B6ch	K-N1	21. K-Q3	K-N2
2. Q-N6ch	K-R1	22. K-B2	K-N1
3. Q-R6ch	K-N1	23. K-N1	K-N2
4. R-N7ch	K-B1	24. K-R2	K-N1
5. Q-B6ch	K-K1	25. R-N5ch	K-R1
6. KNR-K7ch	K-Q1	26. Q-B8ch	K-R2
7. Q-Q6ch	K-B1	27. R-N7ch	K-R3
8. NR-B7ch	K-N1	28. Q-B6ch	K-R4
9. R-B2dis.ch	K-R1	29. R-N5ch	K-R5
10. Q-B6ch	K-N1	30. R-R5dis.ch	K-N5
11. R-N2ch	N-N6	31. Q-B5ch	K-R5
12. R-N7ch	K-R1	32. R-R4ch	N-Q5
13. R-N6dis.ch	K-R2	33. Q-B6ch	K-R4
14. R-R6ch	K-N1	34. Q-N6ch	K-R5
15. Q-B5	K-N2	35. K-R1	K-R6
16. R-R5	K-N1	36. Q-B5ch	K-R5
17. N-Q2	K-N2	37. R-N4ch	K-R6
18. N-B3	K-N1	38. R-N1dis.ch	K-R5
19. N-K1	K-N2	39. Q-N5ch	K-R6
20. K-K4	K-N1	40. N-B2ch	NxNmate

Subsequently, other unusual solutions were found. However, quite recently (124 years after the game was published!) a young schoolboy named Vitali Degtyaryov from the city of Izhevsk sent to the editors of *Shakhmaty v USSR (Chess in the USSR)* magazine a solution he had found in 25 moves!

The Secret of His Victories

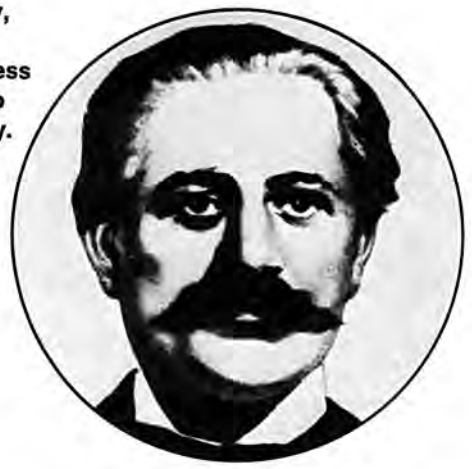
Morphy's contemporaries were at a loss to find the answer to his invincibility. How was it that a young player could get the upper hand of masters who had long records of victories behind them?

Alexander Petroff was one of the first to have taken a correct approach in understanding the American master's strategy. (Only a quarter century after Morphy's short career, William Steinitz, who subsequently became the first official world's champion, showed that the reason for the U.S. master's victories lay in the now established principle of development before attack.) It is even more interesting to note that earlier Petroff remarked in discussions with Urusov that besides a talent for chess, he saw in Morphy's game the triumph of positional strategy and a high degree of mastery in the specific calculation of variants. Petroff admired Morphy's "*unusual ability to play and forge ahead* [emphasis by Petroff—I.L.]. Just analyze his games closely. Most of them are distinguished for thoroughness and precision of calculation and extraordinary farsightedness in thinking."

Morphy's style of play and the typical features of his games were discussed later more than once in Russian chess publications. Outstanding chess players like Mikhail Tchigorin, founder of the Russian school of chess, and Alexander Alekhine, the future world champion, expressed their views on this subject.

Alekhine, for example, strongly objected to the claim that Morphy's genius had manifested itself primarily in combination play. In Alekhine's opin- ▶

Ilya Shumov, author of a book on chess dedicated to Paul Morphy.



A diagram of a chess problem by Shumov dedicated to "Mr. Morphy."

Mikhail Tchigorin, founder of the Russian school of chess.

Anatoli Karpov, the current world chess titleholder.

ion, the secret of Morphy's phenomenal succ lay in a perfect command of the principles positional play. Moreover, he emphasized necessity of considering Morphy's games aga the background of the views and ideas preva at that time. "Only in this way can one for correct opinion of Morphy, only in this way myself judge his games," Alekhine wrote. went on to say this:

> How much more vivid and full-blooded a figu he will cut, how much clearer the secret of h success and charm will become if we think ba to the time when he lived and played, if we tak the trouble to at least study his contemporaries . . . Morphy's strength, irresistible as it is—th is the reason for his success and the proof of h immortality!
>
> The essence of this strength lies precisely that Morphy always played positionally—naturall in the broad sense of the word. . . .
>
> It is only thanks to this quality of his play, e ceptional for the time, that he succeeded in to pling such opponents at Harrwitz, Lowenthal an mainly Anderssen, whose power of imaginatio and talent for combination play were not inferio to Morphy's.

"An Incomparable Master"

As the lifetimes and playing careers of ma chess masters recede farther and farther into past, the more clearly we see their greatn This is particularly true of Paul Morphy.

The chess world, Mikhail Tchigorin wrote, " never forget him and will always find pleas and satisfaction in the masterpieces of the gr American player."

In 1937 Soviet chess players widely mark the centennial of Morphy's birth and, later, centennial of the start of his famous performan in Europe. One article in particular, titled " Morphy's Creativity," by Merited Chess Mas Pyotr Romanovsky, who was a two-time champi of the Soviet Union, stands out among the n merous publications on this subject in the Sov press. Romanovsky emphasized that even tod chess players, while studying the games of t American master, can derive much that is va able for themselves because "Morphy was an i comparable master at dealing with openi moves." Romanovsky formulated the following s points which, as he believed, should guide on in learning chess from Morphy:

> First, use every opportunity to improve the de ployment of pieces; second, in every kind of position be able to find an object for the initia tive; third, after grasping the initiative, carry it on without the slightest loss of time; fourth, make the best possible use of combination play; fifth, value beauty in the art of chess, combining correctness and artistry in the execution of ideas; and, lastly, sixth, show the will to win.

Twenty years ago Vyacheslav Ragozin, a prom inent Soviet grandmaster and FIDE vice pres dent, claimed that Morphy's games were as im portant as ever. In his book *The History of World Title Competitions*, Ragozin wrote:

> In a search for truth, he . . . discovered prin ciples that have become the asset of generations and elevated chess to a higher level. . . . The new generation of chess players is beginning to learn from Morphy, studying his style and striving to copy his professional—in the best sense of the word—attitude toward the art of chess.

And though Morphy did not hold the title of th world's best player, he, in Ragozin's opinion "was a real world champion as a seeker after and creator of, new ideas in chess art."

Morphy's impact on the progress of the art o chess has been highly appreciated by all the Soviet world champions, from Mikhail Botvinnik to the reigning chess king, Anatoli Karpov.

It's still called the Olympic Village even though the new residents range from circus performers to factory workers. Marina Ryklina introduces some of the new people who have moved in. Below: The Borukayev family out for a stroll on a fall day.

OLYMPIC VILLAGE

MICHURIN AVENUE MOSCOW

Photographs by Vitali Savelyev

IN OCTOBER 1980, three months after the 22nd Olympic Games, the first new residents moved into Olympic Village. Now they consider themselves old-timers.

I entered building 11. The three-section building has wide staircases with four apartments on each floor. I couldn't decide which door to knock on. Then I noticed that the doors to apartments No. 13 and 14 were open.

A Pleasant Surprise

"May I come in?"

"Sure, we're always glad to have company," said a woman.

Having heard an unknown voice, children came running out of the neighboring apartment.

"Have you come to see us?" they asked, laughing and grinning.

"No, I want apartment 13."

"We live in apartment 13."

"You were visiting in apartment 14?"

"No, we live in two apartments."

That's how I met the Borukayev family—Margarita, Victor and their six children.

The Borukayevs used to live in a three-bedroom apartment on Sevastopol Boulevard. The District Soviet had repeatedly offered them an additional apartment, but they didn't want to live apart.

"After the Moscow Summer Games," Victor explained, "we were offered these two apartments. One has two bedrooms and the other has one bedroom. It was a pleasant surprise, and we accepted eagerly."

Margarita and Victor both work at the Second Moscow Instrument-Making Factory. She's an assembler, and he's a forwarding agent. He and a driver deliver food to the plant's cafeteria. Their oldest daughter Fatima, who is 21, is a graduate of the Moscow Institute of Culture and works as a librarian. Marina, 20, is in her last year at medical school. Albina, 17, studies at a trade school. The Borukayevs' son Khetag, 10, is in third grade; their daughter Zalina, 6, and son Chermen, 3, go to kindergarten.

It seems that each member of the family likes the new apartments for different reasons.

"These are very comfortable apartments," says Victor. "All the rooms are bright. The entrance is roomy, and the lobby is very nice. We didn't have to do a thing when we moved in."

"A consumer service center that offers just about everything and a supermarket are located in the same building on the main square. So I don't have to do a lot of running around," Margarita observed.

"There's a lot of entertainment here," Fatima chimed in. "We have dances, a discotheque and regular concerts."

"The best part about living here is the sports facilities," commented Khetag. "Three days a week I go to freestyle wrestling classes at the sports complex, ▶

where Olympic champions used to train."

A Few Facts and Figures

The giant sports complex operates at full capacity. The gyms for gymnastics, ball games, wrestling and judo are open from 8 A.M. to 10 P.M. The courts are used by the sports school for children of the Gagarin District, in which the Village is located, and are rented for workouts and competitions by many of Moscow's institutes. Three swimming pools are available from 7 A.M. to 11 P.M. The two small pools are open to all children living in Gagarin District who want to learn to swim. The third, an Olympic-size pool with springboards and high diving boards, is for adults. Schools also use the large pool for physical education classes. The district sports school for children, the Moscow swimming team and sometimes even the Soviet national squad rent this pool.

The health center includes 10 saunas and 10 small pools.

Although no polls have yet been taken, it can be assumed that most of the youngsters living in the Olympic Village use the sports complex to good advantage.

Preplanned Present

I dropped in unexpectedly on the Khruslovs, who live in building No. 5, apartment No. 28. But Vitalia and Georgi didn't act surprised at all. Vitalia used to work for the Olympic Organizing Committee, and Georgi directs the office responsible for housing foreign students at the Pushkin Institute of Russian Language. Both are used to dealing with journalists.

"For two years," Vitalia said, "I worked as a consultant for the Organizing Committee. I knew I would get a two-bedroom apartment after the Games. We certainly looked forward to moving in. My sons, nine-year-old Timofei and eight-year-old Stepan, immediately asked me to sign them up for swimming lessons.

"Both their school and the pool are a five-minute walk from home. There are few roads with heavy traffic in the Village. So as soon as we moved here, my boys began walking everywhere alone."

"What will you do about another job?"

"I have been offered so many jobs that it's hard to choose. I'd like to get one not far from home and work part-time. I would also want my job to be connected with my profession. I'm a philologist. I study Russian and Japanese literature. And I'd like to spend more time at home with my children. So I'm looking for a compromise. But I must run now. We're having a family portrait taken today. But before that I must go to the beauty parlor. It's great having all this only a three-minute walk from home!"

For 43 days envoys from 81 countries lived here during the 22nd Summer Olympic Games. This one square kilometer in Moscow's Gagarin District now houses thousands of families.

More Facts and Figures

The Olympic Village, which spreads over one square kilometer, was built along the Smorodinka River on the site where an old village called Nikolskoye once stood. Today this is one of Moscow's greenest areas. It's surrounded by beautiful parks and ponds. There are 451,000 square meters of lawns and gardens, 240 blue spruces and lots of birches and maples in the Village.

The 18 apartment houses, each rising 16 stories, are almost completely occupied. The residents range from circus performers, industrial workers at nearby factories, professors and engineers, to drivers, doctors, students and store clerks. The Olympic Village has a polyclinic, two elementary and secondary schools, four day-care centers, a concert hall, a restaurant and a café.

The furniture in the apartments formerly occupied by athletes was distributed to children's homes, sanatoriums and dormitories.

The location is ideal for getting around the capital quickly. Three major thoroughfares, Michurin Avenue, Lenin Avenue and Vernadsky Avenue, are close by.

Almost totally self-sufficient, the Olympic Village has a polyclinic, two elementary and secondary schools, four day-care centers, a concert hall, a restaurant and a café.

Vitalia and Georgi Khruslov and their sons. As soon as they moved in, the boys signed up for swimming lessons. Upper right corner: Chermen Borukayev and his sister Zalina.

THE ETERNAL RAPHAEL

By Tatyana Kustodiyeva
Art Critic

OF THE TWO PAINTINGS by Raphael in Leningrad's State Hermitage Museum, *The Conestabile Madonna* enjoys world renown. *The Holy Family* (usually known as *The Virgin and Child with the Beardless St. Joseph*) is most often just mentioned among Raphael's creations of the Florentine period.

Raphael was still under the influence of his teacher Perugino when he painted *The Conestabile Madonna* in the latter part of 1502 and the beginning of 1503. It definitely is one of the best works of the young master.

Unlike any other artist past or present, Raphael was always able to glean much from the art he came in touch with, but he never imitated anything blindly. As a preparatory sketch for *The Conestabile Madonna* he used a drawing by Perugino, accurately reproducing the figures of the Madonna and the Child. A comparison of the drawing and the painting shows what the young artist sought to achieve.

He rejected the rectangular shape of the drawing for a circle, which required of the artist a perfect mastery of composition. All the lines—the contours of the Madonna with her slightly bent head and the rounded outlines of the Child's body—are subordinated to this shape. It creates a feeling of harmonious clarity, which later became a hallmark of Raphael's work.

Initially, Raphael sketched the Child holding a pomegranate in his hand, according to Perugino's drawing. But later he replaced it with a book. This was only discovered when the painting was transferred from wood to canvas. Perhaps Raphael felt that the book justified the thoughtful concentration with which the Mother and Child look at its pages.

The Conestabile Madonna corresponds totally to the characteristics of the Umbrian period in Raphael's creative work. This can be seen from the close relationship with Perugino's images and from the depiction of Umbria, the region where Raphael spent his early years, in the landscape. The sky, the water in the lake and the gossamer foliage of the slender trees are transparent. The light is in harmony with the poetic mood of the whole scene.

The painting has a decorative gilded frame. The striking pattern perfectly complements the meticulous brushwork.

According to legend, Raphael received an order for a Madonna with a book from Alfano di Diamante in Perugia, who bequeathed the painting to his heirs. Sometime during the eighteenth century the Alfano family received the title of the Counts della Staffa. During the same century *The Madonna with Book* was passed on to relatives of the Della Staffa, the Counts Conestabile della Staffa. The painting became the gem of their collection. Every guidebook to Perugia included Raphael's small masterpiece as one of the sights of the city.

Nineteenth century students of Raphael noted with delight that *The Madonna with a Book* was the artist's only work that had been preserved in its original frame and was still in the family for which it had been painted.

However, in 1869 the Conestabile brothers were in financial trouble and decided to sell their collection. Stepan Gedeonov, director of the Imperial Hermitage Museum, traveled to Florence in 1870 in order to draw up a contract for the purchase of Raphael's *Madonna*. The people of Italy were so upset by the decision to sell the painting that one of the Conestabile brothers published a pamphlet (G. Conestabile. *Sulla vendita della Madonna del libro di Raffaello,* Perugia, 1871) in which he described the difficult circumstances of both his family and the Italian government, which didn't have enough money to purchase the painting.

In 1871 the *Madonna* arrived in St. Petersburg. During the trip from Italy to Russia the cracks in the wooden foundation had become wider. A special commission was set up to decide how to preserve the "new" Raphael. The commission decided to replace the wood with canvas. Thus, the painting was cut from the frame with a saw and the cracks were pasted so that they were barely perceptible. A piece of fabric was pasted on the face of the painting and fastened to a marble slab. Then the wood was removed from the back, layer by layer, and the initial drawing of the Child with a pomegranate in his hand was discovered. The painting itself was fixed on a canvas, and the pasted fabric was washed off the face.

The Conestabile Madonna became the property of the wife of Alexander II and hung in her private rooms. The painting was added to the Hermitage collection after her death in 1880.

In 1504 Raphael moved to Florence, where a new period of his creative work began. There he became acquainted with the advanced achievements of his time, especially with Leonardo da Vinci's painting. Without having seen and studied the work of his great contemporary, Raphael could not have created *The Holy Family*.

The supposition that Raphael painted the picture for Guidobaldo da Montefeltro is based on the following words of the eminent sixteenth century art historian Giorgio Vasari: "He made for Guidobaldo da Montefeltro, then Captain of the Florentines, two pictures of the Madonna, small but excellent, in his second manner." (By "second manner" Vasari meant the Florentine period.)

The picture had many owners before it was added to Pierre Crozat's famous collection in Paris. Together with 400 other paintings from this collection, it was purchased for the Hermitage in 1772. In 1824 it was transferred from wood to canvas.

A catalogue of the best works from Crozat's collection contained the following information about *The Holy Family*:

> Monsieur Barrois bought this picture belonging to the house of Angouleme for a rather low price. It had been kept there without any particular care. An unskilled painter wanted to renovate it, and since he couldn't make his work correspond to that of the author he actually painted it all anew so that Raphael's work was no longer seen. However, when Monsieur Barrois bought it, Vandin cleared the picture from the work painted on top of it, restoring the original painting. Instead of being spoiled, it looked even fresher; the paints of the unskilled artist had served as a cover and had protected the picture from the harmful influence of the air.

This story was the inspiration for Alexander Pushkin's wonderful poem "Revival."

The picture was painted about 1506. Its second name—*The Virgin and Child with the Beardless St. Joseph*—came about due to the unusual iconography of Joseph, who was usually portrayed with a beard. Some art experts even believe that Raphael had included someone's portrait in his composition. However, the striving for ideal beauty typical of the artist and the absence of any striking features contradict this opinion.

The Holy Family is a moving and spiritually rich picture. The figures are depicted against the background of a wall, but on the right, through an arch, a peaceful landscape is visible, creating a wonderful impression of depth. In other paintings by Raphael similar to this one in style and poetics the Child is represented in lively and easy movement (*The Madonna of Orleans* at the Musée Condé, Chantilly; *The Madonna Bridgewater* and *The Madonna with Palm*, both at the National Gallery of Scotland in Edinburgh). However, in *The Holy Family* at the Hermitage Museum the Child is clinging to the bosom of the Virgin, who thoughtfully clasps him to herself. The child looks at Joseph, who is watching him sadly.

The composition of the painting may seem elementary, but this simplicity conceals the careful consideration of the looks, the gestures, the gentle smoothness of the outlines and the balance of color.

Interesting results have been obtained during an examination of *The Holy Family* at the Hermitage Museum's laboratory.

An infrared photograph executed by a unique method made it possible to see the original drawing. An artist would prick the outlines of a preparatory drawing with a needle. Then it was placed on the primed foundation of the future painting (either wood or canvas) and rubbed with charcoal or paint, which came through the tiny holes and left an outline on the primer.

Invisible to the naked eye, the drawing of *The Holy Family* is fine and expressive. In addition to the author's alterations are clearly noticeable (which is impossible during copying). The outlines of Joseph's fingers were changed (at first they were longer). His face was more individualized; he was almost bald; the shape of the eye was changed, and so on.

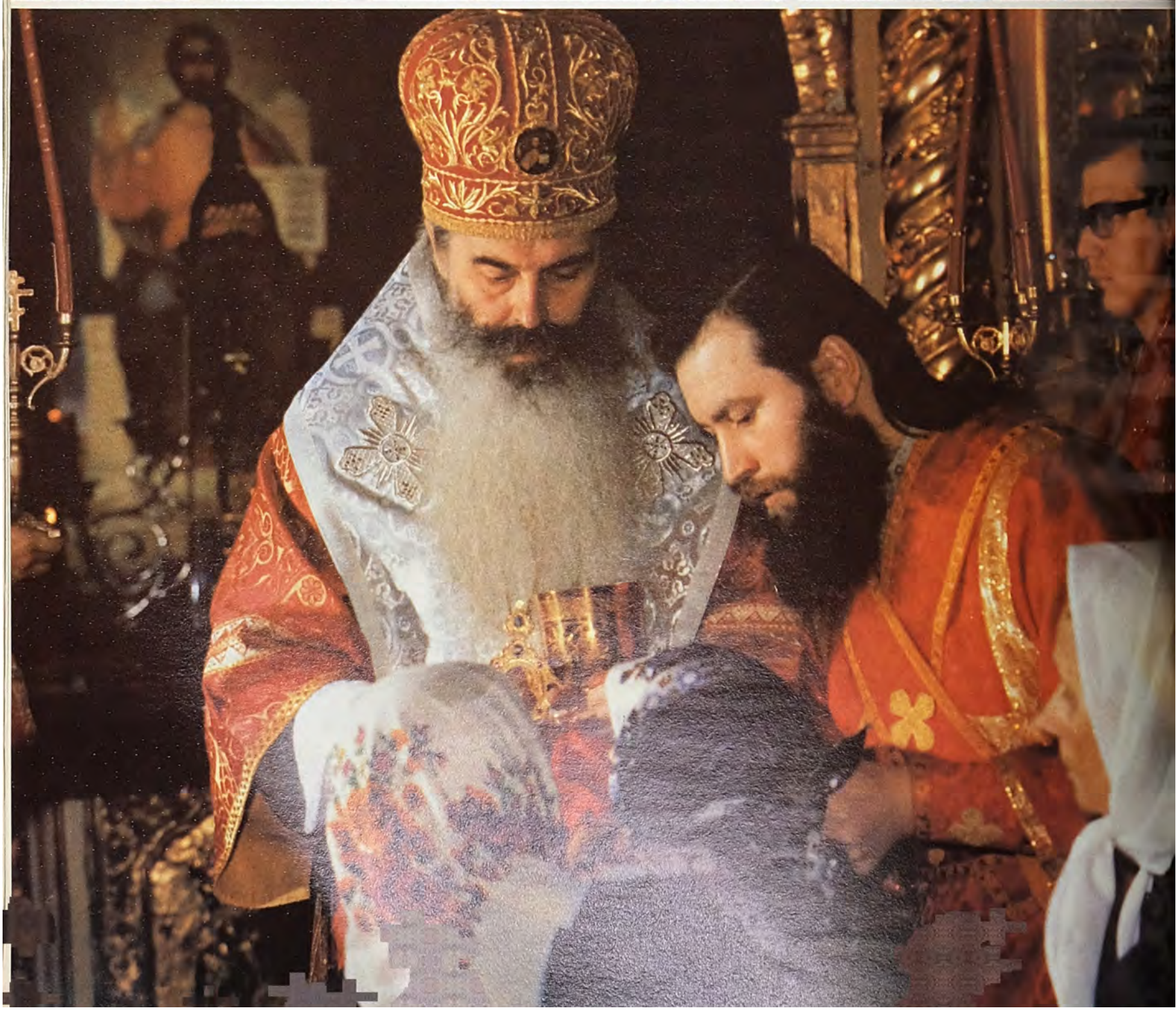
The excellent drawing revealed by infrared rays serves as indubitable proof of Raphael's authorship. *The Holy Family* is extremely typical of the artist's work. Raphael embodied in it his ideas of human beauty and perfection.

In 1979 the residents of Washington, D.C., Los Angeles and New York were able to view the works of the Italian Renaissance from the State Hermitage Museum. Among the 11 paintings on loan from Leningrad were works by Leonardo da Vinci, Andrea del Sarto and Titian. Raphael's *The Holy Family*, which Pushkin called "a painting of extraordinary charm," was also on display.

The Holy Family (The Virgin and Child with the Beardless St. Joseph),
by Raphael. c. 1506. In the State Hermitage Museum, Leningrad.

Conestabile Madonna,
aphael. c. 1502.
e State Hermitage
eum, Leningrad.

The Troitse-Sergieva Mona
in Zagorsk draws thousand
its Russian Orthodox festi
Bottom: Archbishop P
of Volokolamsk giving Comm



respondent Elya Kvochkina interviews Archbishop
im of Volokolamsk, chairman of the publishing
artment of the Moscow Patriarchy of the Russian
odox Church. Their conversation took place in
former Novodevichy Monastery in Moscow, which
serves as one of the residences of the church.

WE ARE
LL UNITED
Y LOVE
OR OUR
HOMELAND"

Kvochkina: Your Grace, first I must thank finding the time to receive me. Let me ask me questions concerning the Russian Or- Church in the Soviet Union.

Soviet Constitution guarantees citizens of untry freedom of conscience, that is, every- free to practice any religion or no religion How do believers use their rights?

ishop Pitirim: They use them in every re- One who has faith subjects his life to us canons shared by fellow believers. Pro- g religion requires a certain steadfastness rmness; it requires arranging one's life in mity with traditional religious norms and rving ancient religious laws in modern so- amily and professional contexts. A believer tinguished by his inner life. A true believer beys biblical commandments is not only a ssor but also a priest as well. The Soviet itution guarantees freedom to worship in respect.

Kvochkina: Soviet law has special codes protect believers from infringement upon rights. Any form of discrimination against ers or use of force to persuade them other- is prohibited. How is this observed in lity?

ishop Pitirim: The violation of constitu- norms is not tolerated, but especially not ministrative bodies. If they violate the law, fic measures are taken—warnings, fines and taction.

Kvochkina: Who oversees observance of the protecting believers?

ishop Pitirim: The Council on Religious Affairs of the Soviet Government. It monitors enforcement of the law with the help of its representatives and examines all disputes. Not one request or complaint goes unconsidered.

Elya Kvochkina: Would you say that cases of believers' rights being violated are unusual and rather rare occurrences?

Archbishop Pitirim: Positively. A person cannot go outside the bounds of the law with impunity. The prosecutor's office and the courts don't exist for nothing. You must understand that religious beliefs are part of an individual's inner life, and unless they come into conflict with the law, they remain the private property of the believer. The state in no way establishes the religious beliefs of its citizens, but it does punish very strictly violations of religious laws.

Elya Kvochkina: Has legal action ever been taken against a religious figure?

Archbishop Pitirim: In recent years there have been some trials of clergymen of various faiths. I would not like to name them, but they are well-known. Legal action was taken against them not because of their religious beliefs, but because they violated laws on religion. Some evaded community registration; some printed illegal literature in underground printing houses and distributed it; some used the position of a pastor and religious activity to advance ideas discrediting the Soviet system and the Soviet state. These people are serving sentences of different terms. In some cases repentance was taken into consideration, and the individuals were not punished.

But I would like to mention some examples of another kind. I think it would be of some interest for SOVIET LIFE readers to know that the Russian Orthodox Church is the largest religious body in the country. Thirteen metropolitans, 27 archbishops and 35 bishops sit at the head of its 76 eparchies. Some eparchies have as many as 1,000 parishes. Most Orthodox priests coming to the pulpit in the name of God fulfill their duties quite well. They conduct services, preach, confirm new members, teach them the Commandments, hear confessions, give Communion and baptize people without coming into conflict with the law.

I would like to emphasize that it is not the relations between the church and the state that comprise the essence of our religious life and define the degree of its spirituality. I have been lecturing at the Moscow Theological College and Academy for 30 years. Hundreds of my students have been ordained and now preach in bishop's or priest's robes.

Elya Kvochkina: The Western press often raises the question of a growing religious movement in the Soviet Union, referring to it as kind of a "religious boom." What would you, as one of the leading figures of the Russian Orthodox Church, say about this?

Archbishop Pitirim: I have belonged to the church my whole life, and I must say that the Orthodox church has always been active and full of life. Our churches have always been spic-and-span. They are carefully cleaned by the parishioners' own hands. But the most important thing is that they have always been full of people.

But now we are witnessing a new phenomenon,

A procession of students from the Moscow Theological College and Academy. Below: An Orthodox service in the Troitse-Sergieva Cathedral in Zagorsk, northeast of Moscow.

The Pokrov Monastery in Suzdal.

which can be fully comprehended from the inside, that is, from a cleric's point of view. The church has always been replenished with young people, but my generation and my elders were mostly successive church members following family traditions. While the people of my generation had parents or grandparents who were believers, nowadays the grandchildren of unbelieving grandparents sometimes come to the faith. And so their turning to the church is beyond tradition. This phenomenon raises other questions, but it is nevertheless profound and interesting and it imposes a great responsibility upon both sides: upon the young people coming to church and the parish priests and hierarchs who admit them into the bosom of orthodoxy. We should not speak of a quantitative "boom," but we should speak and think of a qualitative addition to the church. In general, I would say religiousness is difficult to explain.

Elya Kvochkina: Let me ask you something that relates to your role as head of the publishing department. How are the clergy's requirements for religious literature met?

Archbishop Pitirim: Every religious group has the right to publish the literature it needs. In some faiths this matter is solved by publishing one or two prayer books. However, the Russian Orthodox Church has a large number of prayer books.

I have been at the head of the publishing department of the Moscow Patriarchy for almost 20 years. Much has been done in that time. The fourth edition of the Bible has been issued. Many books that were published when I assumed this post are now in their second edition. We are conducting a lot of research. We study manuscripts and theological books compiled as far back as the sixteenth and seventeenth centuries.

The editorial staff has increased five-fold since I have been working here. When I took over the editorial board, there were 20 people here. Today there are more than 100.

The prayer books for the parishes of the Russian Orthodox Church are published annually. Those who read *The Journal of the Moscow Eparchy,* which comes out in Russian and in English each month, have an idea of our church life. The journal publishes sermons, theological studies and information on the vast international contacts of the Russian Orthodox Church.

Each year we issue a church calendar. Among the periodicals prepared in our publishing department is *Theological Works.* On the pages of this collection are printed the studies of professors and lecturers in our theological schools, theologians here and abroad, the teachings of the holy fathers and religious scholars. These collections are widely known and arouse invariable interest.

In connection with the forthcoming celebration of the millennium of the Christening in Russia in 1988, a commission headed by Patriarch Pimen has been set up. For the occasion we are planning to publish materials that appeal to serious interests as well as materials for a wide audience of Christian believers.

We will soon release a popular book called *The Russian Orthodox Church* in Russian and in English. It will be our present for the tenth anniversary of His Holiness Patriarch Pimen's election to the Moscow Patriarch's seat.

There are theologians on our editorial staff who combine work in our office with lecturing at the Moscow Theological Academy and conducting regular services. We also have former students of theology on our staff and graduates of secular schools and institutes.

A new building for the publishing offices is just being finished. There we will have a studio to make documentaries for our students and parishioners.

Recordings of the monastery choir as well as of the best choirs in Moscow and Leningrad have been released.

Elya Kvochkina: How does the Russian Orthodox Church satisfy its needs for personnel?

Archbishop Pitirim: We have three theological seminaries, which are secondary educational institutions with four-year courses, and two theological academies that are higher educational institutions, also with four-year courses. Quite naturally, these are mainly schools for the clergy. But life requires priests to be more than clerics. They must be up to the demands of the modern world. For this reason our educational institutions offer weekly secular lectures on various problems of modern life—the international situation, the development of technology and the conquest of space, economic and ecological problems and questions of social structuring.

Elya Kvochkina: Does this mean that believers are not outsiders but active participants in the life of the country, and that they enjoy full rights?

Archbiship Pitirim: Yes, along with all our people believers take an active part in constructive labor. Our society knows no class struggle or division between rich and poor. It is based on equality.

Our believers realize their religious convictions not only by prayer, but also by serving their neighbors and their country. A creative and constructive atmosphere unites them with all t working people of our country, draws them gether in their great love for their native la We are all united by love for our homeland a love for humankind.

Elya Kvochkina: The peace-making activity of Russian Orthodox Church is well known. W are its sources and its foundation?

Archbishop Pitirim: In the quietness of churches and in the joyousness of our celeb tion services, we have begun every service fo centuries with the Prayer for Peace on Earth the life of our church. The words which C spoke to his disciples—"Peace I leave with my peace I give unto you" and "These thin command you, that ye love one another"—t are the foundations of our Christian outlook contribute the strength of our faith to that and good cause, which we want to secure consolidate together with all people of good the people of the United States of America cluded.

I have been to the United States several ti The last time was in 1980. I had talks with dreds of people. I could feel their profound cern for preserving peace, and I was convin that the leading people of the antiwar mover are religious people who combine their pro sional activity with faith.

Elya Kvochkina: The peace-making activities church representatives does find support fr the Soviet Government, doesn't it?

Archbishop Pitirim: In this connection I wo remind you of the fact that in his report to Twenty-sixth Congress of the Communist Party the Soviet Union, Leonid Brezhnev once mo pointed out the importance of cooperation amon all progressive forces, religious groups included in the cause of safeguarding peace and democ racy. A number of decisions made by our gover ment testify to the favorable reception of th Russian Orthodox Church's activity directed preserving and consolidating peace. This has bee stressed more than once in congratulatory mes sages from the government to Patriarch Pimen His Holiness has been awarded state honors fo his work. All of these happenings are closely related; they demonstrate that the future of ou citizens and the people of the whole world i dependent upon a peaceful path.

f Shayevich, assistant rabbi of the Moscow
al Synagogue, is interviewed by Avtandil
adze. Together the two men explore the history
e synagogue and how engineer Shayevich
to be Rabbi Shayevich.

ROM ENGINEER
O
RABBI

ABBI, is it O.K. if we have a glass of champagne in the synagogue during the wedding ceremony?" asked a slightly tipsy best man, who was surrounded by a group of noisy and ex-
oungsters.
alom! Could I please have a divorce certifi-
asked a young man carrying a violin case
his arm and smiling bashfully. "I want to
rried for the second time."
like this every day here," remarked Adolf
vich, assistant rabbi of the Moscow Choral
ogue.
bi Shayevich invited me into his study in
nagogue after the morning service. He sat
old high-backed chair. A slight man, he
a gray striped suit and a yarmulke. He
much younger than his 43 years.
e questions you heard are, of course, not
st complicated of those I have to answer,"
Shayevich continued. "Some are much
complicated. Then I have to search for the
rs in books. It's good that we have a large
here. We have more than 20,000 volumes
ish religious publications, among which are
rather rare books."
bi Shayevich regards answering questions
is congregation on various religious rites and rituals as one of the most important duties he performs. In addition, he also receives a lot of mail with questions from religious communities and individuals from all over the country. Most of the questions, of course, concern interpretations of different passages from the Torah or of prayers, the kosher properties of a new food product, what prayers to say for the dead, and so on.

For the Needs of the Congregation

"Of course, the publication of religious literature plays an important role in spreading religious teachings," Rabbi Shayevich remarked. "Each year our synagogue prints a Judaic religious calendar. In 1979 we published the Pentateuch in 5,000 copies, and 1980 saw the third edition in the past 10 years of the Sidur prayer book titled *Peace,* edited and with comments by the late chief rabbi of the Moscow Choral Synagogue, Yehuda Leib Levin.

"We place orders for all these publications with a state printing shop, which we have a contract with through the Council for Religious Affairs of the USSR Council of Ministers.

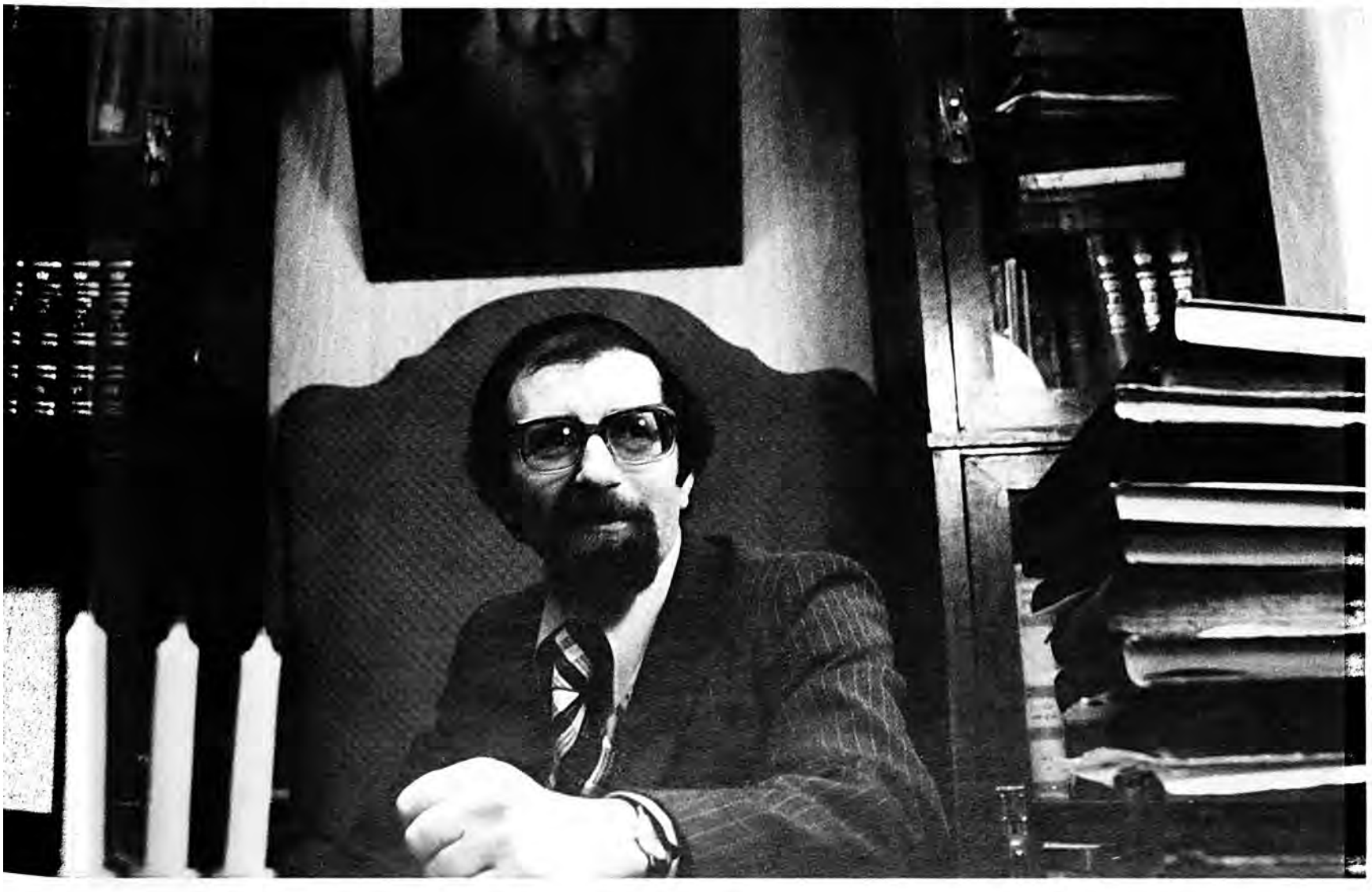
"Thus," Rabbi Shayevich explained, "we are able to supply all our congregation with the necessary religious publications and other articles of worship including, for example, tallithim, phylacteries and mezuzoth, all of which we get on an exchange basis from religious communities in other socialist countries. Our synagogue supplies many of the 90 Jewish communities with literature and ritual articles."

Rabbi Shayevich emphasized that all of these articles of worship are inexpensive and that all the congregation can afford to buy them."We take into account," he said, "that old-age pensioners make up the overwhelming majority of believers, and that is why the synagogue boards have set minimum prices on all religious and ritual articles."

Here are several figures from a catalogue that the rabbi showed me. The Pentateuch costs 10 rubles; the prayer book, 5 rubles; a tallith costs 15 rubles; and a phylactery 5 rubles.

Rabbi Shayevich also stressed that the board of the Moscow Choral Synagogue lowers the prices of religious literature and articles of worship that it sends to other communities in the Soviet Union by 50 per cent to enable these communities to replenish their treasuries. "In fact," Rabbi Shayevich continued, "the Moscow Choral Synagogue has become the recognized religious center of the Jewish religious community in the country, which puts a greater responsibility on us." ▶

Succoth, a Jewish harvest festival, is celebrated in the Moscow Choral Synagogue.



Chief Rabbi Yakov Fishman of the Moscow Choral Synagogue saying the Prayer of Peace at a Passover service. Facing page: The synagogue, built in 1890. It has a large chapel with galleries for women and seats 2,000.

Extensive Ties

Rabbi Shayevich talked at length about the extensive ties that the Moscow Choral Synagogue maintains with synagogues and communities in many other countries.

"Our community has quite a number of friends in Western countries," he said. "Among these I would like to mention Rabbi Arthur Schneier of New York, who is the founder and president of an organization called Appeal to Conscience, which unites people of different creeds in the United States. Then there is Rabbi Pinchas Teitz from Elizabeth, New Jersey, and Rabbi Yitzach Hechtman from Montreal, Canada. These people have visited the Soviet Union several times as guests of Moscow's Jewish community and other religious Jewish communities in our country. In turn, our representatives frequently go abroad to visit."

Rabbi Shayevich spoke with particular enthusiasm about his trip to New York in May 1976 for the bicentennial of the United States as a member of a Soviet religious delegation. He was still a student at Budapest's Yeshiva at the time. On that same trip he was invited to go from New York to Canada as a guest of the Montreal Jewish community.

"We also stay in close touch with some of the Jewish communities in Western Europe. We correspond and exchange greetings on religious holidays," Rabbi Shayevich continued. "We often get letters from Jewish believers in different countries asking us to describe the life of our community and to write about the Moscow Choral Synagogue. Since we get so many letters like this, we decided to put out a booklet about our synagogue in several foreign languages," he said, pointing to a large pile of galley proofs on his desk.

A Bit of the Synagogue's History

I knew that the Moscow Choral Synagogue had a rather interesting history, and so I asked Rabbi Shayevich to tell me about it.

The Moscow Choral Synagogue was built in 1890 with the oral permission of the chief of police under a plan endorsed by the Moscow guberniya board. Before this Moscow had five little Jewish prayer houses that, all in all, accommodated only several hundred people.

One of the conditions stipulated that the building should not tower over the other structures surrounding it. A gifted architect named Eiboschitz (he was the architect of several colossal administrative and commercial buildings in Moscow) artfully circumvented that demand by making use of the steep slope of the street (which is no more than 300 meters long) on which the synagogue was to be built. Today the street is named after Russian artist Abraham Arkhipov. Despite the monumental nature of the synagogue with its powerful colonnade, which was erected in the middle part of the street, it naturally could not tower over the buildings in the upper part. Nevertheless, soon after the construction work was completed the authorities suggested that the majestic dome be taken down. This was immediately done. And still the synagogue was not opened. The building was regarded as illegal since the chief of police denied ever giving oral permission.

Rabbi Minor and a man named Schneider, who headed the community and insisted that the synagogue be opened, were banished from Moscow on the order of Czar Alexander III. The community was ordered to sell the building by January 1, 1893, or turn it over to a charitable organization.

After that the building was occupied by a trade school, a two-year Jewish Talmud-Torah school, a hospital and other tenants. Between each new occupant the building stood idle for some time. Only 15 years later, when the revolutionary events of 1905-1907 had reached their peak, was official permission finally granted for a synagogue to be opened in the building.

The synagogue has a large chapel with galleries for women. It can seat as many as 2,000 people. It is decorated with majolica tile, mosaic panels and gilded bronze ornaments. It also has a smaller chapel, special premises for the mikvah, or ritual bath, a slaughter room and a kosher kitchen. Not far from the synagogue is a matzoth bakery. The synagogue also has a Yeshiva, which is currently training five students.

At present the synagogue has a paid staff of 37, which includes two rabbis, Chief Rabbi Yakov Fishman and his assistant, Rabbi Adolf Shayevich; Boris Gramm, chairman of the community board; two members of the board; two cantors; a slaughterer; a kosher cook and four shammosim. The staff also includes cleaning women, electricians and technicians who keep the synagogue clean and running normally.

Back to the Disciplined Life

"Had anybody told me back in 1958, when I was working as a tractor driver for a state farm in the Jewish Autonomus Region, that I would become a rabbi one day, I would have laughed and brushed it off as a joke. At that time I determined to become an engineer, and I did come one," Rabbi Shayevich remarked.

Adolf Shayevich was born in 1937 in Khabarovsk, in the Soviet Far East. He went to school in Birobidzhan, the administrative center of the Jewish Autonomous Region.

After graduating from school in 1957, Adolf his classmates volunteered to work at a state farm, where he learned to drive a tractor. Two years later, having passed competitive entrance exams, he enrolled at the Khabarovsk Polytechnic Institute. From there he went on to get a job as an engineer. He was successful in his career and in the early seventies became chief engineer of a building trust. In general, his life was similar to that of millions of other Soviet young men.

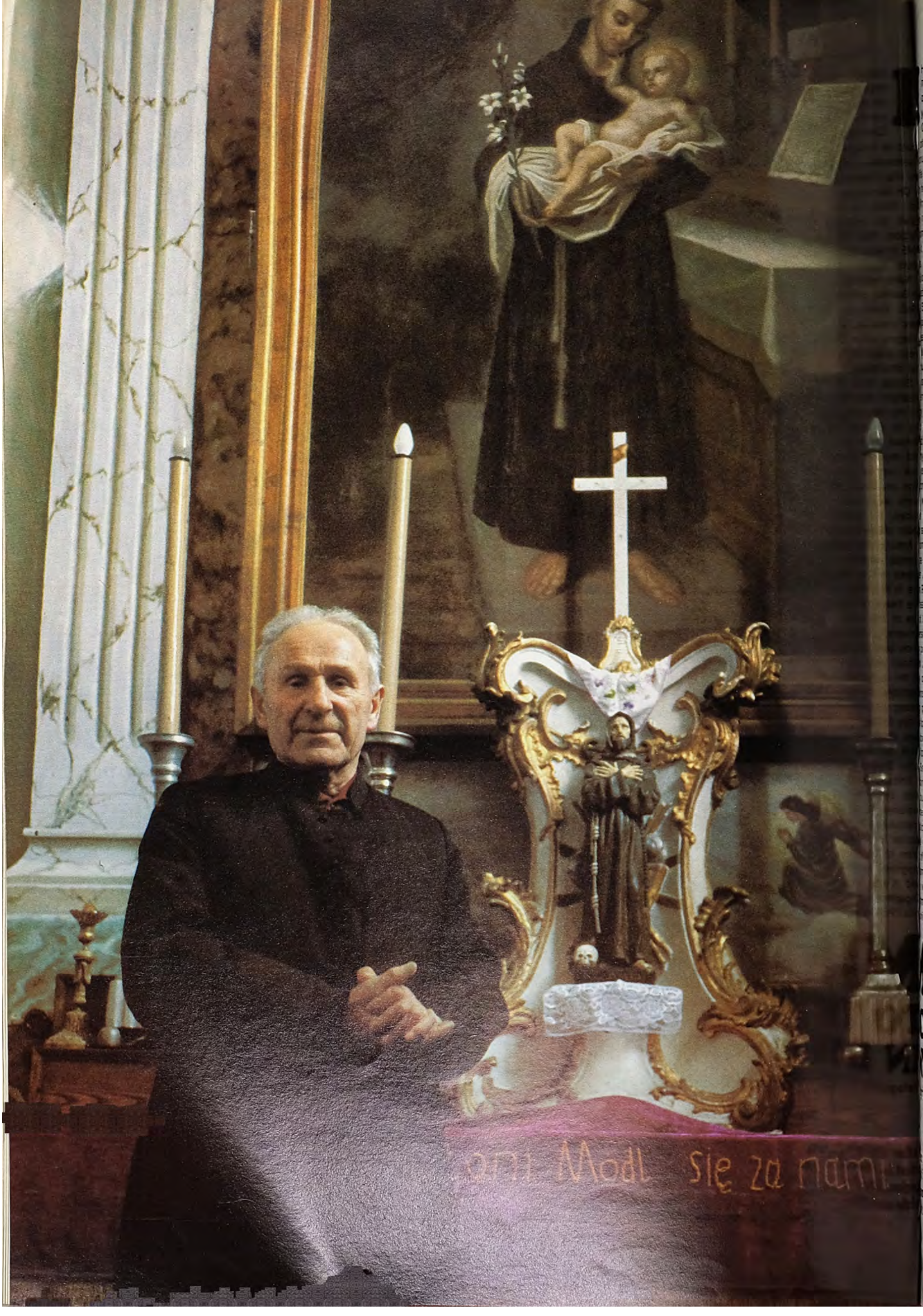
"The big change in my life came in the summer of 1972, when I took two months of leave and decided to visit friends in Moscow," Rabbi Shayevich explained. "They turned out to be really religious people who retold the Torah and the Pentateuch to me and took me to synagogue. At first all this only aroused curiosity in me. But gradually I became more and more interested in the content and meaning of Judaism and began to regard it seriously. When I learned that the Moscow Choral Synagogue was enrolling students for the Yeshiva, I applied and was accepted.

"The following year, 1973, Yefim Levitis, who is now the rabbi of a synagogue in Leningrad, and I were sent to Budapest to study at the Yeshiva there. Incidentally, this is one of the most prestigious religious educational institutions in Europe and it has recently celebrated its centennial. The dean, Professor Alexander Sheiber, is a prominent Judaic theologian and a great friend of our community.

"I spent six years studying," Shayevich continued. "Finally in March 1980 I received my diploma. The presentation ceremony was attended by Chief Rabbi Yakov Fishman and Boris Gramm, chairman of the community, who made a special trip from Moscow.

"I got married while I was studying in Budapest. My wife, Katalin Sobo, also a Jew, is a graduate from the Budapest Pharmacology Institute this year."

I might add to Shayevich's story that, as assistant rabbi of the Moscow Choral Synagogue, he conducts practically all of the regular services in order to ease the load on Chief Rabbi Yakov Fishman, who is getting on in years, and to ensure an active and uninterrupted religious life in his congregation.


Módl się za nami

MINISTERING TO THE CATHOLICS IN BYELORUSSIA

ographs by Victor Drachyov

er Boleslav Gavrikhovsky, a Roman Catholic st in the village of Gozha, Grodno ion, Byelorussia, writes about his experiences e meeting the needs of the faithful.

I HAVE spent most of the 77 years of my life meeting the religious needs of the people of my parish. During almost half of these years I was the head of various large Catholic parishes, which are typical of of those located in the Western regions of ussia, the Ukraine, Lithuania and Latvia. In I have seen a lot, good and bad.

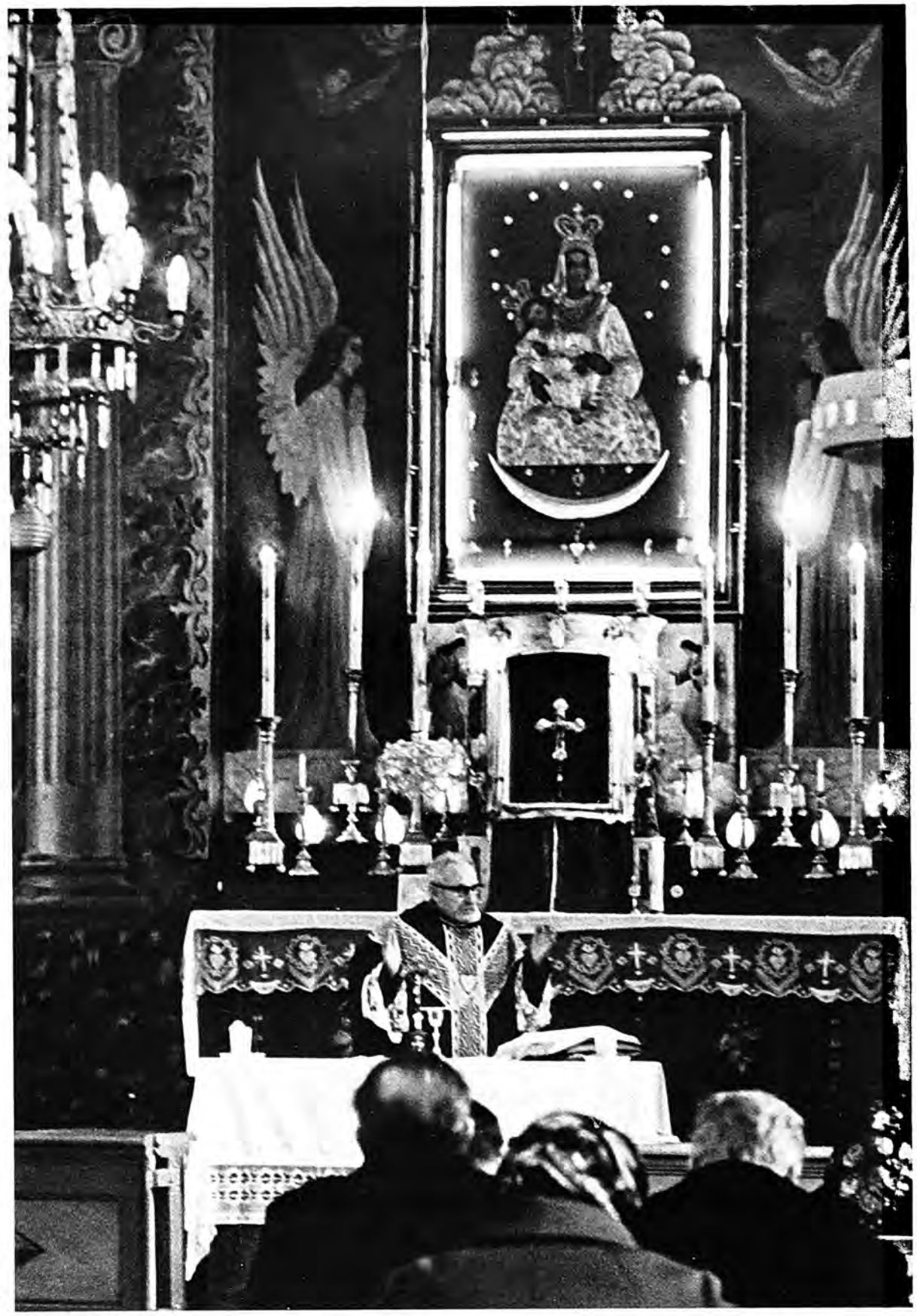
wo occasions I had to close down my par- rst, in 1944, when Hitler's army burned my church in Ozery, a village in Grodno h. We took great pains to restore it, but in was blown up again by a group of nation- Again we restored the church.

onalists also raided the parish in the village ha, where I was sent to work as a priest in Soon the raids were stopped. During the ostwar years, when the ravaged towns and s were being restored, the Soviet Govern- also allotted us materials for the repair of urches.

e that time the number of churches in rn Byelorussia has not declined, although impression that the number of people go- church has decreased. Each time I go d with other representatives of our faith, I nyself comparing churches. Our churches ust as good, if not better, than those in for- countries. Many of our churches are partic- well cared for because they are master- s of architecture and have been placed state protection.

ong our parishioners are people of the most e walks of life. For example, the Yanule- s are a very religious Catholic family who Polnitsa, a village not far from my parish. ead of the family is an old friend of mine. f his sons is a third-year student at Grodno rsity. Both daughters of Yuli Lebed, another parishioners, have graduated from medical l and are physicians now. Of course, none congregation would regard these as ex- ns to the rule. Our faith does not prevent people from choosing paths other than followed by their parents, and the state, in does not choose the road to education and for them. They enjoy the same rights all Soviet citizens enjoy.

fortunately, many of the old priests have but I am happy to say that they are being ced by young graduates of special religious utions like the theological seminary in Riga, al of Latvia, for example. Its five-year pro- of study does not differ at all from those rams used at Catholic universities in Rome s very similar to the one I followed at the rtment of Philosophy and Theology of Vil- University.



Facing page and above: Father Gavrikhovsky at the altar of his church. Left: The exterior of the Roman Catholic Church in Gozha.

In the Gozha village office Father Gavrikhovsky (center) discusses the needs of his parish with Alexander Lukyanov (left), chairman of the Village Soviet, and Konstantin Kardash, chairman of the Iskra Collective Farm, one of the largest farms in Byelorussia.

Of course, the work of seminary studen... much easier now than it was when we st... They have a wide selection of religious literat... including the *Decrees of the Second Va... Council,* at their disposal. We have receiv... number of new books for priests and laype... from Vatican City.

People of all religions—and I have seen ... for myself—are united by a respect for hum... life that is truly sacred. This feeling might ... stronger in me because I have witnessed t... world wars and have experienced so much.

One day during World War II the Nazis dr... 15 of us Catholics into a pit to bury us aliv... began to absolve the sins of the people ch... around me. By some miracle I lived. I managed ... get out of the pit that we were buried in ... escaped unnoticed. But I still remember the ... words of each of them: "May this terrible ... sacre never be repeated in the world!" To... day I end each service with these words.

Father Gavrikhovsky never misses the evening news. Above left: Father Gavrikhovsky (right) and Fyodor Zelenkevich, a worker at Iskra, have known each other for years.

RESTORING THE CATHEDRAL OF THE ASSUMPTION IN VLADIMIR

By Inna Zhukova
aphs by Lev Ustinov

FEW MEDIEVAL Russian buildings can rival the Cathedral of the Assumption in Vladimir for dramatic history. The town of Vladimir is located 200 kilometers southeast of Moscow. The Cathedral was burned five times. Three times Tatar-Mongol hordes stripped the gold from its cupolas and stole the precious church plate. Its tin roof was melted down for bullets, and its whitestone walls and arches were crisscrossed with cracks. In 1238 the Mongols burned alive the local Prince's entire family on the Cathedral's gallery.

For hundreds of years the Cathedral of the Assumption remained the model for churches built in Moscow. For eight centuries, since 1160, services have been held regularly in the Cathedral. For the past three years, however, there have been no choirs singing or no candles burning within its walls because restoration and preservation work is being carried on inside and out. The largest functioning church in Russia is being restored jointly by the Soviet Government and the Russian Orthodox Church.

A New Face

The restorers say that they have never before encountered such complicated work as in the Cathedral of the Assumption. Although the building was in decay by the eighteenth century, no serious reinforcement work had ever been done. Services were held in the Cathedral only during the warm seasons of the year. After the current restoration work is completed, the Cathedral will be open for services and tours year-round.

The price of the restoration work will be close to two million dollars. The government is providing expensive materials like gold at cost.

The Cathedral will remain whitestone as it was in the twelfth century. This soft stone is difficult to clean. It has to be done by hand with brushes because the stone will not hold up under mechanical cleaning. A heating system will be installed, and the existing ventilating system will be replaced. Powerful air conditioners will regulate the temperature and humidity.

The roof of the church will be covered with sheets of two-millimeter-thick copper riveted by hand. The new roof should last for centuries. It will not require a coat of paint, nor will it rust. Previously, only the main helmet-shaped cupola was covered with gold, but after the restoration the remaining four onion-shaped cupolas will be covered too.

Special attention has been focused on the restoration of the precious frescoes by the great Russian painter Andrei Rublyov. In 1976 and 1977 new fragments of his paintings were discovered. The finds created a sensation.

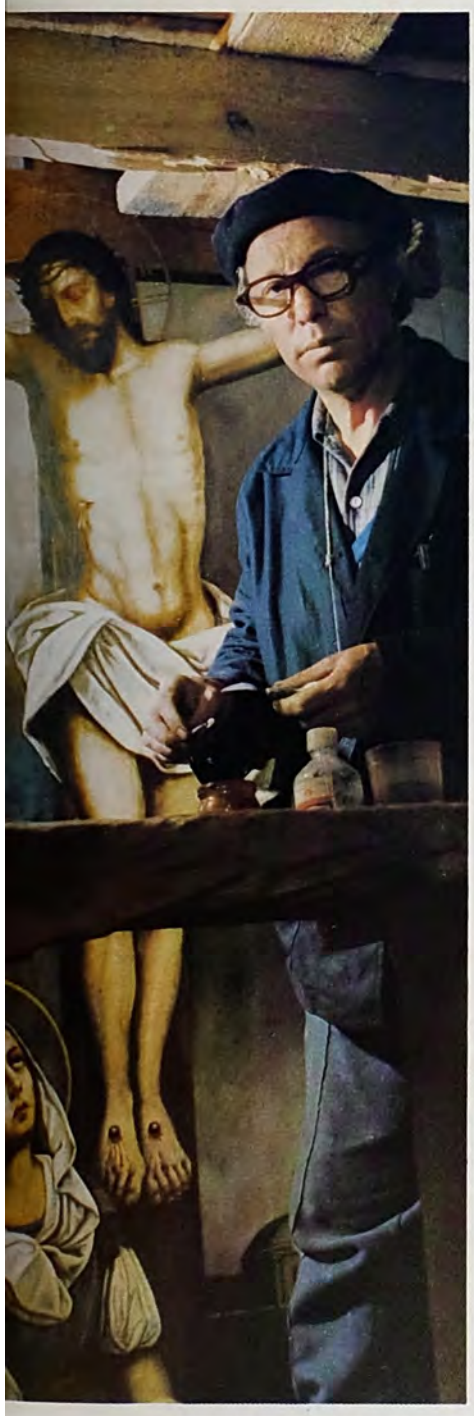
Guaranteed for Centuries

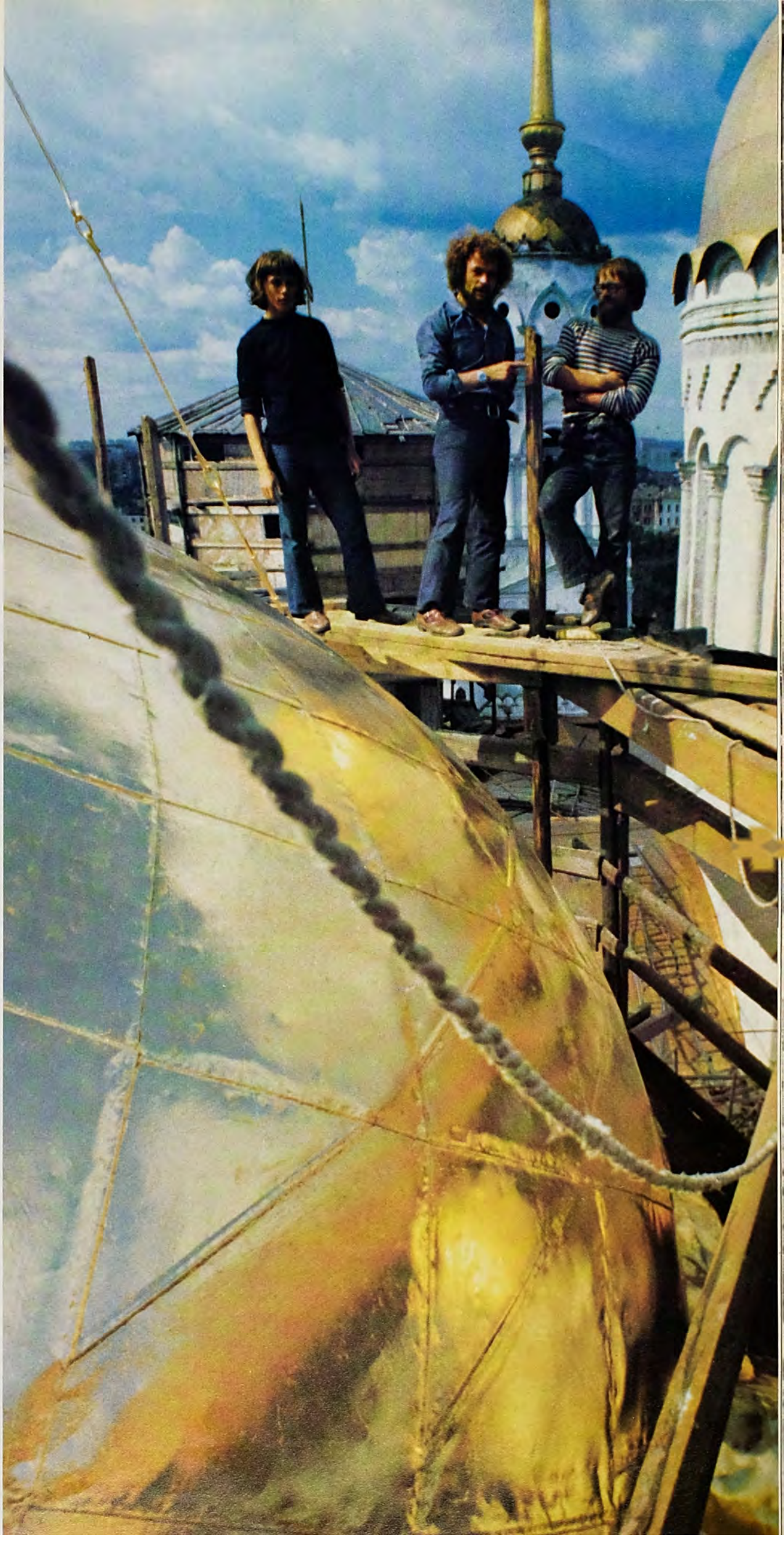
There was some disagreement between repre-

Skilled craftspeople are restoring the original beauty and luster to the Cathedral of the Assumption in Vladimir. Right: The restoration is a joint project of the Russian Orthodox Church and the Soviet Government. Left to right: Alexander Nekrasov, chief restorer, Archbishop Vladimir and Igor Stoletov, chief architect.

of the church and the state about restoration work was to be completed. ch authorities thought that it could be e quickly. However, the researchers and who participated in the preliminary d inspection of the building did not ey thought that speed would be harm- all, the preservation and conservation of t date back to the twelfth and fifteenth are at stake, works that at the moment most critical and unsafe condition. And es especially for the frescoes by

nnot permit anyone to hurry in restoring y discovered masterpieces by Andrei commented Alexander Nekrasov, chief of the Cathedral. "In general, in this town, where one out of every two build- monument of history and culture, we k to guarantee the quality of restoration ries." ■



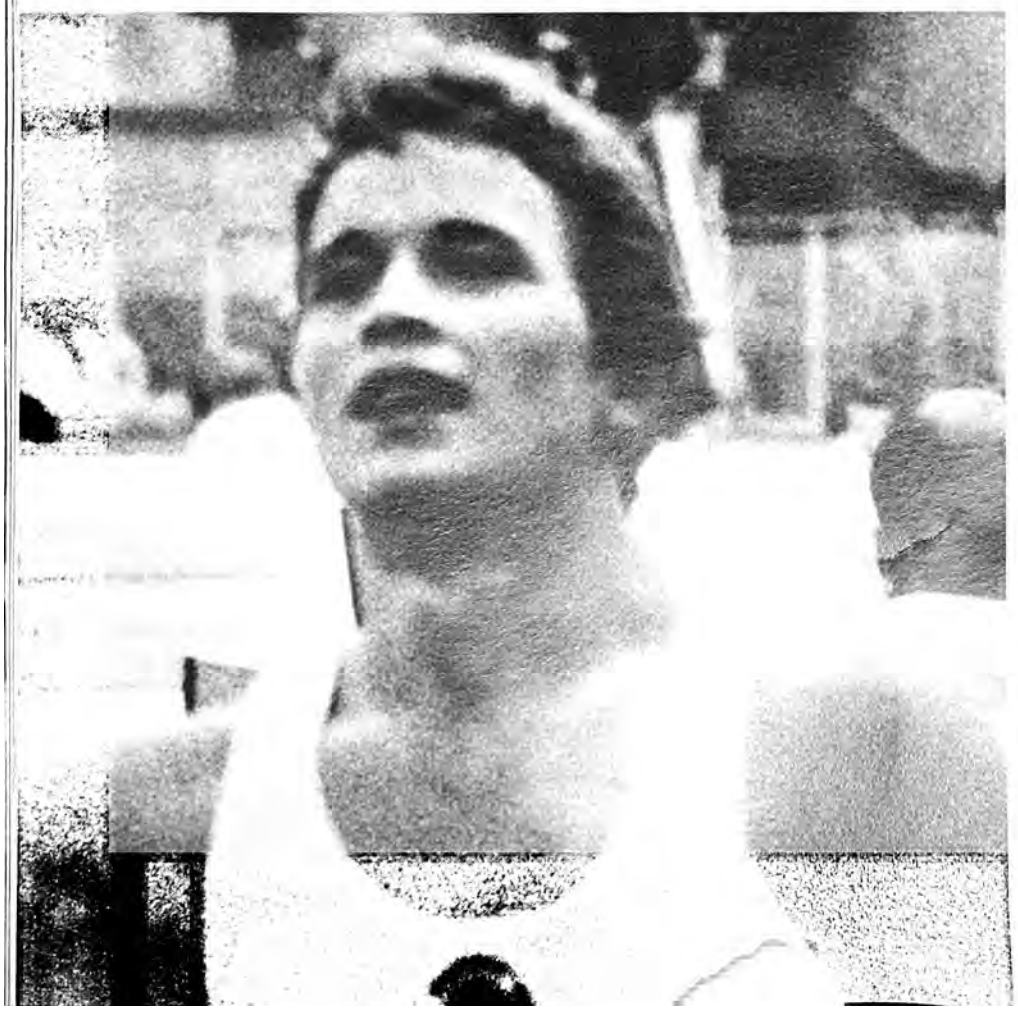


Chief restorer Alexander Nekrasov cautions against undue speed in completing the Cathedral, much of which dates back to the twelfth and fifteenth centuries. Right: The Osipenko brothers are gilders. They will cover not only the main cupola with gold, but also four other onion-shaped cupolas.

At the 22nd Olympic Games the 23-year-old gymnast won gold medals in over-all competition, in team competition and on the rings. He took silver medals on the horse, the horizontal bars, the parallel bars and the horse vault. And he captured a bronze in the floor exercise.

ALEXANDER DITYATIN: A PROFILE

By Alexei Srebnitsky
Photographs by Vladimir Fedorenko



SOVIET GYMNAST Alexander Dityatin was the all-round champion at the 1980 Olympics in Moscow. He racked up eight medals, more than anybody else in the Games.

According to all the sports experts, not just talent and skill, but emotional stability helped Alexander to win the top Olympic laurels.

Alexander Dityatin was born into a family that has a strong work ethic. His father is a repairman, and his mother an assembly worker. Both have worked for years at a plant in Leningrad.

Alexander is a junior at the Leningrad Physical Culture Institute. Someday he will probably teach physical education or coach or conduct research. What is his choice?

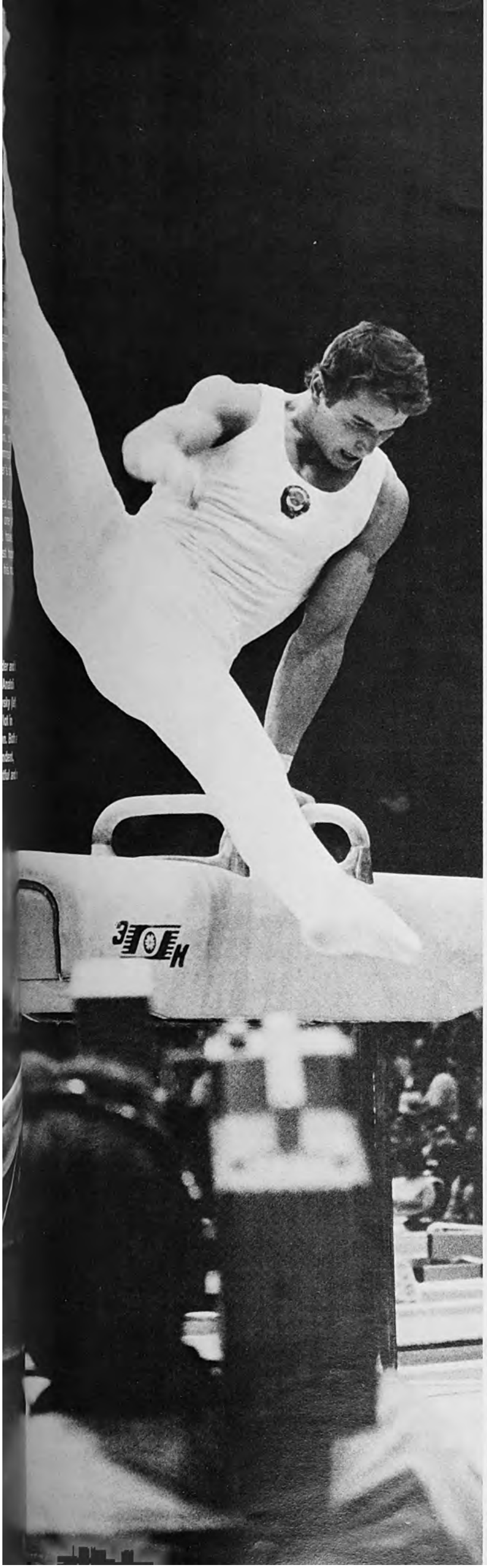
"So far I haven't given it much serious thought," he says. "I'm enjoying being a student. For at least another year it will be school and gymnastics for me."

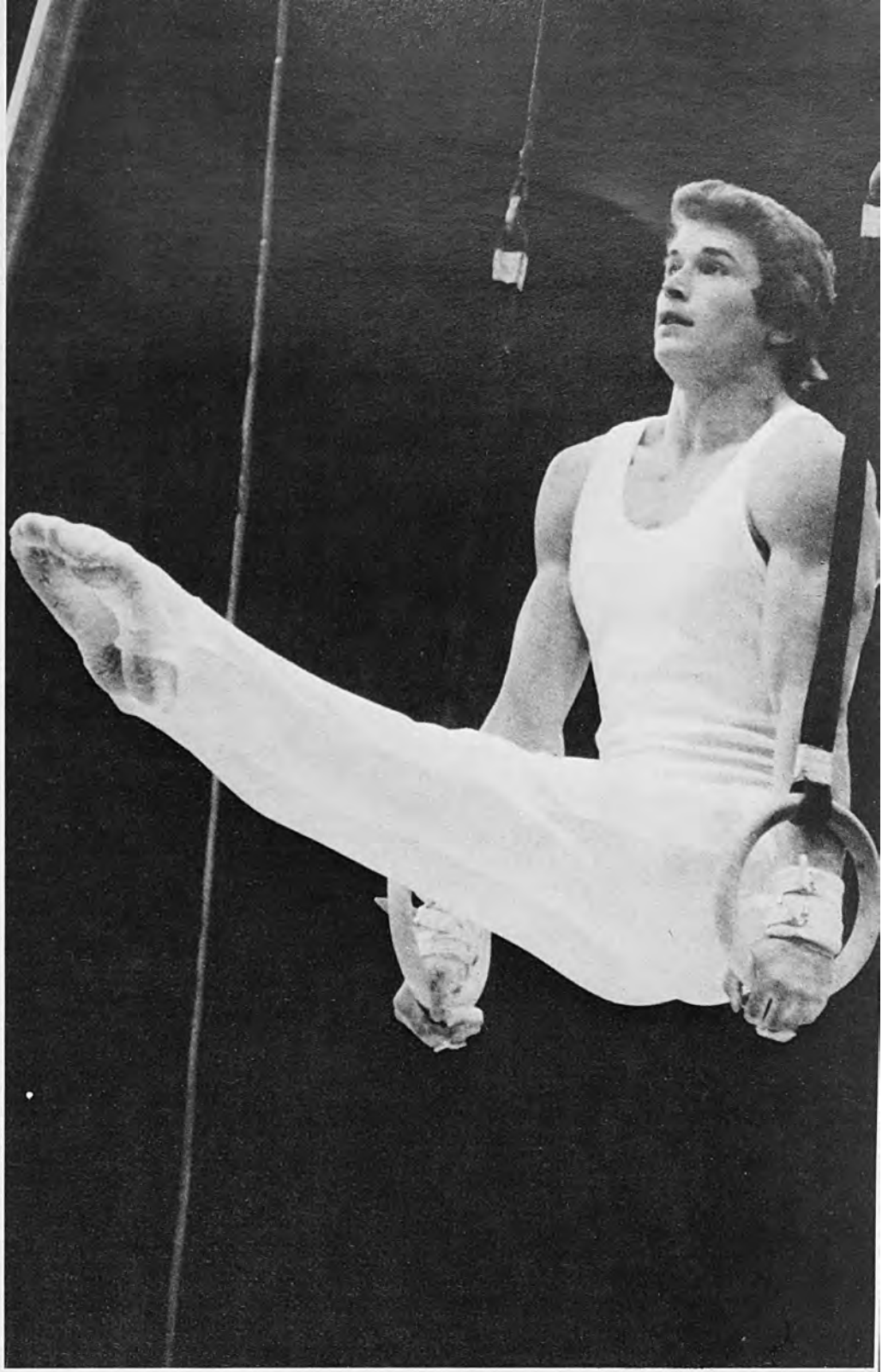
Asked who his favorite gymnasts are, Alexander responded, "I have two. One is Victor Chukarin, who performed in the late forties and early fifties. I only know about him from films and stories from older people. I admire his courage. The other is Mikhail Voronin. His every move is elegant."

Dityatin's career in gymnastics wasn't all roses. Colleagues smiled when Anatoli Yarmovsky, a coach at a sports school for children, enrolled nine-year-old Alexander and promised to make him a champion. The thin, ungainly boy didn't seem to have the makings of a star gymnast. However, the young coach discerned the third grader's stick-to-itiveness and uncompromising character.

Even before he was 16, Alexander was regarded as a contender. Then all of a sudden he grew 12 cm. in one year to reach a height of 178 cm. Other boys would have been happy about it, but not an enthusiastic gymnast hoping to make the big time. "He was growing fast, but his muscles ▶

Alexander and his coach, Anatoli Yarmovsky (left), have a lot in common. Both are independent, thoughtful and modest.





Describing the geometry of Alexander Dityatin's movements on the rings, a *Washington Post* sports writer once likened him to a big white bird. Left: Lord Killanin presents Dityatin with a medal at the 1980 Olympics.

Alexander and his son Alyosha, who's now a "terrible two." The Dityatins live in Leningrad.

remained the same," Yarmovsky recalls. It's harder tall boy to perform complicated pirouettes, jumps and than one of medium height. Yarmovsky continued to with Alexander. He turned his height into an advantage.

Yarmovsky singles out Alexander's independent th as one of the keys to his success. "He doesn't take thing on trust. He must be persuaded before trying a in an element. If he thinks that it doesn't fit him, you c dissuade him. In such cases he usually suggests his variant, and often it proves right."

After his brilliant Olympic victory Dityatin intended to a little rest. But following the Summer Games, Soviet nasts had a 45-day tour of Latin America. "I missed my Alyosha most of all," Alexander admitted once he was home. "During the last few weeks I just couldn't wait to with him." In August the Olympic champion turned 23 his son reached the magic age of two.

Alexander and his wife Elena share many interests. She also studies at a physical culture institute. She majors track and field.

What are the champion's hobbies? "I'm embarrassed," says, "but I still enjoy reading science fiction, detective stories and thrillers. I also like fishing. Even if nothing biting, I can sit for hours on end with a rod and a

Another sport Alexander has taken up is synchronized swimming. He is also fond of ballet and doesn't miss a play. At the theater he tries not to think about how a movement of a dancer on stage could be used in his exercises.

CLIPSE RAWS CIENTIFIC ROWD

and photographs by Larry Bohlayer

JULY 31 much of the Soviet Union was eated to the spectacle of a solar eclipse. he vast portions of Asia witnessed only phases, those observing along the path of clipse saw the entire Sun blocked by the or well over a minute. The path, roughly es wide, extended from the Black Sea the southern part of the Soviet Union and o the Pacific Ocean, ending near the an Islands.

e the best viewing is obtained where the high in the sky, many scientists and ir astronomers gathered at sites midway path of totality. Dr. Vitali Bronshten, Sci- Secretary of the All-Union Astronomical eodesic Society of the USSR Academy of es, coordinated the efforts of numerous expeditions in selecting viewing locations. the sites, Bratsk, in Siberia, offered favor- observing for the American, Japanese, ian and Spanish groups.

ore sunrise on eclipse day all were aboard bound from Bratsk across the reservoir to tion called Tarma that was actually on the line of the eclipse. Once there, the 250 ational viewers prepared an impressive of photographic equipment as well as ex- experimental apparatus for the fleeting nts of totality.

ing totality a thin cloud was lying in the f site, but it did not hamper most of the graphic or visual efforts. Beautiful pink nences projected from various points on the edge) of the Sun. The corona (or outer phere of the Sun) was glorious in its white, y appearance and extended millions of outward from the Sun's disk.

ortunately, many of the other eclipse site ons were clouded over. Several veteran vers at Bratsk said that it was one of the beautiful eclipses in recent years.

few days before the eclipse, one of the ican groups visited the Moscow Planetarium, Dr. Portsvetsky, the director, presented a ation of the eclipse.

er the eclipse, the same group was given a welcome at the Pulkovo Astronomical Ob- tory outside Leningrad.

e Americans had high praise for the hospi- offered by the Soviet people. Don Trombino, r of an American group, cited the extensive aration made at the Bratsk observation area indication of the detailed planning that went making the trip an enjoyable experience. ■

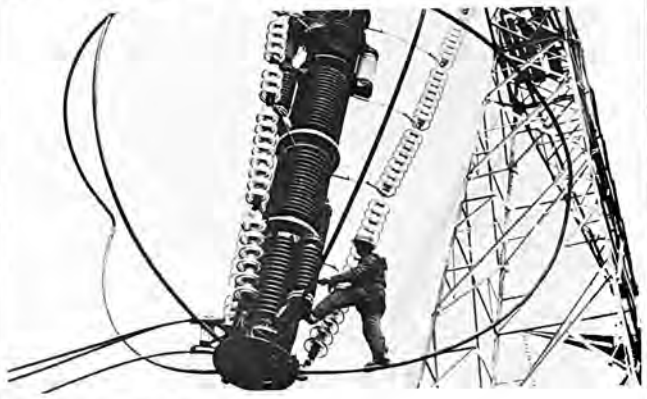
A group from the Canary Islands used liquid nitrogen to cool equipment and film in order to increase the sensitivity to light.

The Canadian expedition site at Tarma. Before the eclipse everyone was busy setting up, checking and rechecking equipment.

THE SIEGE OF LENINGRAD

900 Days of Heroism

Six hundred thousand Leningraders died of starvation alone, but the people would not surrender to the Nazis. Journalist Ivetta Knyazeva was only a child then, but like everyone who lived through the siege, she will never forget those tragic days. She reminisces about the blockade 40 years ago in an article in the November issue.



BIGGER ROLE FOR NUCLEAR POWER

New Safety Measures Developed

There has not been a single serious accident at a Soviet nuclear power plant since the first one was put into operation more than 25 years ago. The annual exposure to radiation of people working at such plants is less than that received during a routine X-ray examination. But in spite of this, there is no complacency about nuclear energy in the USSR. An article next month describes measures being taken to guarantee its safe production.

THE PHOTOGENIC GENNADI BASHTANYUK

Filling Our Readers' Requests

There was a photograph of a handsome young worker of the Kama Truck Plant on the cover of our February issue. A number of readers asked for an article about him. So here it is with more pictures.

COMING SOON

Kirghizia—Journey to a Mountainous Land

THE MOSCOW THEA
OF MIME AND SIGN LANGU

Scenes from Ci
(above) and Vanka-V
The *vanka-vsta*
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SOVIET LIFE

NUCLEAR POWER STATIONS
SAFETY FIRST

BLUE STONES OF KHIVA

November 1981 • $1.25

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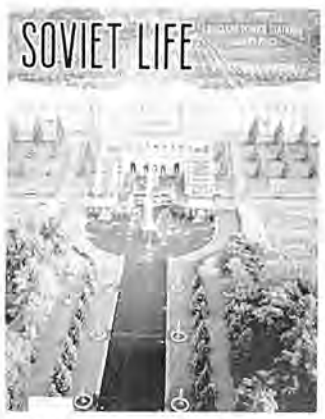
24 Vladimir Pereventsev tells us about the man in our February cover picture.

50 Poet Yevgeni Yevtushenko reviews the ballet based on Dostoyevsky's novel *The Idiot* choreographed by Boris Eifman, at right.

November 1981, No. 11 (302)

SOVIET LIFE

The magazine SOVIET LIFE is published by reciprocal agreement between the governments of the United States and the Soviet Union. The agreement provides for the publication and circulation of the magazine SOVIET LIFE in the United States and the magazine AMERICA in the Soviet Union.



Front Cover: The Grand Cascade in Petrodvorets contains two staircases, 37 gilded statues and 64 fountains.

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An important announcement to our readers

DUE to steadily rising production costs over the past few years we were forced to raise the cover price of SOVIET LIFE to $1.25 a copy beginning with the June 1981 issue. We did so reluctantly since it has always been our wish to bring our readers the finest magazine we can produce at the lowest possible price. For that reason we did not immediately increase the subscription price and seriously hoped that it would not be necessary to do so. Unfortunately, we must now increase that price, too, effective January 1982.

The increases are modest, and we believe you will agree that even at the new, slightly higher subscription price, SOVIET LIFE represents a remarkable value.

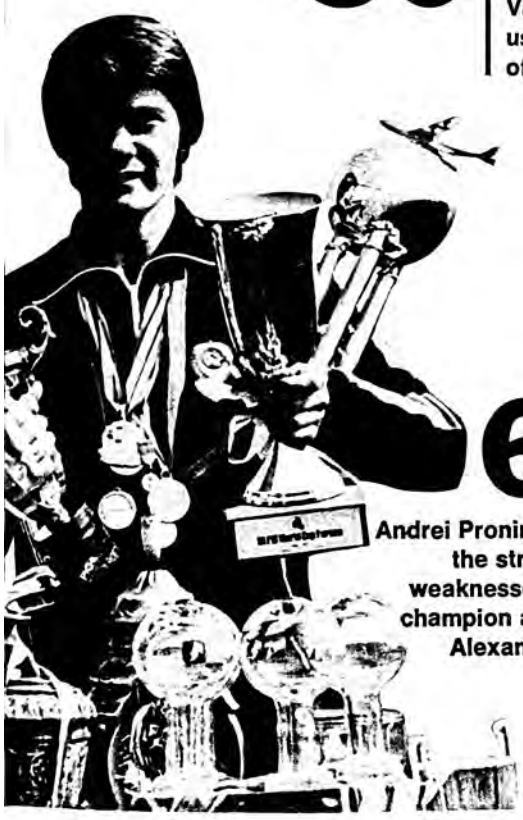
Please note, however, that all subscriptions entered prior to January 1982, will continue to be honored at the previous price for the full length of their term. (For example: If your present subscription runs until December 1982, you will not be asked to pay the new price until your subscription is renewed in August 1982.)

The new subscription prices are as follows:

1 year @ $8.35 (only about 69¢ a copy—you SAVE $6.65 off newsstand price!)
2 years @ $15.35 (only about 64¢ a copy—you SAVE $14.65 over newsstand price!)
3 years @ $19.50 (only about 54¢ a copy—you SAVE $23.25 over newsstand price!)

30 A sightseeing tour of an exotic city. Photographer Vadim Gippenreiter brings us the architectural treasures of nineteenth century Khiva.

2 Vladimir Gurevich explains the care with which nuclear power technology is being developed in the USSR.



64 Andrei Pronin describes the strengths and weaknesses of USSR champion alpine skier Alexander Zhirov.

20 An article by Svetlana Orekhova on the USSR's exchange program.

4 This is what the Grand Castle and fountains in Petrodvorets looked like after the Nazis looted and destroyed it. Ivetta Knyazeva recalls the terrible 900 days of the siege of Leningrad.

EDITOR'S NOTES

OUR country is celebrating the sixty-fourth anniversary of the October Revolution this month. It is difficult to say definitely whether this is a lot or a little. The question is: What shall we use as a measure? The number of years? It is not very much —less than the average life span of a human being. The magnitude of achievements? It is overwhelming.

People follow the custom of giving gifts to each other on their birthday. But to give gifts on the birthday of a country is rather rare. Yet this has become a tradition in our country among our people.

I have in front of me the latest issue of the newspaper *Vechernaya Moskva.* The banner headline reads: "Let us fulfill the year's target by November 7." Some readers will probably ask me: What's the purpose of that? Wouldn't it be better to fulfill the planned assignment toward the close of the year?

No, it wouldn't. The point is that our people need even higher living standards and more material benefits produced over and above what is planned.

This explains the impatience with which we await the report of the Central Statistical Board on plan fulfillment. Its dry figures represent the tremendous effort made by the people, who are giving a collective present to the country on its birthday.

We have become accustomed to considering that the rising standard of living of our people is an objective law and that in our country it is jobs that look for workers, not vice versa.

These things are precious to us, as they were to those who precisely 40 years ago were defending Moscow from the nazi hordes. I was in Moscow in that grim November of 1941. We shall never forget the words of a soldier defending the capital: "There is nowhere to retreat. Moscow is behind us!"

Memory is a great thing. It keeps the hatred for war fresh in the minds of the Soviet people. And it will keep the words President Franklin D. Roosevelt prepared for his Jefferson Day radio address in 1945: "More than an end to war, we want an end to the beginning of all wars."

"I have been reading SOVIET LIFE for three years and have enjoyed every copy, with the exception of those issues that favored construction of nuclear power plants. I happen to take a very dim view of atomic energy." In response to this letter from Nathan Sauberman of Virginia, Vladimir Gurevich explains the development of nuclear power in a socialist state, where industry is not privately owned.

NUCLEAR POWER STATIONS: SAFETY GUARANTEE

By Vladimir Gurevich

THE SOVIET UNION has pioneered the use of nuclear power engineering for peaceful purposes in all spheres. It constructed the first nuclear power station, the first nuclear icebreakers and the first breeder reactor. It was the first to begin researching controlled thermonuclear power stations, and it will soon be the first to use nuclear power for the production of residential heating.

Yet in terms of the number of nuclear power stations in the USSR compared with the West, the Soviet nuclear industry developed at a slower pace in its initial stages. Although the West began to build such stations later than the Soviet Union, it built them faster.

The world's first atomic power station—it had a capacity of 5,000 kilowatts—was put into operation in the town of Obninsk near Moscow in 1954. The second Soviet nuclear power plant, the Sibirskaya, was built four years later. It was not until the mid sixties, however, that the Soviet Union began building bigger nuclear plants.

Although the process was quite slow at the beginning, this can hardly be attributed to backwardness on the part of Soviet technology. Nuclear power development was slow because the Soviet Union, having cheap and then easily available ordinary fuel, opted for a balanced approach in developing nuclear power technology and decided first to scrupulously study the reliability and safety of nuclear power, work out all the necessary precautionary measures and consider the various ways to dispose of nuclear waste.

According to Academician Nikolai Dollejal, one of the inventors of the world's first reactor for a nuclear power station, maximum attention was paid to radiation safety during the construction of the Obninsk plant. To a considerable degree this served to shape the prestige of the nuclear power industry.

During the 15-year development of nuclear power, Soviet physicists have had a chance to provide it with a solid foundation for fast and steady growth. So, when priority growth was recognized as economically feasible, Soviet nuclear power was prepared to face the challenge.

Wait-and-See Period

Some people believe that the development of nuclear power production is inevitable. Academician Mikhail Styrikovich, a leading Soviet energy expert and the honorary vice chairman of the Executive Committee of the World Energy Conference, thinks the point is not the inevitability of the further growth of nuclear power, since world power resources are far from exhausted, but rather its economic feasibility, because nuclear power seems to be the best way to solve the global energy problem.

If Soviet nuclear physicists were not quite sure they could make the quickly growing nuclear power industry reliable enough, its economic feasibility would have been disregarded in favor of safety. A different and safer way, though less effective and more expensive, would have been chosen. So when after a lengthy wait-and-see period the Soviet Union finally decided to go ahead with developing the nuclear power industry, the decision was made after carefully considering the possibility of avoiding all risks.

As far as the economic aspects of the problem are concerned; it is not that the Soviet Union, having suddenly found itself facing an energy crisis and grabbing at the last opportunity to avoid it, has decided to boost its nuclear power industry. Although its fuel and energy consumption is high, the Soviet Union has vast resources. It, therefore, has less reason to worry about the problem than the majority of developed countries.

And yet the extraction of fuel has become costlier and more difficult because most fuel resources now available in the Soviet Union are located in the eastern and northern parts of the country. What is more important, they are thousands of miles away from the consumers, which are concentrated mostly in the European part of the USSR. In the past few years the country's European part has been made increasingly dependent on fuel supplies from remote areas, mostly from Siberia. It is easy to understand the problem this creates by imagining that the United States produced half of its oil, gas and coal in Alaska and had to ship them in growing amounts to Maine or Ohio, for example. Nuclear power stations, built chiefly in the European part of the USSR, will help solve this problem. Naturally, they also help save expensive organic fuels (the equivalent of 15 million tons of oil in 1980).

It is expected that from 1981 on, nuclear reactors will account for the growth of the power industry in the European part of the USSR as well as hydroelectric power stations. In 1975 nuclear power produced 3.2 per cent of all the electricity generated in the European part of the [illegible] in 1980 it generated 10 per cent, and by 1990 it is expected to gen[illegible] third of the electric power to be produced in this part of the coun[illegible]

Prospects for the Eighties

In the current decade nuclear power plants will be developed [illegible] priority rate, and their share in the national energy balance will g[illegible] accordingly. They will generate most of the energy increasingly requ[illegible] by consumers.

This year one of the world's biggest nuclear power stations, the Le[illegible] gradskaya, will attain its designed capacity—four million kilowatts. It [illegible] four channel-type reactors with a capacity of one million kilowatts ea[illegible] Even bigger nuclear stations will be built in the Soviet Union in the n[illegible] future. One of them, the Ignalinskaya Plant in Lithuania (six million [illegible] watts), will be equipped with 1.5-million-kilowatt channel-type reacto[illegible] Similar power plants will be built in other areas of the country.

Meanwhile, Soviet nuclear power engineers are increasingly using [illegible] so-called water-cooled reactors. Such reactors, each with a capacity [illegible] 440,000 kilowatts, have already been operating successfully at a numb[illegible] of power plants in the Soviet Union and plants built by the Soviet Un[illegible] abroad. Water-cooled reactors with a capacity of one million kilowa[illegible] will soon be off the production line. They incorporate the latest te[illegible] scientific achievements as well as the most up-to-date engineering so[illegible] tions ensuring greater reliability and higher efficiency. Experts in the fi[illegible] regard this major achievement of Soviet designers as a new stage in t[illegible] development of nuclear power. The first such reactor has already be[illegible] put into operation at the Novovoronezh plant in the center of the Europe[illegible] part of the Soviet Union. An increasing number of nuclear power plan[illegible] will be provided with such reactors. For example, in the Ukraine alo[illegible] five will be put into operation in the next five years.

Fuel

The world's growing nuclear power industry has made nuclear fuel [illegible] increasingly acute problem. We can prove the advantages of nuclea[illegible] power plants over those burning traditional fossil fuels by the fact th[illegible] the daily amount of atomic fuel consumed by the former can be carrie[illegible] by a couple of men, while the latter require a couple of trainloads of co[illegible] or oil every day. But the problem is that modern nuclear power plants a[illegible] run on uranium-235, whose resources are rather scarce. Meanwhile, th[illegible] world's resources of uranium-238 are about a hundred times vaste[illegible] Uranium-238, as well as thorium (both available in great quantities), c[illegible] be used in breeder reactors. Breeders not only generate power but als[illegible] produce plutonium as a by-product. Plutonium can also be used as n[illegible] clear fuel. So by helping to solve the problem of atomic fuel for hundre[illegible] of years to come, breeders open up fresh vistas for the development [illegible] nuclear power.

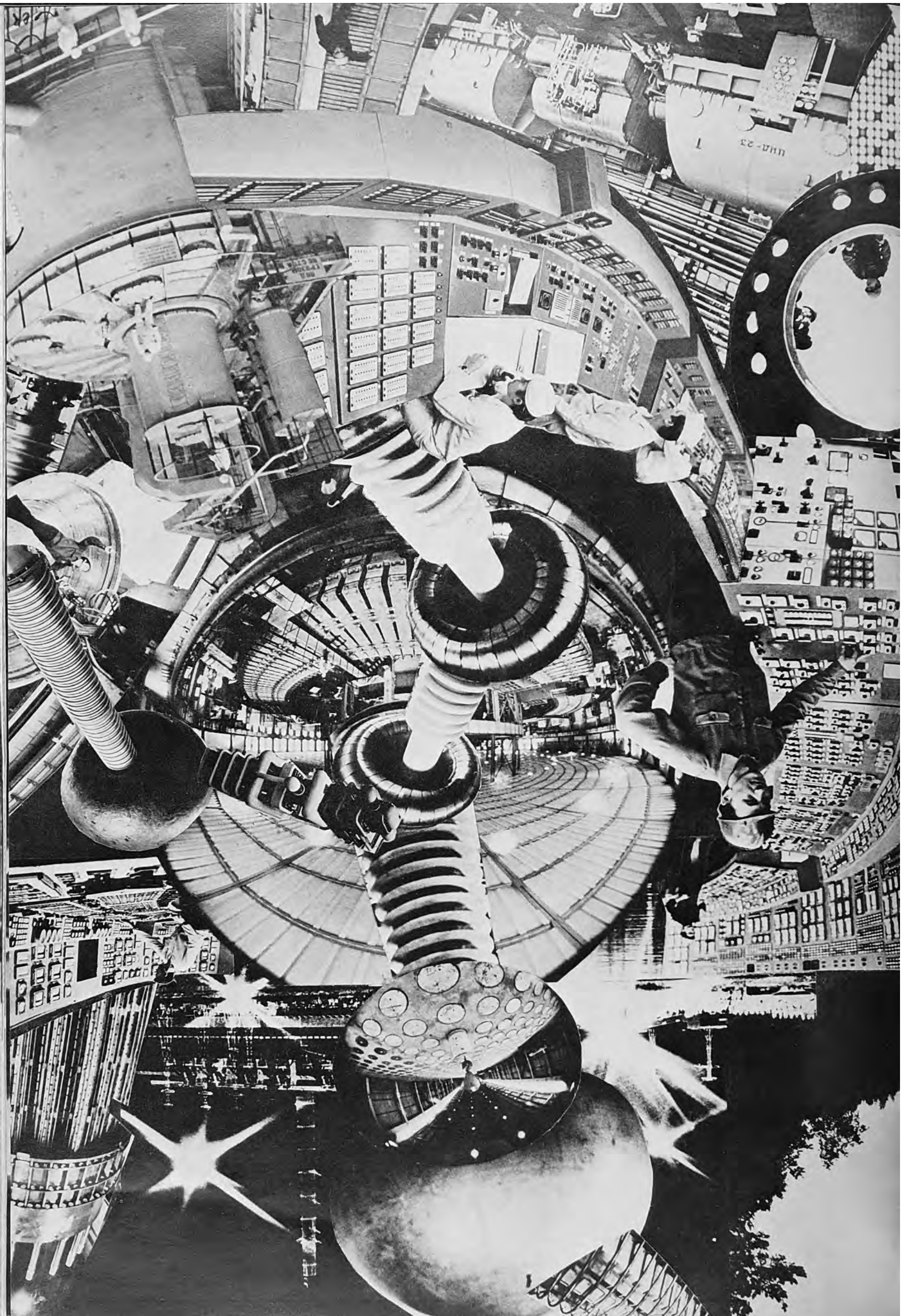
Physicists in France, West Germany, Great Britain, Japan, and India ar[illegible] currently working on the development of breeder reactors. The idea of th[illegible] fast neutron breeder reactor was first proposed by Soviet physicist Alex[illegible] ander Leipunsky in 1949. In the mid-sixties a research breeder was buil[illegible] in the Soviet town of Obninsk. It had a capacity equal to that of the firs[illegible] nuclear power plant—5,000 kilowatts. In 1969 Soviet physicists put a large[illegible] research breeder into operation in the town of Dmitrovgrad on the Volg[illegible] which made it possible to develop similar breeders for industrial purposes[illegible]

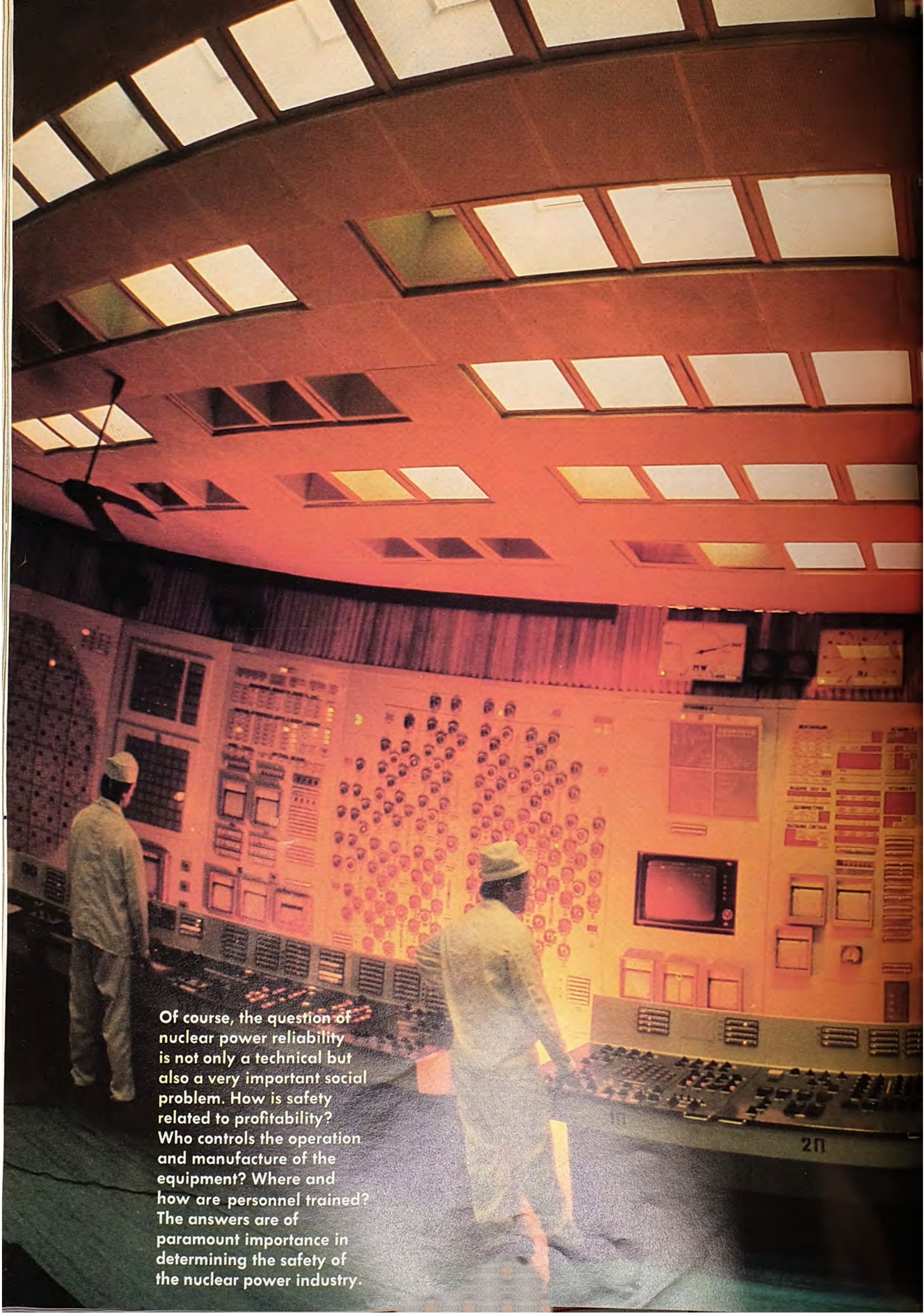
Four years later a breeder with a capacity of 350,000 kilowatts was pu[illegible] into operation in the city of Shevchenko in Kazakhstan on the desert[illegible] peninsula of Mangyshlak in the Caspian Sea. The breeder not only ge[illegible] erates electricity but also ensures the operation of several distilling inst[illegible] lations supplying water to the city (population 100,000), which has bee[illegible] turned into a green oasis.

Finally, early in 1980 one of the world's biggest breeder reactors wi[illegible] a capacity of 600,000 kilowatts was put into operation at the Byelova[illegible] skaya Plant in the Urals. Soviet physicists intend to develop breeders w[illegible] a capacity of 800,000 to 1.6 million kilowatts, but they still have a numbe[illegible] of technical problems to solve before they'll be able to develop th[illegible] optimum breeder reactor.

Thermonuclear Power Stations

The energy yielded by thermonuclear fusion is one of the most gran[illegible]





Of course, the question of nuclear power reliability is not only a technical but also a very important social problem. How is safety related to profitability? Who controls the operation and manufacture of the equipment? Where and how are personnel trained? The answers are of paramount importance in determining the safety of the nuclear power industry.

The control panel of the Leningradskaya nuclear power station, one of the biggest in the world. Its designed capacity is four million kilowatts.

A loading machine in the reactor hall.

Although the process was quite slow at the beginning, this can hardly be attributed to backwardness on the part of Soviet technology. Nuclear power development was slow because the Soviet Union, having cheap and then easily available ordinary fuel, opted for a balanced approach in developing nuclear power technology and decided first to scrupulously study the reliability and safety of nuclear power, work out all the necessary precautionary measures and consider the various ways to dispose of nuclear waste.

scientific and technical projects in history. Once mastered, it will n unlimited source of energy for the entire world. The primary ma- of thermonuclear fusion are ordinary sea water and lithium, avail- n the Earth in any amount required by the world's power industry. rium is easily obtained from water, and tritium from lithium. To put ply, the fusion of their nuclei produces this unique source of energy. ough the problems facing scientists are great, the development of monuclear power industry is considered a realistic goal. According tr Neporozhny, USSR Minister of Power and Electrification, the first onuclear installations to produce electricity and heat will most prob- start operating during the nineties. Academician Yevgeni Velikhov, President of the USSR Academy of Sciences and head of the Soviet am for controlled thermonuclear fusion, also believes that the first onuclear electric power station will not start generating electricity dustrial needs in less than 15 to 20 years. It is expected that such ns will only be used on a larger scale in 30 to 40 years' time.

viet physicists have developed a very promising installation, the nak (widely believed to be a prototype of the future thermonuclear ic power station), which provides one basis for research being ucted in many countries, including the United States. Soviet scien- also invented laser-controlled thermonuclear fusion. Since research s field is extremely expensive and complicated from the technical of view, it is being conducted on an international scale. The idea nitiated by Academician Igor Kurchatov, who was a prominent Soviet cist and the first to report Soviet research in controlled thermonu- fusion at the British Atomic Energy Research Establishment in Har- in 1956. Before that, countries doing research in this field classified findings.

How Many Roles Does the Atom Play?

e generation of electricity by nuclear power plants is not the total sion, however. Even if all electric power plants in the Soviet Union converted into nuclear plants, which is hardly possible, the con- ption of traditional fossil fuels would be cut by only 20 per cent. The of atomic energy to produce heat, and also in metallurgy, the chemi- ndustry and for transportation, involves more than just the develop- : of nuclear power plants.

far as transport is concerned, the USSR already has several big ear-powered icebreakers. All the vessels have proved very reliable. e has not been a single case of radiation leakage. Nevertheless, the ling of the new atomic icebreaker *Rossiya*, currently under way at the ngrad Shipyards, will require even more rigid control over radiation y because of the use of new automatic tracking devices. Transport o vessels will also be provided with nuclear engines. According to oli Alexandrov, President of the USSR Academy of Sciences, in the 10 to 15 years nuclear power may be extensively involved in the uction of hydrogen to be used as fuel for aircraft and other means ansportation.

t it is in the production of heat that nuclear power is expected to the most important role. The Soviet Union consumes 50 per cent e fuel to produce heat than to generate electricity. The USSR has eered the use of atomic power for the production of heat. In 1974 the insk Combined Nuclear Electric-Power-and-Heat-Generating Plant, a capacity of 48,000 kilowatts, was put into operation in the arctic n of the Far East. Both the electricity and heat it produces are suc- fully used for the area's domestic needs and for the extraction of on the Chukchi Peninsula.

ven more important are nuclear heat-producing plants. The first ex- mental station of this kind, with a 5,000-kilowatt capacity, was into operation at the Research Institute of Nuclear Reactors in trovgrad in 1979. Two such stations with a capacity of one million watts each are currently being built in Central Russia, near Gorky and onezh. Each one will heat an area with a population of 300,000 to 000. It is expected that by 1990 there will be nuclear heat-producing nts in other parts of the country. When these are put into operation, Soviet Union will be able to save roughly a third of all oil produced in country.

uclear heat will be cheaper than heat produced by burning fossil s. Nuclear power plants are also highly competitive compared with plants operating on coal and *mazut* (low-grade oil). As the price of oil continues to rise, nuclear power will become economically more attractive.

True, nuclear power is becoming more expensive, too, because of the increasing cost of safety measures. The Soviet shielding devices with three or four backup systems, closed-circuit water cycle and other such precautions, account for nearly half the cost of a nuclear power station. However, Soviet engineers will not skimp on safety measures. Profitability estimates of Soviet nuclear power plants take into account reliable safety devices. To make operating them cheaper and more economical, Soviet designers plan to use standard equipment and designs and more powerful reactors. The development of nuclear engineering will be of decisive importance in solving this problem.

Standardization of Equipment

The Soviet Union already has large nuclear engineering factories. The Izhorsky Plant in Leningrad is one of them. Early this year, the first nuclear reactor was manufactured at the Atommash Plant in the city of Volgodonsk in southern Russia. Said Pyotr Neporozhny: "We are very optimistic about the future of this project. It will be the world's biggest nuclear engineering works when it reaches its designed capacity in 1990 of eight one-million-kilowatt reactors per annum. It will also be the only enterprise to manufacture complete plants for nuclear power stations. At present Atommash has a staff of 11,000 people, which will increase to 21,000 in the future. Four billion rubles has been allocated to build the plant and housing for its workers in Volgodonsk."

According to the management of Atommash, the control operations account for one-sixth of the over-all cost of the reactor. Control is acquired throughout the entire technological chain by all existing methods, including radiation, ultrasonic, magnetic, luminescent and vacuum. The quality of the welding seams of the reactor's body is checked by electromagnetic rays and X-rays beamed by powerful linear accelerators with a capacity of 15 million electron volts.

The Soviet Union will soon start mass producing powerful earthquake-proof reactors. In 1977 the Metsamor Nuclear Power Station in Soviet Armenia withstood a major earthquake, while the Soviet-equipped nuclear power plant at Kozlodui in Bulgaria survived an even larger earthquake.

Reliability

Nuclear power stations built with Soviet assistance and those provided with Soviet-made equipment in some of the East European countries and Finland have also proved very dependable. Finnish specialists believe that the safety of Soviet equipment at the Lovisa-I nuclear station exceeds the level of reliability of such stations in Western countries. The performance of Lovisa-I has been so impressive that Soviet design and equipment have been used to build Lovisa-II.

The Soviet Union's prestige in building and operating nuclear power stations is also enhanced by the fact that all nuclear power plants on its own territory are equally reliable. According to Andranik Petrosyants, Chairman of the USSR State Committee for Nuclear Power, for over a quarter of a century, since the first such plant was put into operation in the USSR, there has not been a single serious accident. Nor has there been a single case of the personnel being exposed to dangerous quantities of radiation or of a radiation leak threatening the population. The normal operation of a nuclear power station has never been interrupted, and there has not been a single instance of environmental pollution.

For many years now the personnel at all Soviet nuclear power plants and the inspectors of the USSR Ministry of Health have been enforcing rigid controls at the stations themselves and in adjacent areas for dozens of miles around. The annual dose of radiation to which workers at Soviet plants are exposed is 10 times lower than the permitted health standards. This is even less than the dose to which a patient is exposed during one diagnostic X-ray. Radiation in the air, soil, plants, water and snow is also checked. The findings are very impressive. The radiation at Soviet nuclear power plants and in the area surrounding them has never increased beyond the natural level. This proves that Soviet experts are right in thinking that with adequate precautions, nuclear power plants can be one of the world's "cleanest" industries, especially compared with traditional thermal power stations. ▶

The control panel of the Novovoronezh station. Below: The reactor hall. Facing page: The industry is one of the most ecologically clean.

People's Attitude Toward Nuclear Power

It is only natural that the unfailing record of the Soviet nuclear power ustry largely determines the attitude of people toward nuclear power ur country. A garden in the vicinity of a nuclear power plant, a beach d with thousands of people, or trout bred in a lake near a power plant, n Lake Imandra near the Kola Station in the northern part of the coun- are all natural phenomena in the Soviet Union.

f course, the question of nuclear power reliability is not only a techni- but also a very important social problem. How is safety related to itability? Who controls the operation and the manufacture of the ipment? Where and how are personnel trained? The answers are of amount importance in determining the safety of the nuclear power ustry.

n the Soviet Union the designing and construction of all plants are cted under a single authority and on the basis of a unified system. control of the technical operation and maintenance of nuclear power nts are also centralized. In the USSR it is impossible for an operator e trained by a private organization or company, as in some Western ntries, where differences in the quality of instruction make it possible both skilled and inadequately trained operators to work at a nuclear er plant. In the USSR training is centralized and rigidly controlled, n extremely high demands made on all trainees without exception. One ning center is located at the Novovoronezh station. There are for- ners among those attending the course. At this training center special ulators are used to reproduce all kinds of "unusual" power plant situa- ns. Similar centers are being set up in other parts of the Soviet Union.

Security

Security at nuclear power plants also demands maximum attention. at does not mean the prevention of a "nuclear explosion," which is ually impossible. The poorly enriched fuel used at nuclear reactors not explode. What is primarily meant is preventing a radiation leak. gardless of how free of radiation the environment around Soviet nuclear ctors is, experts keep working to improve safety regulations. The viet Union is about to launch the mass production of domestically de- ned reactors in which, even if the water mains with radioactive water plode or are damaged—the most serious possible crisis at a nuclear wer plant—the contamination of the environment will not exceed per- ssible safety levels.

According to Fyodor Ovchinnikov, Deputy Minister of USSR Power and ctrification, the probability of such an accident occurring is once in a llion years. But even if an accident were to happen, the emergency oling system in the radioactive zone of the reactor would be triggered. viet nuclear reactors are provided with three such systems, each func- ning independently. There are only two such systems at nuclear reac- s in some Western countries. If all three emergency systems prove effective, the products of radioactive decay would be contained by a tective layer enveloping the premises of the reactor. Newly designed actors will have an improved protective layer shaped like a huge linder with a dome made of special reinforced concrete which can ntain any radioactive discharge and withstand a powerful earthquake, e blow of a crashing aircraft or an object falling from space.

Soviet nuclear reactors are also provided with uninterrupted feeding stallations. The computer that controls the operation of a nuclear reac- r, including the emergency protection systems, is fed by an electric cir- uit. If the feeding process is interrupted, the installation assumes the ectrical load to feed the protection devices. The reliability of nuclear actors can be enhanced by coupling them with big hydroaccumulating ations. These help compensate for peak loads and thus ensure the sta- on's uninterrupted operation.

Finally, the design of steam generators is of utmost importance for ater-cooled reactors. When asked if, for instance, an accident of the nd that occurred at Three Mile Island is possible at a Soviet station, ri Markov, deputy chief of the USSR Industrial Association Soyuzato- energo, said:

"Even if there were some trouble at a Soviet station, it would not e fraught with such dangerous consequences because Soviet-designed eam generators can carry a far greater load of boiler water. This allows much more time to divert heat from the reactor, provide for its emergency cool-down and take additional effective measures to ensure its safety.

"Of course, we also had troubles at our stations in the beginning. However, there has never been any threat of radioactive contamination of the environment, and the lives of personnel or the population in the nearby settlements have never been endangered."

Much of what has been said about safety fully applies to nuclear heat-and-power-generating plants. According to Professor Victor Sidorenko, division chief at the Kurchatov Institute of Nuclear Power in Moscow and a leading Soviet expert in the field of nuclear heat supply, the reactors at such stations are operated at lower parameters, especially lower temperatures and pressures. This makes the design much simpler and the performance safer. Nevertheless, the reactors at nuclear heat-and-power-generating plants are provided with a second protective layer which makes radioactive contamination impossible, even in situations impossible to foresee.

The radiation at Soviet nuclear power plants and in the area surrounding them has never increased beyond the natural level. This proves that Soviet experts are right in thinking that with adequate precautions, nuclear power plants can be one of the world's "cleanest" industries, especially compared with traditional thermal power stations.

Nuclear Waste

Nuclear waste is one of the most complicated problems facing nuclear power. It naturally commands the unfailing attention of Soviet physicists. True, the quantity of waste at nuclear reactors is insignificant compared with traditional power plants, and only a small part remains dangerous for a long time. But even this small quantity poses a grave problem, especially since more and more nuclear plants are being built in the USSR. Nevertheless, Soviet experts are convinced that those who consider the problem unsolvable are wrong.

There are stiff regulations in the Soviet Union prohibiting the disposal of nuclear wastes in the soil, seas, oceans and lakes. In this country, water contaminated with radioactive substance is treated by every known physical, chemical and mechanical method to help reduce radioactive contamination to legally acceptable standards. The residue containing radioactive elements is mixed with cement or bitumen and skimmed into blocks which are buried in ferroconcrete graves.

The most serious problem is disposing of highly active nuclear waste which is kept in special storage tanks with two-meter-thick concrete walls. However, the tanks have to be changed every 25 years. Instead, Soviet nuclear physicists are now beginning to use glass blocks, which are insoluble in water. They are prepared by mixing nuclear waste with various materials and subsequently baking them in kilns at high temperatures.

Work is under way in the Soviet Union to start burying nuclear waste in specially selected geological formations whose stability has been tested by time. The degree of radioactive contamination of any nuclear waste gradually diminishes until it ceases to be a danger to the environment. The burial places will be provided with protective devices and reliable monitoring. Leading Soviet scientists believe that this method is the safest and most radical one, ensuring a perpetual burying place for nuclear waste. According to Anatoli Alexandrov, we will be able to reduce the quantity of nuclear waste when thermonuclear power stations are in use instead of fission reactors.

It would be wrong to think that Soviet nuclear physicists are complacent about the problems created by the use of nuclear power. As the industry develops, new measures are taken to ensure the safety and reliability of nuclear power plants. A research institute for the operation and maintenance of nuclear power plants has recently been set up in the Soviet Union.

Researchers make various proposals to develop the most suitable alternatives for the future growth of the Soviet nuclear power industry. Some experts have proposed that the nuclear power generation, fuel processing and the burying of nuclear waste be concentrated at big complexes. This, they believe, will make transportation of nuclear fuel and many other problems much simpler, while the area occupied by nuclear power plants would be substantially reduced.

Despite various problems facing Soviet nuclear power engineering, Soviet scientists are optimistic about its future development. They have every reason to be so after having traveled the thorny path from the first nuclear power station in Obninsk to unique water-cooled reactors and the Byeloyarsk breeder reactor. ■

SUCCESSORS OF TOKAMAKS

What progress has been made in thermonucle synthesis physics? Yevgeni Velikhov, Vice President of the USSR Academy of Sciences director of the Soviet thermonuclear research program, and Academician Boris Kadomtsev, of the plasma physics department at the Kurc Institute of Atomic Energy, talk to Yuri Slyusarev of the magazine *Znaniye-Sila*.

Correspondent: I would like to begin with an excerpt from the speech of a famous Soviet physicist, Academician Lev Artsimovich, which he delivered at the end of the second conference of the International Atomic Energy Agency in 1961. "It is now clear to everyone," he said, "that the early optimism that the door to the desired superhigh temperatures would open without a squeak at the first strong impulse of creative energy from physicists was just as groundless as the hope of a sinner to enter heaven without first passing through purgatory. Yet there can hardly be any doubt that the problem of controlled thermonuclear synthesis will be resolved. The only thing unknown is how long our stay in purgatory will last."

So my first question is: What can you say now, almost 20 years later, about the possibility of the peaceful uses of thermonuclear energy?

Velikhov: Since you mentioned Lev Artsimovich, allow me to answer by quoting his own words: "The problem of controlled thermonuclear synthesis (CTS) will certainly be solved as soon as humankind is faced with a real need for it."

The problem of CTS will soon be 30 years old. High temperature plasma physics has gone through dramatic stages during this period. Successes alternated with setbacks, and hopes with disappointments; a line of attack promising quick victory sometimes ended in no advance at all. But, in general, science did forge ahead. And now we can say with confidence that controlled thermonuclear synthesis may be in active use by the end of the twentieth century. In principle, we no longer see any "prohibitions" of nature on the establishment of thermonuclear plants.

The work on CTS has greatly accelerated in the past few years. This applies to all the countries that have been doing such research for a long time, primarily the Soviet Union, the United States, Great Britain and France. Comparatively recently, Japanese physicists joined in, and they have already obtained good results.

Correspondent: How would you explain this livened interest?

Kadomtsev: I think that it is primarily due to the need for a new source of energy. Until the seventies, CTS studies were perpetuated solely through the enthusiasm of physicists whose primary focus was purely physical problems. Of course, there was also the attractive aim of kindling a "terrestrial sun," that is, carrying out a calm thermonuclear reaction here down on the Earth. But that was a rather distant symbol, unrelated to any definite time when humanity would desperately need to kindle such a sun.

Secondly, plasma physics has advanced so much that swift progress in tackling what seemed insurmountable problems became possible.

And most important, we began to feel confident that we had at long last started to correctly understand the phenomena of plasma and could reasonably predict how it would behave under specific physical conditions.

Velikhov: I want to add that another factor of no small consequence now looms large on the scene: the tendency to shift from the enormous number of little studies to relatively few investigations in key or most promising areas.

Correspondent: Goëthe said: "A seeker of the path has to wander." The early years of CTS research can probably be compared to groping in the dark for the way out of a huge house. It's wise to touch everything you come in contact with. But when the lights are turned on, the field of search narrows sharply. It becomes enough just to open doors.

Velikhov: Not very accurate, but generally true. Indeed, we now know what to do in order to reach the goal more quickly and less expensively. The line suggested and developed in the USSR under the guidance of Academician Artsimovich was found to be one of the most promising—the so-called stationary system with a toroidal magnetic field, widely known as the tokamak. A large series of investigations was carried out with such impressive results that early in the seventies the tokamak began to spread to all countries engaged in CTS studies.

Correspondent: What are the concrete successes in this area? How close have you managed to come to the desired goal?

Kadomtsev: The main landmarks are as follows. In 1975 Tokamak-10 went into operation at the Kurchatov Institute of Atomic Energy, and it very soon obtained plasma with a temperature of about 12 to 13 million degrees. Let me recall that a temperature of 80 to 100 million degrees will be required for future thermonuclear reactors. The life of plasma—roughly speaking, the time during which we contain plasma and prevent it from touching the walls of the reactor and becoming cool—lasts 60 to 70 milliseconds.

Correspondent: And for the reactor a plasma life of over a second, or 12 to 15 times more than the duration achieved, will be required?

Kadomtsev: Yes, in Tokamak-10 the produ density multiplied by time was about 5.10[13] is, 40 times less than what is necessary. ever, this discouraging fact concerns physi very little at the present stage because exp ments on Tokamak-10 have finally establishe very important conclusion: The containment rapidly increases as the cross section of plasma "roll" is augmented. In other words can simply proceed toward the goal by enlar our installations. We shall be able to co plasma for the required time with a reactor to five times as large as Tokamak-10.

There were several other important results of which I want to note. In 1976 the Princ Large Torus, about the size of Tokamak-10, st operating. After adjustment experiments, tained a temperature of 55 million degrees Ce in August 1978.

Correspondent: Thus, the experiments of past five years have shown that the tokamak well be a tool for obtaining hot plasma with required characteristics. What next? Might time to design thermonuclear generating pla

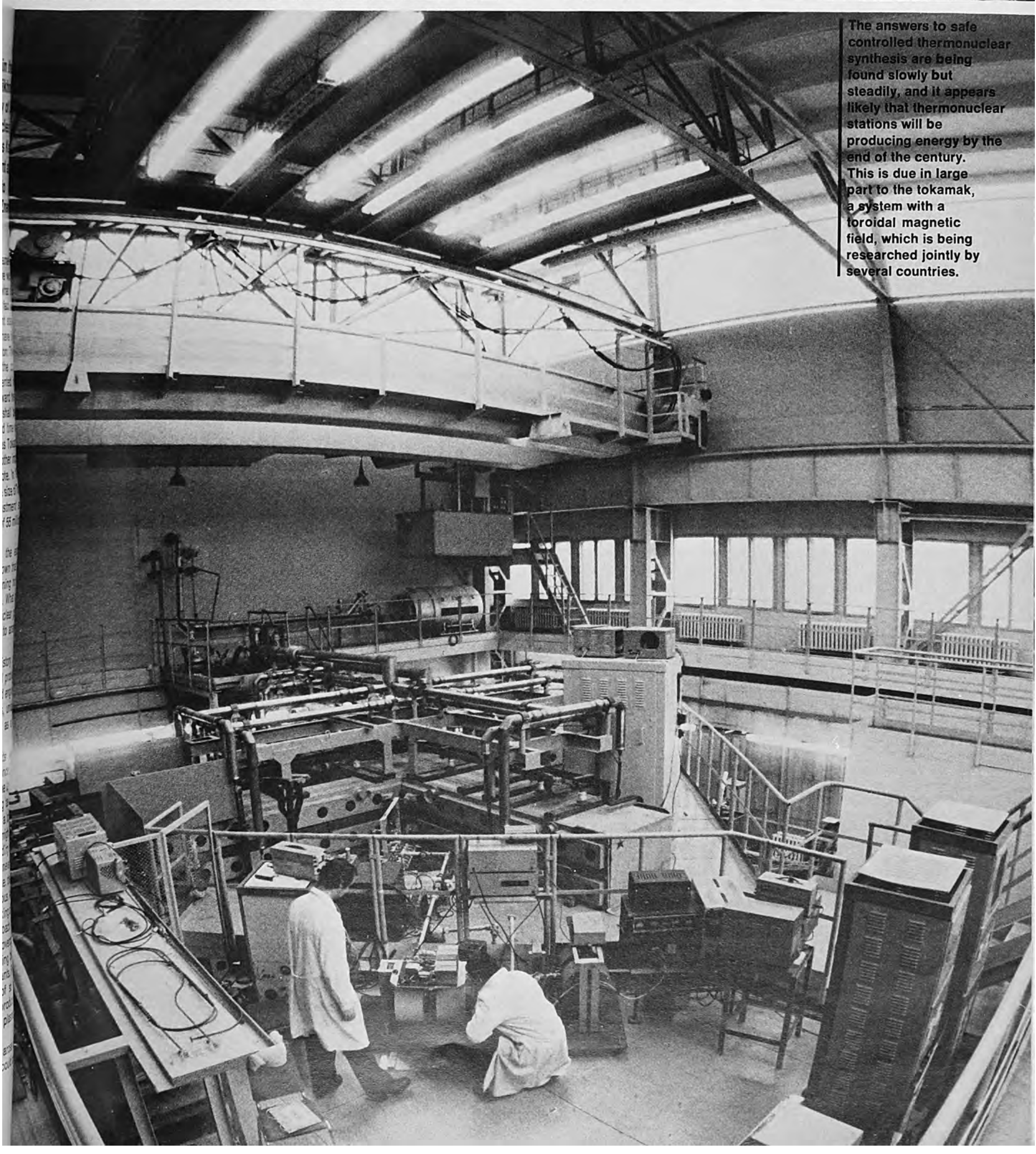
Velikhov: It is not easy to answer this que in a phrase or two.

To begin with, the history of power pl shows that the theoretical problems were so first and that only then did engineering quest related to materials, parts, units and design reactors and the stations as a whole gradu come up.

Thermonuclear scientists were inclined adhere to the same sequence: First, produce thermonuclear reaction in the laboratory and th get down to the engineering task of building t reactor. As you see, this is a long process.

On the other hand, we might opt for a hi risk strategy and start building a thermonucl station now. But we would never be forgiven the mistakes we would make, the price of wh financially, could be enormous. And mistakes a inevitable in a new undertaking of this kind, esp cially using such an approach. Many technic difficulties will have to be overcome, much mo formidable than those facing the developers the first atomic power plants. For example, must create a number of so far nonexist materials, learn how to produce tritium in reactor and how to clear plasma of the adm tures of heavy elements.

That is how the concept arose of a demonstr tion experiment, one that could confirm the fe



The answers to safe controlled thermonuclear synthesis are being found slowly but steadily, and it appears likely that thermonuclear stations will be producing energy by the end of the century. This is due in large part to the tokamak, a system with a toroidal magnetic field, which is being researched jointly by several countries.

SUCCESSORS OF TOKAMAKS

sibility of obtaining thermonuclear energy and permit solving the main engineering problems. So we are now concentrating on designing demonstration or test tokamak reactors.

We think that the stage of demonstration experiments will take about 10 years. But at the midway point of this road we shall be able to start working on the specific task of building thermonuclear power reactors, and perhaps thermonuclear generating plants as well.

Correspondent: Does this mean that we are now past the stage of pure physics and embarking on a qualitatively new phase in CTS?

Kadomtsev: Not exactly. We are still rather vague about the concept of a physical demonstration of a thermonuclear synthesis. It does not involve a transition to something qualitatively new, but rather an artificial dividing line the physicists have drawn for themselves. As more intensive reactions are obtained and, correspondingly, as the output of energy increases, engineering rather than physical problems will be pushed to the fore. So we cannot expect an abrupt transition from the current theoretical stage to that of engineering and technology. It will be a gradual process.

To make this process surer, installations of the second generation of thermonuclear tokamak reactors are now being set up. All of them by far exceed their predecessors in size. Thus, whereas in Tokamak-10 and the Princeton Large Torus the volume of plasma was five cubic meters, in Tokamak-15 it will be about 25.

Generally speaking, the new models have the same aim: to obtain a "full value" thermonuclear plasma or, at least, to come as close to it as possible.

This should begin happening within the next few years, and somewhere in the mid-eighties we hope to carry out experiments that will basically complete the phase of theoretical investigations.

Correspondent: But shouldn't you try to look further into the future?

Kadomtsev: We simply must and are doing this, both in our laboratories and institutes and together with our foreign colleagues. Recently the discussion of all these problems and methods led to the idea of a major cooperative project: the International Tokamak Reactor (INTOR). It envisages that the leading countries of the world will pool their efforts for the next step in thermonuclear studies. In 1978 Velikhov proposed the project at an IAEA meeting on behalf of the Soviet Government.

Velikhov: The problem of CTS long ago went beyond the effort of individual countries into the arena of international cooperation.

The Soviet and American scientific schools have always held leading positions in this work. Scientists from other countries have also actively joined in the cooperative effort over recent years.

But with the growing size of thermonuclear installations, we need more and more funds for their construction and operation, and the returns are still far in the future. The financial burden is already becoming evident with the construction of the present generation of tokamaks. For this reason the countries that are members of Euroatom have decided to cooperate in building the Joint European Torus (JET) installation, which should be functioning in the next few years.

The financial aspect is not the only consideration in cooperating with other nations on thermonuclear research. For the first time science now faces global challenges that affect the future of all humanity. So there must be a cooperative effort based on the latest achievements and knowledge not only of individual states, even those that are very advanced, but of the planet as a whole. Therefore, we think that to solve the problem of providing future generations with energy, the consolidation of efforts by major powers would be the most reasonable step.

The international council on thermonuclear synthesis supported our proposal. A working group was established for the development of INTOR, which includes experts from all the participants—the Soviet Union, the United States, Japan and nine West European countries. The first thing they did was to assess the existing scientific and technical information. They concluded that it provided an adequate base for beginning the design and construction of the reactor, taking into consideration our expectations for the next three or four years.

Correspondent: Does this mean that all the hopes for the solution of the CTS problem are now associated with the INTOR? Or is it only a part of national thermonuclear programs?

Velikhov: This is not the only promising installation that will be developed in the near future. Each country has its own national program that reflects, among other things, the specifics of its fuel and energy structure, the state of its economy and its scientific and technical potential. Our views on the role, share and relationship of thermonuclear power with other sources of energy noticeably differ. Therefore, while paying due attention to the INTOR project, each country will nevertheless follow its own path. For example, Soviet scientists regard the creation of a so-called hybrid reactor as a possible stage in thermonuclear power engineering.

Correspondent: Do you mean a not pure thermonuclear reactor, but a combination of thermonuclear power with something else?

Velikhov: The idea of a symbiosis of atomic and thermonuclear power engineering is the underlying principle of the hybrid reactor.

It is known that not all of the uranium charge, but only the part represented by the uranium-235 isotope, participates in the fission reaction at current atomic power stations. The bulk of the fuel, that is, uranium-238, remains almost uninvolved. We have plans to use it in fast neutron reactors, turning it into readily fissionable plutonium.

Such reactors could be an intermediate step on the road to pure thermonuclear reactors. The hybrid systems are very valuable, for here we shall be fully able to grasp the engineering problems of thermonuclear power generation, but in an easier variant.

Correspondent: Hybrid reactors are an interesting idea that, hopefully, will help make thermonuclear energy available for use much sooner. But it does not solve the main problem of obtaining a self-sustained, energy-profitable reaction but actually gets around it. Are there any promising ideas in the arsenal of physics that would indicate ways to simplify the pretty high demands on the characteristics of plasma?

Kadomtsev: Well, we deliberately did not touch on alternative variants of the solution of the CTS problem, having agreed to discuss the state of the present most successful line of research—the tokamaks, though it would be very unjust to forget other thermonuclear systems.

But I think that along with wide-ranging theoretical quests, we should now choose one of the leading systems and try to advance in this direction as far as possible. First, this is necessary so that we can more quickly get some idea of the engineering tasks that await us and understand if they are compatible with actual physical ideas, of which we have plenty now. And second, we want to convince everybody that thermonuclear power has significant advantages after all.

Correspondent: The last question is one that arose comparatively recently, as people came to realize that human industrial activity on the planet is beginning to equal global natural processes in its effects. For example, how great can energy production be without perilously affecting the natural balance of matter and energy in the biosphere? It is possible that future generations will have to moderate their energy appetites. Will they need thermonuclear energy?

Velikhov: Forecasts, as history has shown, are a thankless task. I'd rather not guess about the appetites of our descendants. The sources of energy already available, including uranium, might well satisfy them in principle. But it is reasonable to ask whether the quality of these resources suits us even now and to question the efficacy of their use. In a chemical reaction of combustion (that is, when burning an organic fuel) only 10^{-7} per cent (!) of the energy potential of the matter is released, and we do not use even this meager part of it fully, but the exact efficiency of heat engines is more like 40 per cent at best.

The process of thermonuclear reaction will help to release energy from matter that will be ten million times greater than in chemical combustion. Mastering this energy will not prevent humanity from adhering to a certain maximum capacity if necessary. So in this case there can be no question of aggravating the ecological situation or even simply replacing one source of energy with another. It is a question of making better use of the potential energy resources of our planet.

Courtesy of *Znaniye-Sila*

THE COMMUNIST PARTY OF THE SOVIET UNION:
THE VANGUARD OF THE SOVIET PEOPLE

By Konstantin Chernenko
Member of the Politburo, Secretary
of the Central Committee of the
Communist Party of the Soviet Union

HE Twenty-sixth Congress of the Communist Party of the Soviet Union held in late February and early March 1981 was an event of amount significance in the life of the Communist Party of the Soviet on. In developing the strategic line of the preceding twenty-fourth and nty-fifth party forums, the Twenty-sixth Congress gave clear answers ne fundamental issues that face Soviet society at the turn of the new ade. The report of the Central Committee of the CPSU, delivered by nid Brezhnev, General Secretary of the Central Committee, is, in the nimous opinion of the Soviet and the progressive international public, odel of a realistic, well-balanced and, at the same time, daring, crea- and truly innovative approach to the key problems of Soviet social elopment and of the present-day situation in the world.

shared my opinions on the growing role of the revolutionary party in period of mature socialism in the September 1980 issue of SOVIET E. Now that the congress of the Soviet Communists has provided a alth of material corroborating this conclusion, it seems necessary me to return to it, since, as Leonid Brezhnev pointed out, "Party gresses, which blaze the high road, as it were, of Soviet society's ward advance, are the highest expression of the CPSU's leading role."

Unbending Core of the Society, Its Living Soul

his is how Leonid Brezhnev described our party. The truth of his tement has been borne out by the entire work of the congress, by rything with which the party came to its supreme forum, by everything ecided and outlined. The CPSU appeared at the congress as a power- healthy and mature collective welded together by unity of will and ion, as the true people's vanguard. In the light of the impressive ievements of the Soviet people in building communism, one can com- hend Lenin's words that the party is the intellect, honor and con- ence of this epoch more deeply.

The party's statistics are telling. Presently, the CPSU has almost 17.5 lion members. From 1976 to 1980 the ranks of the Communists have wn by 1.8 million. Being a party of the entire people, the CPSU has served its class basis and remains a party of the working class—the ding force in society. Factory workers account for 43.4 per cent of its mbership. During the past five years more than 1.5 million of the finest presentatives of the working class, or 59 per cent of the newly admitted mbers, joined the CPSU. The party unites all sections of Soviet society the positions of the working class. The party's ideals, its cause, have come the ideals and the cause of the entire Soviet people.

Although the party has not sped up its campaign to increase its mem- rship and constantly expels people who do not justify its confidence in em or have behaved in an unworthy manner, the CPSU's steady growth evidence of its increasing prestige in society.

The party lays its main emphasis on the quality of its membership. nin's proposition that we must permanently raise the role and prestige the party member remains just as pertinent today. Looking into the ces of the delegates and listening to their speeches during the party ngress, I could not help thinking: How glad Lenin would have been to sit the Kremlin Palace and see the Communists of the early 1980s! any Communists spoke at the congress—workers, collective farmers d intellectuals. Among the speakers were weaver Valentina Golubeva om Ivanovo, builder Anatoli Surovtsev from Moscow, iron and steel rker Vasili Naumkin from the Urals and village teacher Alexandra nirnova. They appeared at the congress as people of leadership. In their nouncements you could feel a profound understanding of major policy, aturity and great scope of thinking.

Some people in the West like to speculate on an "elite" in the CPSU. his malicious lie is refuted by the very composition of the congress. mong the 5,000 delegates, whom Communists entrusted to decide the ost important questions of party policy, were 1,370 industrial workers, 77 workers in the field of agriculture, 269 scientists, writers, physicians, teachers and workers in the arts. If some people in the West consider the Soviet people who manufacture machines and build apartment houses, grow crops and educate children to be a privileged section of the society, this is really so. Another fact gives the lie to the stories about a "Soviet party elite": More than 71 per cent of the delegates to the last congress were elected for the first time.

The character of a political party is judged, of course, not only and even not so much by its social composition as by the policy it pursues, by whose interests it expresses and upholds. The Constitution of the USSR states, "The CPSU exists for the people and serves the people." This was convincingly proved at the Twenty-sixth Congress. The entire work of the supreme party forum concentrated on two interconnected points—communist creativity and strengthening peace, in which the people have the greatest stake.

The Communist Party does not consider its role as the leading and guiding force in Soviet society to be a privilege. It was not granted by a decree, but won in the selfless struggle for the happiness of the working people. We clearly realize that prestige and influence cannot be taken for granted. The Communists must confirm every day, by every move, their right to guide society. And the CPSU successfully does so. Convincing proof of this are the major actions taken by the CPSU and the Soviet state over the several months since the congress. During this period the Central Committee of the CPSU and the Soviet Government have passed important decisions, including decisions on privileges for families with children, on additional measures for the development of the Non-Black Soil Zone, the Central Black Soil Zone in the Russian Federation and a number of others. All of these measures are in keeping with the efforts to implement the decisions of the Twenty-sixth Congress. They are a vivid manifestation of the fact that our party matches its words with its deeds. If we turn to the CPSU's foreign policy, we will see that the Central Committee and its Politburo have launched a vigorous struggle for the implementation of the peace initiatives of the Twenty-sixth Congress, which are being increasingly approved by people around the world.

Party Leadership and the Economy

Our party has always based its practical policy on questions pertaining to the development of our nation's economy. It proceeds from the premise that it is in the economy that the foundation is laid for the resolution of social tasks, for strengthening the country's defense capacity, the foundation for the Soviet state's active foreign policy. The congress has shown that the CPSU is successfully guiding the effort for the creation of the material prerequisites for a communist society. During the Tenth Five-Year Plan period the Soviet economy made fresh gains, notwithstanding the difficulties that cropped up in connection with a shortage of labor resources, the difficulties involved in the development of raw material and energy sources in the East and the North, and the unfavorable weather conditions during three out of the five years. The productive forces have reached a qualitatively new level. The scientific and technological revolution gained in depth and scope, thus changing the character of many industries and whole branches of the nation's economy. A persistent effort was begun to ensure the effectiveness of socialized industry. The most concentrated indicator in that field is the increase in labor productivity. It grew 17 per cent during the five-year period.

Over those five years a big step forward was taken in the resolution of social problems. The material and spiritual requirements of Soviet people were more fully met, and the conditions of their work and everyday life were improved. It is sufficient to visit our cities and villages to see this. You will be struck by the improvement in the quality of the people's food and clothing. They live in larger and more comfortable apartments; their interest in culture and the arts has grown.

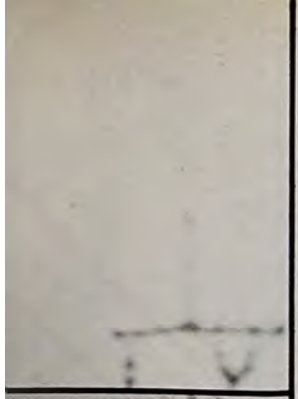
Much has been done. But it is not in the tradition of Communists to be content with what has been achieved. The Leninist party always endeav-

Continued on page 42

The besieged city refused to surrender, and the Red Army beat off the enemy's attacks. Top: The barbarians willfully destroyed the beautiful parks and palaces in the Leningrad suburbs.

On September 8, 1941, the troops of nazi Germany closed the ring of the blockade around Leningrad that lasted 900 days.

WHO



How will they ever forget that the only way they could bury their child, who had starved to death, was to cart the little body by sledge to the cemetery, that though they were weak with hunger, the only way they could get a drop of water was to crawl along the ice-covered streets to the main?

Barrage balloons, obsolete now, were useful in protecting the city of Leningrad by hindering the passage of enemy aircraft.

TO THOSE
E MEMBER...

By Ivetta Knyazeva

I KNOW how it all happened. With each beat of my heart I remember the mortal anguish of the long days of the blockade and the little piece of dough that Mother, swollen with hunger, was trying to break into two parts —and the cold.

I must tell about it. I sit down at my typewriter and insert a sheet of paper, but the paper remains blank. I sit crying. I see our house at the corner of Nevsky Prospekt and the Fontanka River on that day 40 years ago: The all-clear signal has just sounded after the air raid. A bomb has hit the neighboring house. It had been a café, and now the dead and the wounded are being pulled out from the ruins. In the apartment in which we are living the windowpanes have been blown out. Mother and I will board up the windows with quilts and light a little wick made of thread in a jar of machine oil. There will be no electricity for a long time. And there will be no water. And there will be no food. . . . I am again 12 years old. And though a lifetime has passed since then, I remember everything and I shall never forget it till my dying day.

I don't remember much of what happened later, but the blockade is imprinted in my memory.

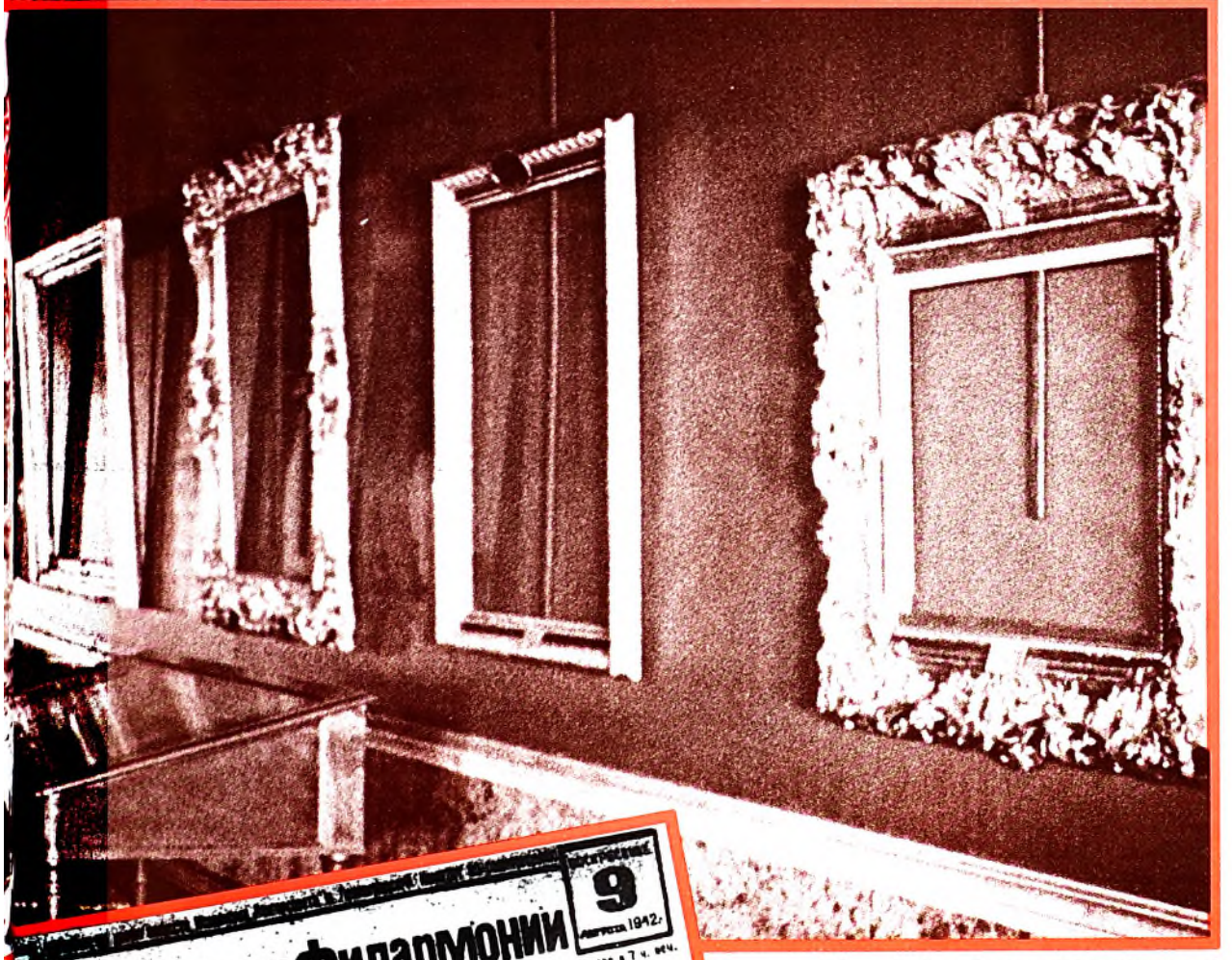
Events

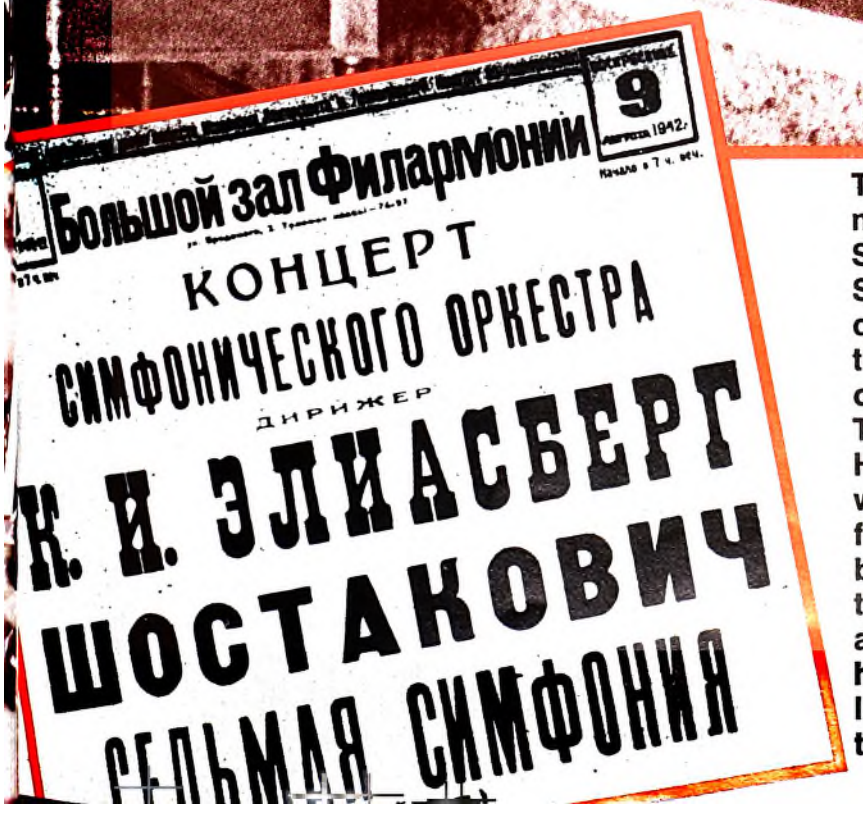
If I had my way, I would include a chapter on the defense of Leningrad in all the textbooks used in all the classrooms around the world. The chapter would not be a lesson in history, but a lesson in human dignity, honor, courage, humanism and hatred of war.

Eight weeks after their attack on the Soviet Union, the nazi troops broke through to the city of Lenin. They could see it and hear it: Four kilometers from the front line the Kirov Plant was operating, and 14 kilometers away, in the very center of the city, the dome of St. Isaac's Cathedral was sparkling. The Nazi Command had already appointed a military commandant for "Petersburg." Permits for the occupation vehicles to be used on the streets of Leningrad had already been printed. Invitations for the "victory banquet" to be held in the Astoria Hotel, the most elegant hotel in the city, had already been sent out.

For Hitler Leningrad was close at hand but inaccessible. Losing all hope of taking the city by storm, the nazi troops closed a ring around it on September 8, 1941, cutting off all the communication lines that connected Leningrad with the rest of the country. Thus began the legendary 900 days of the Leningrad siege.

The more than 700,000 soldiers and officers hurled by Hitler against Leningrad from the west (the ring of the blockade to the north of the city was held by a 400,000-strong army) had already been battle trained on the fields of Europe. They were under the command of Field Marshal Wilhelm von Leeb, who had been decorated with the Knight's Cross for his battles in France. His 1,500 tanks could barely wait to get at the city. More than a thousand airplanes rising into the Leningrad sky dropped 100,000 bombs on the streets and houses. Twelve thousand guns rained down almost 150,000 artillery shells on these "military" objectives. They razed to the ground every fifth and damaged every third house in Leningrad.





The defenders of Leningrad never lost faith in victory. Shostakovich dedicated his Seventh Symphony to the city, and it was performed there for the first time on August 9, 1942. Above: The empty halls of the Hermitage. The paintings were evacuated to the East for safe keeping and were brought back in 1945. Now three million people from all over the world come here every year. Above, left: Nevsky Prospekt today and during the siege.

A la guerre comme a la guerre! Did an army battle against an army? Not at all. Within the ring of the blockade there were 2.5 million peaceful citizens, who included, as is testified by the documents, not less than 1.2 million dependents (old men and women, and sick people), with 400,000 children among them—and this was well known to the nazi butchers. "The Führer has decided to wipe Petersburg off the face of the Earth," reads the nazi Naval Headquarters top-secret directive "On the Future of the City of Petersburg." The order was "to blockade the city tightly and raze it to the ground by means of all-caliber artillery fire and continuous bombardment from the air." If as a result of the ensuing situation there should be requests for surrender, they were to be rejected.

The murderers of Leningrad carried out the Führer's order with maniacal precision. The nazi shells and bombs were aided by starvation. The nazi bombers destroyed the food storehouses, and it was impossible to bring in foodstuffs to the city, which was cut off from the rest of the country. Starvation was aided by the cruel winter. In December 1941 the thermometer fell to below minus 30 degrees centigrade. Corpses of people who had died of starvation or had frozen to death piled up on the streets. Excavators dug mass graves in the stone-frozen earth of the cemeteries. During the siege more than 641,000 Leningraders died of starvation alone.

Destiny

"On the 22nd of June we flung open the door and did not know what was behind it"—that was what Adolf Hitler admitted to his subordinates during the first months of the blockade. This twentieth century "superman" took everything into account—except that which was simply beyond his comprehension: Who would defend the first land of socialism and in the name of which ideas?

In the first hours of the war, when the mobilization had not yet been announced, about 100,000 Leningraders came to the city's military registration and enlistment offices demanding to be sent to the front. Detachments of a people's volunteer corps were formed at the biggest plants, the workers citadels of Leningrad. Communists were the first to join. Nikolai Bessonov, a 65-year-old worker, came to the enlistment office with his six sons and two daughters. Prominent intellectuals joined the ranks of volunteers.

Leningrad's outstanding monuments had to be saved. They had to be covered with sacks of sand. Those sacks were sewn by the women, and among them was the great poet Anna Akhmatova, "the proud muse of love," as she was called. The most famous landmarks in the ▶

city had to be camouflaged, and Mikhail Shestakov and Alexei Safonov, both cellists, and Olga Firsova, pianist, mounted the spire of the Peter and Paul Fortress to cover it with linen. Before the war their hobby was mountain climbing.

Massed air raids began. Counting on fires and panic, the Nazis dropped hundreds of incendiary bombs on the houses of the city. The children of Leningrad and their parents climbed onto the roofs to extinguish them. We were not allowed to go, but we went. Among those who stood guard on the roofs was Dmitri Shostakovich, who was already considered one of the greatest composers in the world. He said: "Until these days I have known only peaceful work. Now I am ready to take up arms. I know that nazism and the end of civilization are synonymous. Humanity can be saved from destruction only by fighting."

Shostakovich had grown so thin that he looked like a teenager, but for a long time he refused to leave Leningrad. In his freezing apartment that felt like a cave, he was composing his Symphony No. 7, the *Leningrad.* It was the most horrible hungry winter of 1941-42 that seemed to hold no hope. As though in defiance of it, the composer wrote on the first page of the score the following dedication: "To our future victory over the enemy."

He finished the symphony after being evacuated, but it took a special government decree to make Shostakovich finally leave the blockaded city. What happened after that I knew myself: In August 1942 the orchestra of Radio Leningrad performed this symphony. It was broadcast from the hall of the philharmonic society all over the country and abroad. Many years later its conductor Carl Eliasberg told me the details of how they came to play the concert that astounded the world.

"The radio orchestra—you remember it?—performed in front of a microphone until the musicians no longer had enough strength to hold their instruments," he told me, getting out his blockade diary. "On September 28, 1941, we played a concert that was being broadcast to Great Britain. The noise of the bombing was heard even in the studio. . . . On December 27—dystrophy and shells had already taken many lives—our concert was broadcast to Sweden. We were playing Beethoven—a German—we of the city that was being tortured by the Nazis. Then a tragic interval ensued. We simply had no strength left."

Eliasberg himself and his wife were taken in February 1942 to the hospital by a little sled (the only transport in the blockaded city)—because they were in such bad shape. It was here that the conductor learned that a military airplane had delivered the score of Shostakovich's Seventh Symphony together with medicines to Leningrad.

"Feeling a little stronger, I began to gather an orchestra. Only a few of us remained. At our request the Command of the Leningrad Front recalled musicians from the army and navy. We rehearsed with great difficulty."

He is again turning the pages of his diary:

"Here are the entries I made at that time: 'The first violin is dying. . . . The drum was killed on his way to the concert hall. . . . The French horn is on his deathbed. . . . But the concert took place in a crowded hall, and the emaciated faces of the listeners were wonderful. Those faces had the stamp of great knowledge on them. And the orchestra, it seems to me, never again sounded like that. We were playing with proud and vindictive inspiration.' "

The city was unusually quiet that evening. To make sure that the music would be heard (I learned about this, too, from Eliasberg), Marshal Leonid Govorov, Commander of the Leningrad Front, ordered that the enemy weapon emplacements be suppressed.

In those days the muffled voice of Olga Berggolts, another heroine of the blockade, sounded on the radio every day. It was a voice of truth, fight, compassion and hope.

In December 1941 the fuel reserves were exhausted in Leningrad, and the houses were no longer heated. In January 1942 the city transport stopped, the water main froze, the sewage system stopped functioning. And starvation, hunger, reigned! A mug of boiling water and a slice of bread, "125 blockade grams of bread half-and-half with fire and blood" were our daily ration.

I heard Berggolts say on the

Petrodvorets, Peter's summer palace, was razed by the Nazis (top). The masterpiece of nineteenth century architecture has been completely restored. Facing page: *The Bronze Horseman*, Falconet's statue of Peter the Great, was covered with sacks filled with sand and lagged with boards to keep it safe during the siege.

radio: "Starvation is Hitler's hired murderer. He has sent it to us, counting on Leningrad's devouring itself, and he would not have miscalculated had he been dealing with philistines whose hunger would have turned them into animals possessing one animal instinct—to survive. But we are people!"

The plants were working, producing arms and repairing tanks. Women and teenagers took the places of the men who went to the front. The children had to stand on boxes to reach the machines. In the city that was weakened beyond description, most offices were functioning. Letter carriers delivered the mail; the newspaper *Leningradskaya Pravda* continued to be printed; the district executive and party committees were working; some schools were open; people went in and out of the Leningrad Library, one of the biggest book depositories of the world. The city was freezing, but it did not burn a single one of its 17 million books. The people needed the library. In its reading rooms they were working in coats and *valenki* (felt boots). The library also contributed to the fight, finding in its archives old prescriptions for the treatment of scurvy with pine branches.

I discussed the prescriptions with Alexei Bezzubov. An expert on nutrition, he was in charge, during the blockade, of a section of the Vitamins Institute which, on the instruction of the city party committee, was searching for ways to somehow relieve the lot of the starving people. Bezzubov and his colleagues worked out a method of extracting vitamin C from pine needles (since the pine is a truly "Leningrad" tree), learning to extract protein yeast from wood, figuring out how to use the burned Badayev food storehouses that had been bombed by enemy airplanes. The burnt, fire-melted sugar, saturated with water from the fire pumps and mixed with earth, was processed by Bezzubov's method into fruitdrops.

Since the victory over nazi Germany Bezzubov has been working for the Soviet Military Administration. He is in charge of a scientific research section of the food industry. And here by chance he ran into Professor Ziegelmeier, a German expert in the same field. Bezzubov recalled:

"Ziegelmeier knew exactly how much food we had, how many people there were left in Leningrad, and he was full of amazement: 'You should not have survived! I reported to my chiefs that people could not stay alive on such meager rations.' "

Memory

Forty years—a whole lifetime—have passed. My son is twice as old as I was in that blockade. And Leningrad has become more beautiful than ever. An inscription on one of the houses on Nevsky Prospekt is a reminder of what the city experienced during the war:

CITIZENS:
During artillery bombardment
this side of the street
is very dangerous

And there is also the boundless field of the Piskaryovsky Memorial Cemetery on what was then the outskirts of Leningrad. About half a million defenders of Leningrad lie buried here.

I walk around Leningrad in a special way. Here is my house—I remember and I can see in my mind's eye how the dead were pulled out from under the ruins of the neighboring wing. . . . Here is the Philharmonic Society. There was a pillbox at its front door. . . . And here is the Hotel Yevropeiskaya, which had been turned into a military hospital and was full of wounded soldiers and officers. . . . And here is the Fontanka River—I crawled on its ice and passed a frozen corpse when I was dragging a little pail of water.

It is terrifying to remember. But it would be even more terrifying to imagine that what we experienced might leave no trace nor teach a lesson to those who were lucky enough to escape it.

"We are not apprehensive about scholastic exchanges in subjects that involve ideology. We invite American lecturers to speak on the most vital current issues. The best examples of this are the courses given in our history and other departments. American professors have been coming here for eight years now to deliver lectures on the history of American political parties," says Professor Vladimir Tropin, Vice Rector of Moscow State University.

UNIVERSITY CONTACTS: FRUITFUL EXCHANGE

By Svetlana Orekhova
Candidate of Science (Philology)

Photographs by Victor Zagumyonnov

Signing the protocol to the exchange agreement between Moscow State University and the State University of New York. Left to right: Igor Ternov, Vice Rector of Moscow University; Rector Anatoli Logunov; Vice Rector Vladimir Tropin; Charles Neff, Vice Chancellor of the State University of New York. Right: Professor Eugene Trani and Nikolai Sivachov.

Moscow State University maintains a large-scale exchange program in the natural and social sciences with universities in the United States, Western Europe and Japan. It is carried out within the framework of governmental agreements through the International Research and Exchange Board (IREX) and the Fulbright Program at Columbia University, Harvard University, the University of Pennsylvania and other universities, as well as through direct interuniversity contacts. We have interuniversity agreements with the State University of New York (SUNY) and the Midwest Universities Consortium for International Activities, Inc. (MUCIA), which includes the University of Illinois, Indiana University, Michigan State University, the University of Minnesota, Ohio State University, the University of Iowa and the University of Wisconsin. We also have an agreement with the California Institute of Technology (Caltech) in Pasadena.

We have a long-standing exchange of fellows. Many of our trainees have become well-known scholars. Academician Rem Khokhlov, the late rector of Moscow University; Professor Nikolai Sivachov; Professor Ilya Berezin (chemistry) and Professor Anatoli Starchenko (philosophy)—all of whom are chairmen of departments at present—were fellows in the United States.

Many of our professors go to the United States as visiting lecturers, and we invite prominent American specialists to come here. Both countries are equally interested in developing these contacts. We support the idea of increasing the number of joint studies and continuing this cooperation.

Professor Robert Kelley is an American historian who was in the Marines in World War II. In an interview during a visit to the Soviet Union, he said that he spent most of his time in Moscow exchanging scientific information and learning more about the Soviet Union. He added that it would strengthen peace if more people had the opportunity to do the same thing.

He said that there was no difference between the way he presented his subject in Moscow and at the University of California. He was also available to students on a regular basis for individual consultation on their course papers. This enabled him to establish direct contact with his Soviet students just as he did with his American students.

Letters to Moscow State University

People write to Moscow State University from all over the world. The letters are from former students, teachers and professors in Europe, Latin America, the United States, Africa and Asia who used to work at Moscow University on an exchange basis. In warm letters they express their gratitude to their Moscow colleagues and friends for the hearty way they were received at the oldest university in the Soviet Union, famous for its gifted scholars.

Early in 1981 Professor Yassen Zassursky, chairman of the Journalism Department, received a letter. Professor Zassursky is a well-known specialist in American literature who has been to the United States several times on lecture tours

5005 Wentworth Avenue
Minneapolis, MN 55419
February 20, 1981

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r Yassen Nicolaevitch:

pictures came back--all 600 of them!--and they include several of , Irena, and Vladimir. Enclosed is a copy of what seems to be the t one of you, taken the evening you came up to our flat for dessert champagne. The people we've shown it to here think it's great--I e you think so too. I'm also sending along the inter-negative used make the print from the original slide, so you can have extras made Moscow in case you want more. If it is impossible to have them made Moscow, send the inter-negative back to me and I will have more de here.

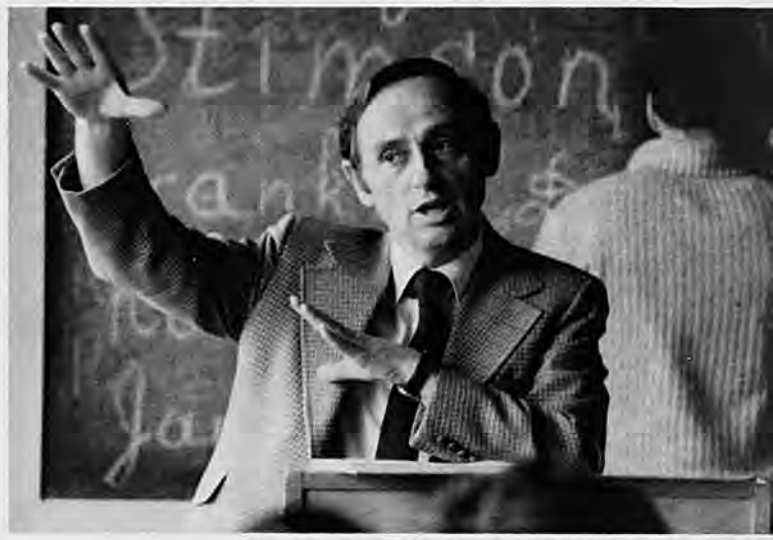
are beginning to work both through Washington and the University of innesota, on setting up something for Vladimir. Meanwhile, I keep hinking about how I would improve on my teaching for you were I to get nother invitation to do so!

Yours sincerely,

Burton Paulu

P.S. Two more books for the Faculty library are coming, via the American Embassy.

Left: Mentioned in this letter are Irina Nechayeva, a researcher in the Journalism Department, and philologist Vladimir Yaroshenko. Below: Professor Eugene Trani giving a lecture on the history of political parties in the United States to students of the History Department of Moscow University.



rican poet William Jay Smith ding his verses at the tral House of Architects. He Consultant in Poetry for U.S. Library of Congress n 1968 to 1970 and a guest urer in Moscow recently.

American fellows Joseph Meschino and Carol Leonard with Soviet students in the reception room of a dormitory at Moscow University.

as a participant in various journalism confer- es or round-table discussions of Soviet and erican authors.

he letter was written by Burton Paulu, a pro- sor at the University of Minnesota in Minneap- . In the autumn of 1979 he delivered a series lectures to Moscow students of journalism hin the framework of the exchange agreement ween Moscow State University and MUCIA. wrote:

> Our pictures came back—all 600 of them!— nd they include several of you, Irina [Nechayeva], nd Vladimir [Yaroshenko]. Enclosed is a copy of what seems to be the best one of you. . . . The people we've shown it to here think it's great. . . . We are beginning to work . . . on setting up some- hing for Vladimir. . . .

Internship Programs at SUNY

In the autumn of 1978 I was one of a group of ne graduate students and young scientists who ok a four-month intern program at the State University of New York. We lived among American students in the university dormitory, met them in the TV room, in the student cafeteria and at parties organized in our honor. They asked us a lot of questions about the Soviet Union.

We used the libraries of SUNY and other universities, as well as the Library of Congress. We met American experts and were present at their lectures, so we got to know many American young people. All this and our impressions of such American cities as Albany, New York, Washington, Boston, Buffalo and Lake Placid, and what we saw at Columbia, Harvard and the Massachusetts Institute of Technology gave us a better idea of the United States and improved our scientific knowledge.

Russian for Americans

For 18 years the Philology Department of Moscow State University has been offering two-month Russian courses for American high school and college teachers, and every summer about 40 people come to the Soviet Union for these courses. The curriculum is comprised of various special subjects and seminars in Russian, lectures and practice sessions. The students attend a series of lectures on the Soviet Union, familiarize themselves with the setup at Moscow State University and go on tours of the country. The courses' cultural program includes tours of the Soviet republics (the Baltic republics, the Ukraine, Moldavia), the major Soviet cities and the historical parts of Moscow and its environs, as well as visits to Moscow's museums. The Russian courses are very popular with American teachers, and many try to take them more than once.

American History at Moscow State University

American exchange professors and teachers with whom I have talked point out the respectful and serious attitude of the university's undergraduate and graduate students toward their lectures and seminars. American professors unanimously point to the Soviet students' thirst for ▶

knowledge, their diligence, educational background, interest in their subject and command of the English language.

Professor Kelley, in particular, remarked that in America he had heard of how comprehensive and profound the Moscow State University curriculum is and added that when he came to the Soviet Union he saw it for himself.

Professor Nikolai Sivachov, whom American experts consider one of the major Soviet scholars of U.S. history, worked at the U.S. Archives and published a number of basic works. He said:

"American lecturers have been visiting our History Department since 1974. We had David Cronon of the University of Wisconsin; David Brody of the University of California (Davis); Elbert B. Smith of the University of Maryland; Winton Solberg of the University of Illinois; Peter F. Walker of the University of North Carolina; Robert Kelley of the University of California change program. In the early seventies the University of Chicago Press decided to publish a series of books on the United States and the world through the eyes of foreigners. The authors were to be experts from different countries. We agreed to their proposals, and in 1979 *Russia and the United States,* written by Professor Nikolai Yakovlev of the USSR Academy of Science and myself, was published."

Soviet Historians in the United States

Soviet historians often go to the United States as visiting lecturers. Some of them are prominent experts, like Yuri Kukushkin, chairman of the History Department and a corresponding member of the USSR Academy of Sciences, and Professor Dmitri Sarabyanov, whose subject is the history of Russian and Soviet art.

The Soviet-American Colloquium on the Study

"I am studying the role of Anatoli Lunacha in Soviet history. When I get back home, I going to write a book about him and have it p lished by the University of Minnesota Pres spend a lot of time at the Soviet archives: t Central State Literature Archives, the Octob Revolution Archives and the Leningrad St Historical Archives. I often go to the Lenin L brary. I have also worked at the archives in K capital of the Ukrainian Republic.

"This is my third time here. The first time six years ago when I visited your country as tourist. I went to Tallinn, Leningrad and Mosco Three years ago I came here again, this ti for four months, to learn Russian at the Pushk Institute.

"I was born in America 29 years ago. I d fended my thesis in 1979. I am a history schol I like my subject and enjoy working at the a chives. I want to understand your country a

(Berkeley) and Eugene Trani of the University of Missouri (Kansas City).

"They all came here with their families. Family friendship enriched our communication. They visited us at our homes and saw how we live. They met our children and grandchildren. We write to one another. They look after our historians when they come to the United States.

"All the professors who visit our department get to be friends with their Soviet counterparts. Naturally, they express their own views on the United States and stick to them, which is quite understandable. We don't always agree with them. In spite of those differences, we still have a lot in common. The main thing is that they share our opinion that the exchange program must be maintained. We know how easy it is to break up this cooperation and how difficult it is to organize it.

"An interesting project has been carried out within the framework of the Soviet-American exof History has been functioning for many years. It is held once every two and a half years alternately in the Soviet Union and in the United States. The U.S. National Committee on the Study of History is the American organizer of the colloquium.

The Joint Committee for the Application of Mathematical Methods to Historical Studies, dealing mainly with the history of economics, makes a big contribution to bilateral cooperation. The committee is formed by the National Committee of Soviet Historians and the American Historical Association.

American Fellows Study History in Moscow

The Soviet Union and the United States have been exchanging fellows for some years. The Americans send their Soviet history scholars to Moscow State University.

One of them, Timothy O'Connor, said:

your people. I am happy to be in Moscow, and would like to extend my fellowship here. M work on Lunacharsky is proceeding successfully

"When I have spare time, I go to museums especially like the museums in Leningrad. I als enjoy Soviet films. They help me to improve m Russian and to get a better historical outlook o your country.

"The Moscow University Student Council is go ing to organize a tour of the Caucasus for th American fellows. We'll be visiting Tbilisi and Yerevan.

"I am quite happy about my training in th Soviet Union, and I'd like to come here again.

Lois Becker said:

"I am a fellow at the History Department o Moscow State University. I am studying th works of Alexander Herzen and Ivan Turgenev. spend a lot of time at the archives in Moscow and Leningrad, so I've come to know those two cities well. I've collected a lot of information and am

to write my thesis. I hope I'll be able to a book on this interesting period of Russian y. I am a historian, a graduate of the Uni- of Illinois and Stanford University.
often go to the theater in Moscow, some- as often as three or four times a week. The ka is my favorite. I have seen its perform- of *What Is to Be Done? The Dawns Are So Here, Listen,* and others.
earned Russian at Stanford University. I many of the Russian and Soviet classics. that literature is a country's best history ok.
ght years ago my parents and I came here rists. I liked your country; that is why I am again.
ive in California, near San Francisco. I'd work at Stanford University."
e Kimerling specializes in early nineteenth ry Russian history. She said:

Professor Gevork Yegiazaryan is holding the book *Organization for Forecasting and Planning. Experience in the Soviet Union and the United States,* the result of Soviet-American scientific cooperation. Facing page: American fellows (left to right) Lois Becker (Stanford University), Timothy O'Connor (assistant professor at the University of Minnesota) and Elise Kimerling (Columbia University).

Moscow University students like William Jay Smith's poems so much that one of them even set some to music. Left: Yevgeni Yevtushenko and Andrei Voznessensky (top, far left) reciting their translations of Smith's poems at the Moscow House of Architects.

am from Columbia University and specialize istory and sociology. I have never been to the iet Union or Moscow before. I like this beauti- city. I often go to the theaters and movies. We nd a lot of time with our Soviet friends. I am rested in your young people. My favorite iors are Fyodor Dostoyevsky, Leo Tolstoy Ivan Turgenev."

U.S. Studies Council at Moscow University

he U.S. Studies Council at Moscow University s founded in 1975. It has about 60 members are professors, teachers and scientists at scow University. It is the council's function to anize scholarly conferences on U.S. studies, lish works by Moscow University authors and cuss teaching methods and scientific cooper- n between Soviet and American specialists. As a result of activities of the council in 1, Moscow University Publishers issued the book *The Two-Party System in the United States.*

Scientific Cooperation in Economics

Moscow University took part in the Scientific and Technological Cooperation Program under the aegis of the USSR State Committee for Science and Technology and the Ford Foundation. This cooperation lasted for a few years, and its main achievement was the joint Soviet-American monograph *Organization for Forecasting and Planning. Experience in the Soviet Union and the United States.* The group of American authors was headed by William Dill, Dean of the School of Business of the State University of New York.

Among other things, the book deals with the system of centralized management and planning of the Soviet Union's socialized industry. The American authors concentrated on American corporate management and planning.

The authors worked on the book for a few years. Several seminars were held both in the Soviet Union and in the United States. Prominent Soviet economists and plant directors and heads of leading American corporations took part.

The publication of this book is the result of successful cooperation, the final achievement of joint Soviet-American economic contacts.

Astrophysics Is an International Science Now

Astrophysicists all over the world know that it is impossible to study the universe at the observatories of only one country. Physicists and astrophysicists at Moscow State University have established good contact with their colleagues in the laboratory headed by Professor Kip Thorne of the California Institute of Technology.

Many Soviet scientists have visited the Caltech laboratory, including Professor Vladimir Braginsky and Professor Igor Novikov. The Soviet scientists and their American counterparts collaborated on a joint study of the key problems of the present state of the universe that resulted in the publication of articles in the scientific journals of both countries.

In 1979 Caltech and Moscow University signed an agreement on scientific cooperation in locating gravitational waves from outer space. This means making a study of astrophysical accidents. The agreement envisages the construction of two gravitational aerials, one in Moscow and the other in Pasadena.

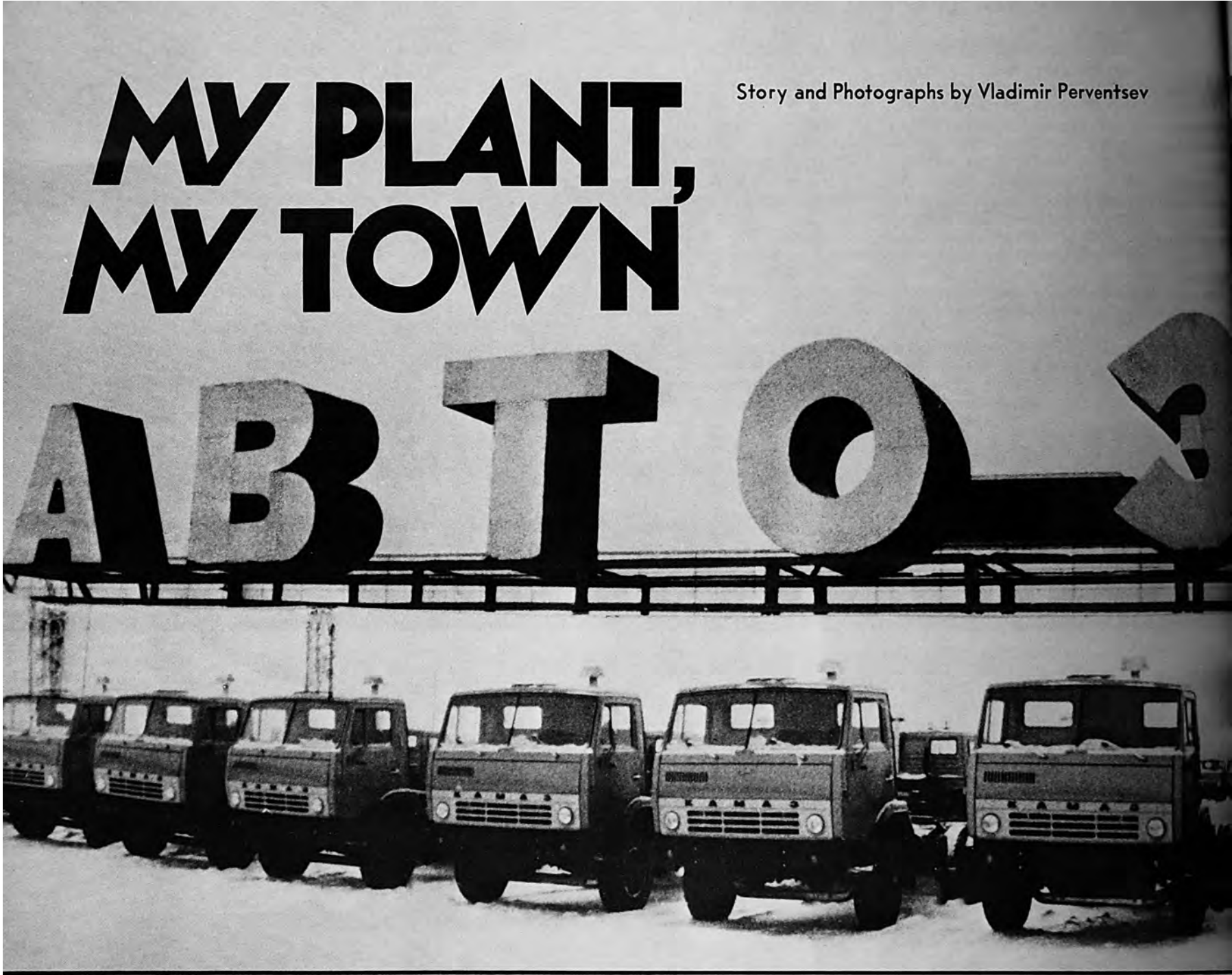
We're Learning to Understand Each Other Better

Professor Yassen Zassursky pointed out that the exchange of journalists and writers is mutually beneficial. He said:

"Such contacts help the Soviet and American teachers of journalism and literature. Many teachers in our department have been to the United States. Books based on the information they collected and on their impressions have been published. Some of our trainees have become well-known experts, like Alexei Burmistenko. American visiting lecturers are popular with us, especially those working in literature. We have recently had the American poet William Jay Smith as a guest. In 1968-70 he was Consultant in Poetry at the Library of Congress. There is nothing like direct contact with a real poet who is a writing personality, apart from being a representative of American literature and culture. Such exchanges are of great use not only to our students, but to the public as well. Smith also spoke to a group of Moscow architects and building engineers. We hope that his poetry will be published in Russian many more times. We also hope that our lecturers speaking in the United States will help Americans to learn more about the Soviet Union." ■

MY PLANT, MY TOWN

Story and Photographs by Vladimir Perventsev



After Gennadi Bashtanyuk's picture appeared on the front cover of our magazine in February, many readers wrote in requesting more information about this Soviet worker. For the story, SOVIET LIFE correspondent Vladimir Perventsev went to Naberezhnyye Chelny in the Tatar Autonomous Soviet Socialist Republic to talk with Gennadi.

HEN HE SPEAKS of Naberezhnyye Chelny where he lives and the Kama Truck Plant (Kamaz) where he works, Gennadi Bashtanyuk says "my town" and "my plant." He is one of the people who helped the town and the gigantic truck plant on the bank of the Kama .

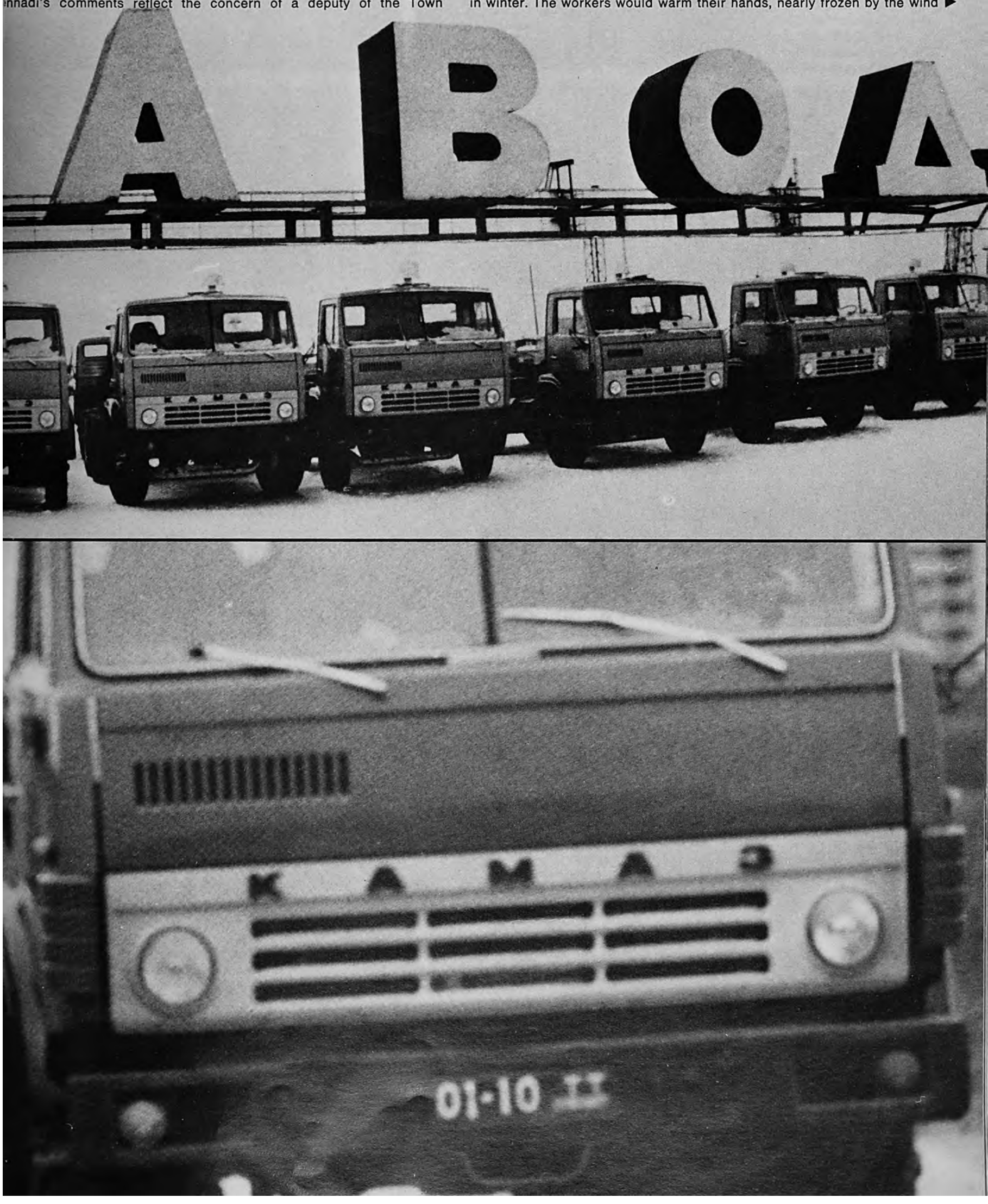
nnadi, his nine-year-old son, Seryozha, and I walked along Mir Pros- wide even by Moscow standards. We turned down the street that s to a department store and passed the Rossiya Movie Theater. A distance away a swimming pool was being built.

hey're taking a long time to complete that project," remarked adi. "We've been waiting for the pool for quite some time now."

nnadi's comments reflect the concern of a deputy of the Town Soviet, a man closely involved in the life of his community. It is characteristic of the people who helped build the town, the avenues and boulevards, in other words, the people who grew up with it.

Strictly speaking, Gennadi was not in on the earliest stages of the town's construction. He was away serving in the army at that time and later worked as an adjuster in Orekhovo-Zuyevo, a town not far from Moscow. When he was 25, Gennadi, his wife and their two children moved to Naberezhnyye Chelny. Many young people from all parts of the country were moving there to take part in building the giant truck plant.

Life was not easy then. Those who came were housed in structures hastily put together, called "wagonets." Conditions were especially hard in winter. The workers would warm their hands, nearly frozen by the wind ▶



Gennadi and son Seryozha out for a walk. Far right: Gennadi's coworkers at the Kama Truck Plant elected him delegate to the Twenty-sixth Congress of the CPSU. Below: One of the original builders of Naberezhnyye Chelny, Gennadi is at home in the outdoors.

Gennadi's wife Olya is a dressmaker at a local shop. Daughter Natasha is in the eighth grade. Far left: Woodcarving is only one of Gennadi's many hobbies. Below: A highly skilled mechanic, team leader Gennadi has earned the respect of his colleagues at the plant.

owing in from the steppes, over bonfires. Some people left the construc-n site after an embarrassed good-by or without any good-by at all. But ennadi and his family stuck it out in spite of the difficulties.

Today the Bashtanyuks live in a two-bedroom apartment in a new build-g. The children have grown: Seryozha, who is the spitting image of the her, is in the third grade, and Natasha is in the eighth. Gennadi's wife ya is a dressmaker at a local shop. At home Gennadi and Olya have cided not to divide the household chores between them but to do erything together. Besides mopping the floors and vacuuming the rugs, ennadi often makes dinner. Seryozha says, "I like Dad's cooking better an Mom's."

A jack-of-all-trades around the house, Gennadi has built closets in the ll, redecorated the bedroom and set up a small workshop in the store-om. "I think husbands should know how to do everything," smiled ennadi.

During our conversation, we often returned to the time when Kamaz as under construction.

"It might seem strange," Gennadi said, "but I think life was more teresting then. Every day there was some new problem to be solved, nd the people who worked here then were hardy and enthusiastic. Things are different today. Everybody wants apartments, cars, summer houses and the like immediately. Don't get me wrong, I'm not against the comforts of life, but I think it's wrong for material things to become the main focus of a person's life and determine his or her outlook."

"What do you believe is the real meaning of life?" I asked him.

"People's lives are happy and have meaning when they feel they are needed and the work they do is important," he answered. "I really feel proud whenever I see a Kamaz truck: I think to myself, 'A part of my labor is in those machines.' "

Gennadi Bashtanyuk joined the Communist Party of the Soviet Union in 1977, the same year he was awarded the Order of the Red Banner of Labor. In 1981 he was a delegate to the Twenty-sixth Congress of the CPSU, where he was elected an alternate member of the Central Committee of the party.

It's hard for me, a journalist, to judge Gennadi's professional abilities, but according to Walter Steeble, an American engineer who worked with him when American equipment was being installed in the foundry, Gennadi is the most qualified of all the mechanics he has ever worked with at enterprises in England, Japan and other countries. Steeble is a 20-year veteran at his trade, so he should know. ■

AROUND THE COUNTRY

Joint Art Exhibition

The Soviet city Nakhodka and the American city Seattle are on opposite coasts of the Pacific, but long-standing ties exist between them. Vladimir Lenin transmitted his famous "Letter to American Workers" via Soviet seamen headed for Seattle. Ships from Nakhodka often call at the American port, and the Soviet-American Maritime Resources Commission has representatives in both cities. In keeping with this tradition, a joint art exhibit was held in Nakhodka with 30 works representing each city. The artists are teachers at the Far Eastern Art and Seattle and Cornish institutes.

Representative of the Cornish Institute L. Allison said:

"Our joint exhibition is excellently organized. Nakhodka provided its best halls in the city's History Museum. We are in favor of continued cultural exchanges. Such exhibitions will undoubtedly improve understanding between our peoples and serve peace."

The exhibition enjoyed great success among the residents of Nakhodka.

Optical Wonders

Fifty holograms are on exhibit for the first time in the Sakhalin (Far East) Museum of Regional Studies.

Dark plates covered with a semitransparent brown film come to life when a ray of light is trained on them. Viewers admire the beauty and perfection of ancient ceramics, old Russian arms, and the refinement of breastplates worn by the King of Sarmatia. The optical effect makes you think you can reach out and touch the golden ornaments.

The collection will move from Sakhalin to Paris.

Petrified Fore

There is only one pe logical sanctuary i viet Union. It is near of Konstantinovka i Ukraine and has, among things, petrified flower trees rising to a height o to 15 meters. The explana given by scientists on the gin of this unique flora is about 250-260 million y ago, there were exte swampy plains overgrown giant araucaria trees on site of the present Don mountain range. The petri forest consists precisely these trees. They were upr ed and carried away by h canes and torrential rain nearby rivers, blocking t silt-covered beds. With no cess to oxygen, they petrifi

Pipelining The Sun

A light guide built by scie tists of the capital of Ukraine can transmit natu sunlight to subway statio underground warehouses a cellars. The way it works rather simple: The rays of t Sun are directed from a co cave mirror in a rooftop hel stat to a concentrator, whi increases the density of t luminous flux several tim over. A powerful beam pe trates the required premis via pipes lined with mirror fil

This device will be installe in a number of projects goi up in Kiev. The experts ar presently trying to figure ou how to make the heliostat fo low the Sun automatically.

Coal from Yakutia

The first million tons of coal have been extracted at the Neryungri opencast mine, which is located in the southern part of the Yakut Republic in Eastern Siberia.

Yakutia, a vast land of more than three million square kilometers, is now going to become a big ore mining center. Great strides in the republic's economic development were made during the Tenth Five-Year Plan period (1976-1980). A more than 200-kilometer-long railroad—the first built here—has made the Neryungri deposit of coking coal accessible. The importance of the railroad will grow as the output of coal increases. Reserves are estimated at billions of tons and are expected to last many years.

The biggest coal-dressing factory in the Soviet Union is being built close to the Neryungri pit.

Pike Under Protection

Not long ago the proximity of a big city meant death to fish. The fish reserves near Moscow were rapidly diminishing. Today there is every justification for saying that environmental protection measures have improved the situation.

A big territory of several thousand acres, comprising 12 big reservoirs and 180 lakes, is now under the protection of the workers of the Mosrybvod Agency as are the inhabitant of the almost 500 rivers of Mos cow and Moscow Regio whose total length is abou 9,000 kilometers. The task the people who work in thi agency is not only to preven poaching and check the fulfil ment of protection measures but also to raise a new gen eration of fish. For this purpose artificial spawning ground have been built.

New Library In Kiev

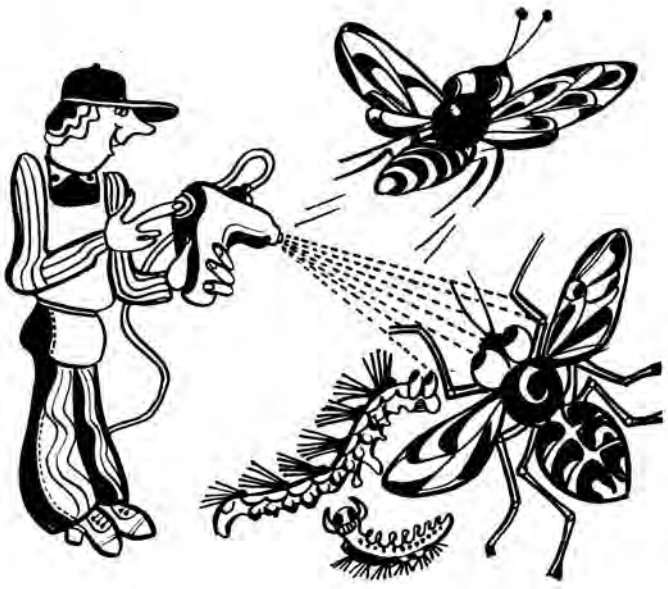
ldren's library—one of 0,000 in the country—st opened in Kiev, capi- the Ukraine. It has more 00,000 books by Soviet reign authors. The use s library, like any other USSR, is free. Children ke a book home or read e library's reading room.

Giant Crystal

nt crystal cultivated by ientists of the USSR rystal Research Institute Kharkov, the Ukraine, s 19 kilograms. Its "em- was a matchbox-size of cesium iodide. Where- takes thousands of years is process inside moun- under natural conditions, quires only several days artificial conditions. al devices monitor the r temperature to main- rowth rates. Giant crystals e used in the manufac- of large-diameter lenses ell as in instruments and ms used in geology and cine.

Dolphin-I Is Launched

e USSR Academy of Sci- nces' Lebedev Institute of sics, headed by Academi- Nikolai Basov, has ched Dolphin-I, a power- laser installation, for re- ch on controlled laser monuclear synthesis. reliminary experiments on ting spherical thermonu- r targets have already be- on Dolphin-I. he Institute of Physics is of the Soviet Union's ma- research centers. It con- ts studies in elementary icle physics, space rays, sma, spectroscopy, lumi- cence and quantum elec- ics.



Understanding the Language of Insects

Lithuanian scientists have established that insects use odors to pass information to one another. By odors, which serve as a wireless "telegraph," they mark the boundaries of their habitat and give information about food reserves and danger.

The scientists have not only succeeded in determining the chemical composition of the odorous material secreted by insects, but have also synthesized some of them.

Knowing the way insects communicate will help drive unwelcome guests—flies, cockroaches and caterpillars—from gardens and dwellings. And if the scientists synthesize the substances which insects secrete to signal danger, it will be possible to banish them forever.

The gnat problem, too, will be solved. Without killing gnats, on which many birds feed, it will be possible to avoid being bitten by them.

Church Organ Is Readied For a Long Trip

The organ in the Doma Cathedral in Riga, Latvia, is to undergo a major overhaul in Holland by the well-known Flentrop Company. The giant instrument will be dismantled for its long journey. Specialists have taken exact measurements and made drawings and pictures in order to facilitate reassembly.

This is the Doma Cathedral's second organ. The first was installed 380 years ago and replaced two-and-a-half centuries later by the present one. Franz Liszt composed a special chorale for the second organ's inauguration.

Visitors will be permitted to visit the cathedral during the time the instrument is away for repairs. They will be able to admire the interior, stained-glass panels and garden of one of the Latvian capital's unique historical monuments.

Airways

Aeroflot has just added a new plane to its fleet. The L-410 has started regular flights on the Kamchatka Peninsula. The plane was built by Czechoslovak aircraft designers with the assistance of Soviet specialists. It is easy to handle and equipped with the latest navigational instruments. It can fly in any weather, day or night. The L-410 is suitable for work in Siberia, the Far East and the other remote areas where population centers often have no reliable land communication with one another.

Shepherds' Health Protected

mobile medical center has been set up in Kazakhstan the treatment of the people ding roaming herds of ani- ls. A medical team flies to steppes and pastures where animals are grazing and nders needed medical care. In Kazakhstan, like in all So- t republics, the right of ev- y citizen to health protection cludes free medical care, the gular expansion of the net- ork of clinics and hospitals, preventive treatment and sufficient state allocations to finance the needed facilities.

Allocations for health care in the republics' budgets will increase by 1.5 times in the Eleventh Five-Year Plan period (1981-1985). This will provide sufficient funds to improve not only the treatment of disease, but also its prevention. Over 100 million people have medical checkups in the Soviet Union every year.

Library Of the Future?

With the semiautomatic apparatus Ultrakart-1 M built by the Scientific and Technical Data Institute of the USSR, it will be possible to put one million pages of text and illustrations inside a box 10 x 7.6 x 12.7 centimeters. With the introduction of the latest microrecording technology, a conventional index-card box will contain a whole library of 10,000 volumes of 1,000 pages each.

Campfires, Guitars and Songs

A youth movement that began in the 1950s and subsequently became known as the Amateur Song Club (ASC) has hundreds of thousands of members in many cities of our country. Their love for songs is the main but not the only thing that makes these young people set out in any kind of weather for annual ASC rallies and festivals held in the woods or on picturesque riverbanks.

A program that includes performances of amateur groups, torch processions, shows, campfire discussions, new songs and poetry recitation explains why the popularity of this movement keeps growing all the time, and not only among the youth.

Burn Brightly

More effective and economic sources of light are now being made by staff members of the USSR Light Source Research Institute in Saransk, Central Russia. Their efforts are presently concentrated on fluorescent lamps that operate in the same way as the now highly recommended cold luminescent tubes. Outwardly they are practically the same as their predecessor, the incandescent lamp. The only distinguishing feature, perhaps, is that they look a little more elegant.

The capacity of the new artificial mini-sun is 18 watts whereas its luminous filament is equal to that of a 75-watt incandescent bulb. The general use of the new lamp will result in an economy of billions of kilowatt-hours of electricity.

Salnikova Sisters— New Names In Sports

The victory of 16-year-old Moscow Dynamo player Julia Salnikova was probably the biggest sensation in the Moscow open tennis championship, especially since she surpassed practically all the best national athletes in this sport. Her present coach Boris Lunin commented:

"Julia's outstanding characteristics are her single-mindedness, an adult attitude toward the game and training, a high sense of responsibility and a strong will. Her approach is more professional than that of her twin Alla, for whom tennis still remains simply a game."

The Salnikova sisters owe much of their achievements to their father, Sergei Salnikov, once a famous soccer player and the Melbourne Olympic champion.

U.S. Fishermen Rescued

Three American fishermen were rescued in the Atlantic by the crew of the Black Sea ship *Krasny Oktyabr*. The skipper of the Soviet vessel said that the men were spotted in a dinghy 17 days after their boat sank. An American helicopter, summoned by the Soviet ship via radio, brought the men back home.

Volcanoes of Distant Worlds

Meteors have helped the Ukraine's Kharkov Institute of Radio Electronics confirm the assumption that planetary systems with volcanic activity exist in our galaxy. The automatic radar system developed by the institute provided the proof. This system records the hard particles that rush with enormous speed into the Earth's atmosphere. When they burn up, they leave kilometer-long ionized trails that fall into the radar beam's field of vision.

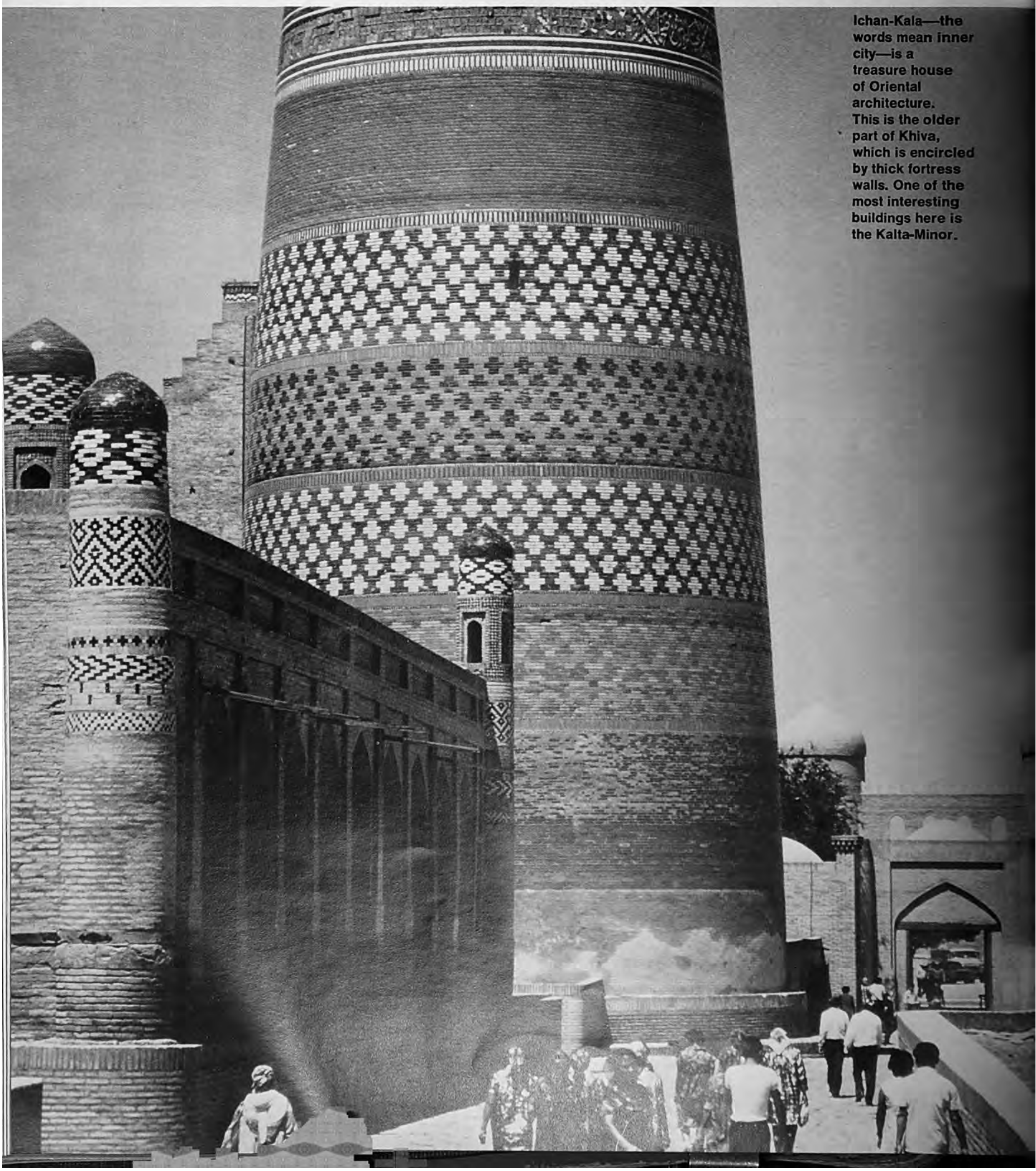
Studies show that connections in the shape of photon radiation exist in interstellar space. There is also an exchange of physical particles. This adds another dimension to our understanding of the galaxy.

BLUE STONES OF KHIVA

Photographs by
Vadim Gippenreiter

KHIVA, Samarkand and Bukhara—the names of these Uzbek cities bring to mind the tales of the Arabian Nights. For they are truly a wonder. Imagine the amazement of travelers when, after a long and tiresome journey over the hot desert among sand hills six to seven meters high, they suddenly see before their eyes the city of Khiva with its palaces, minarets and mausoleums.

We find the first mention of Khiva in the writings of tenth century Arab geographers Istakhri and Maqdisī. It existed as a city in Khorezm, an ancient kingdom whose center was the oasis with the same name, situated in the lower reaches of the Amu Darya River in Central Asia. But archeological excavations revealed that Khiva existed as early as the sixth to eighth centuries. It gained prominence in the history of Central Asia in the second half of the sixteenth century when it became the capital of the Khiva Khanate, a feudal state on the territory of Khorezm dating back to about the year 1511. Its population consisted of the descendants of the ancient inhabitants of the region—Uzbeks, Turkmens and Karakalpaks.

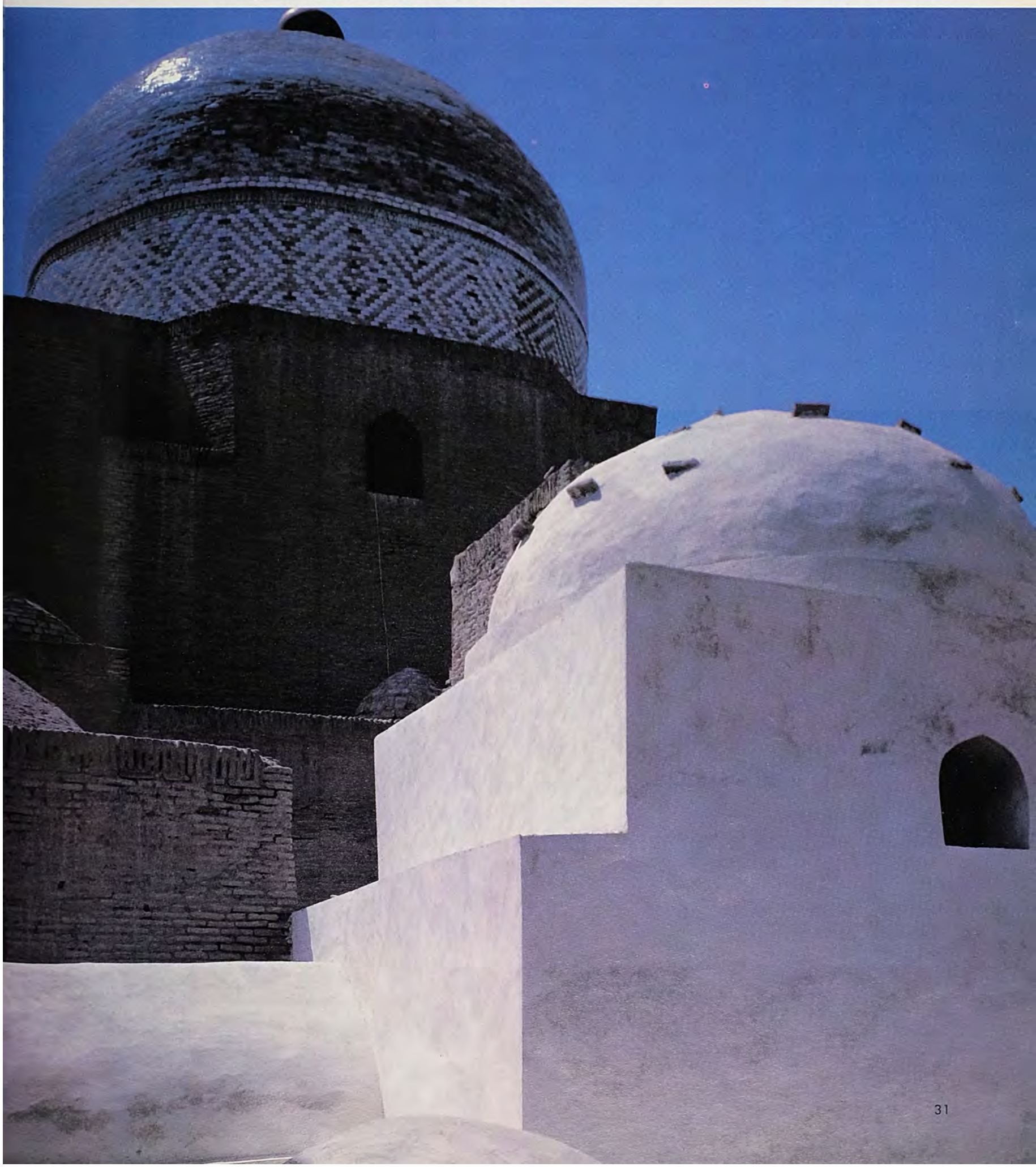


Ichan-Kala—the words mean inner city—is a treasure house of Oriental architecture. This is the older part of Khiva, which is encircled by thick fortress walls. One of the most interesting buildings here is the Kalta-Minor.

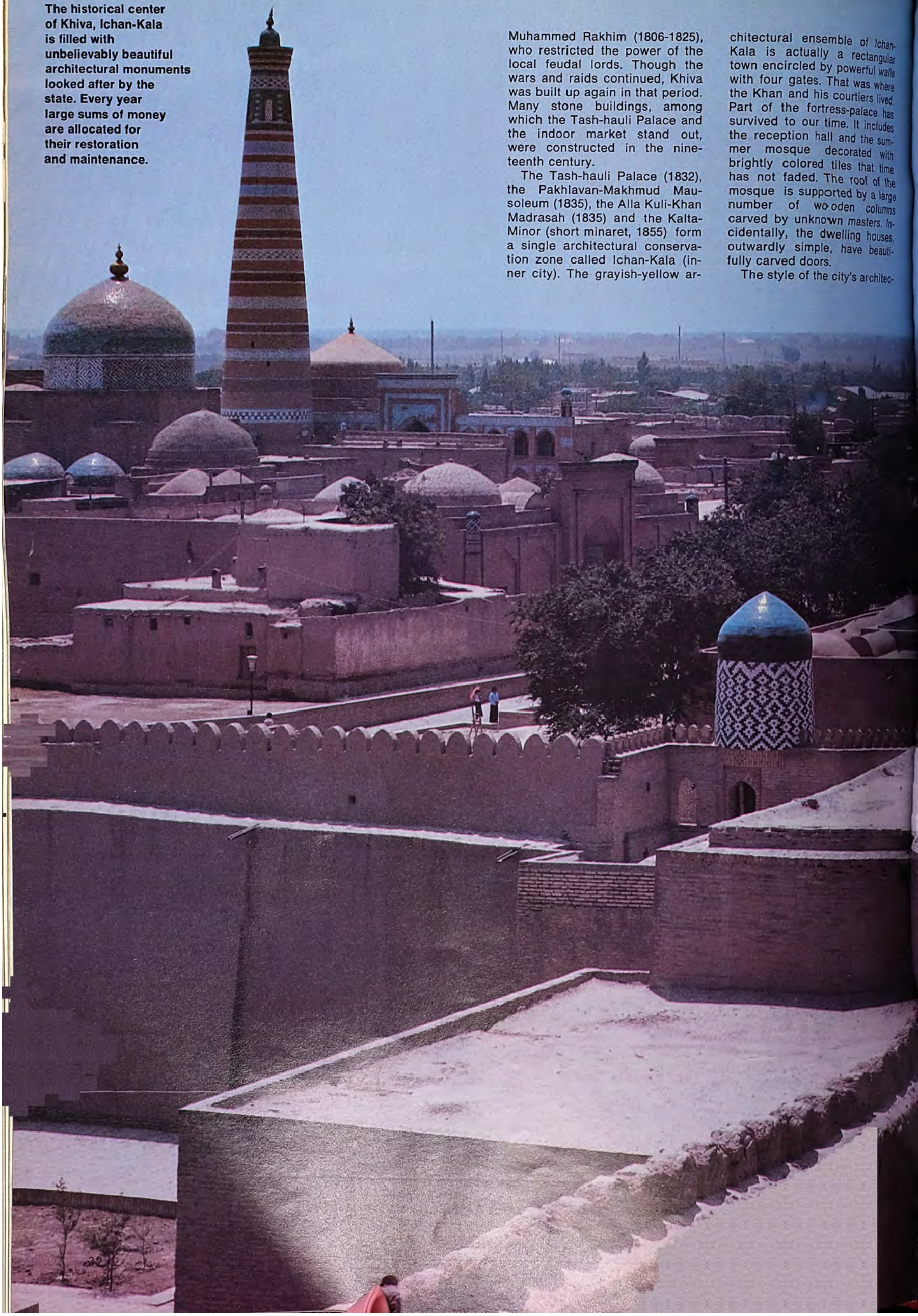
...io earned their living by ...ing, breeding cattle and ...ng handicrafts. The history ...niva is dramatic. It was con-...ly plagued by internecine ...al wars between the Uzbek ...s and frequent raids of the ...men, Khazakh and Kalmyk ...ad tribes that plundered the ... and caused its economic ...cultural decline.

...niva suffered great damage ... the invasion of Central Asia ...Shah Nader of Iran in 1740. ... in the late eighteenth and ...y nineteenth century the ...a Khanate began to revive. ...ecame influential under Khan ▶

The monuments of Khiva have a style of their own. It includes bright majolica facing and carved wood and stone. The Pakhlavan-Makhmud Mausoleum (below) is built of baked brick and faced with glazed tiles. The entrance door is decorated with ivory, and the door opening into the tomb chamber has carved fretwork through which the blue-tiled tombstone can be seen.



The historical center of Khiva, Ichan-Kala is filled with unbelievably beautiful architectural monuments looked after by the state. Every year large sums of money are allocated for their restoration and maintenance.



Muhammed Rakhim (1806-1825), who restricted the power of the local feudal lords. Though the wars and raids continued, Khiva was built up again in that period. Many stone buildings, among which the Tash-hauli Palace and the indoor market stand out, were constructed in the nineteenth century.

The Tash-hauli Palace (1832), the Pakhlavan-Makhmud Mausoleum (1835), the Alla Kuli-Khan Madrasah (1835) and the Kalta-Minor (short minaret, 1855) form a single architectural conservation zone called Ichan-Kala (inner city). The grayish-yellow architectural ensemble of Ichan-Kala is actually a rectangular town encircled by powerful walls with four gates. That was where the Khan and his courtiers lived. Part of the fortress-palace has survived to our time. It includes the reception hall and the summer mosque decorated with brightly colored tiles that time has not faded. The roof of the mosque is supported by a large number of wooden columns carved by unknown masters. Incidentally, the dwelling houses, outwardly simple, have beautifully carved doors.

The style of the city's architec-

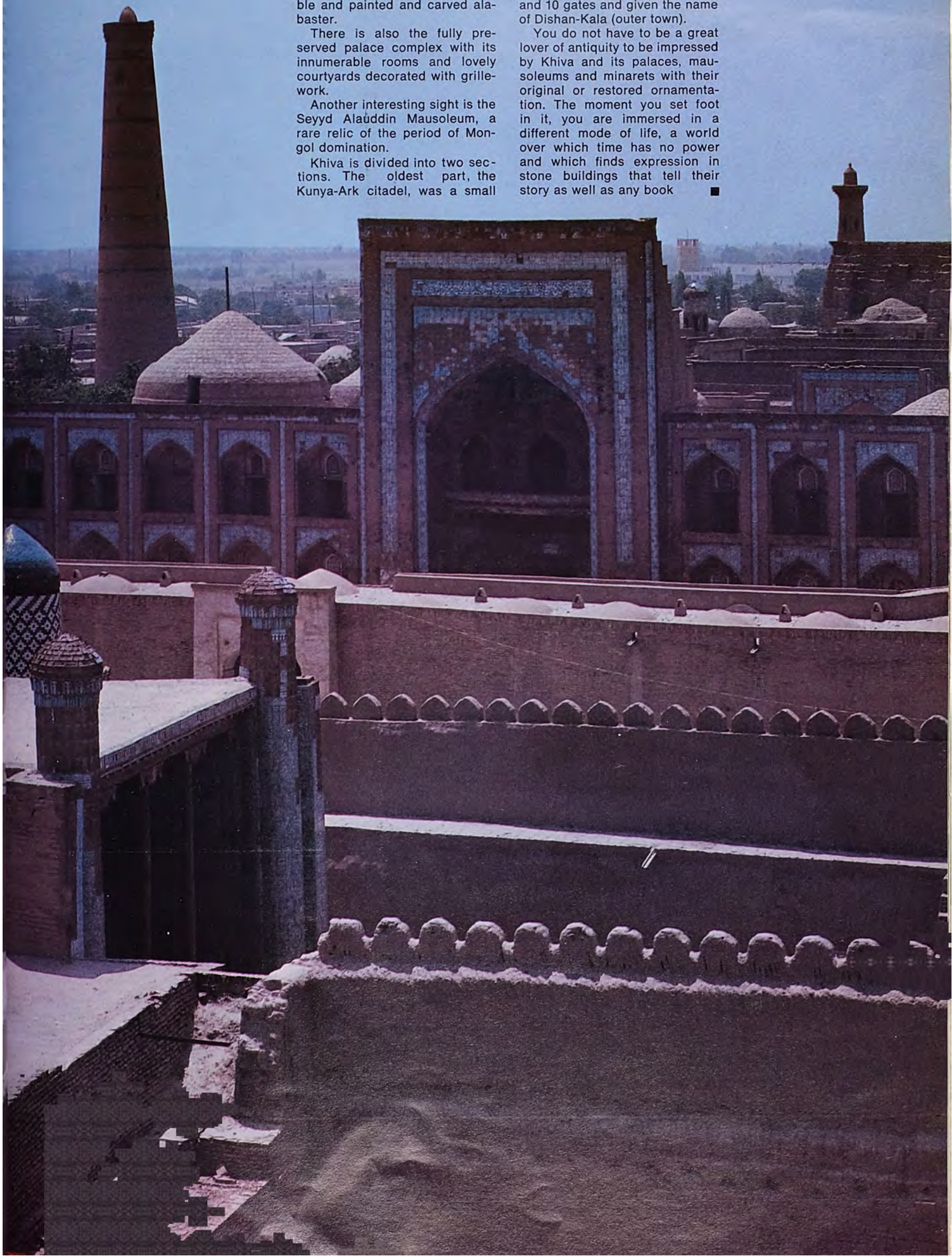
ture took shape between the eighteenth and nineteenth centuries. Its main features are majolica facing, carved wood, marble and painted and carved alabaster.

There is also the fully preserved palace complex with its innumerable rooms and lovely courtyards decorated with grillework.

Another interesting sight is the Seyyd Alauddin Mausoleum, a rare relic of the period of Mongol domination.

Khiva is divided into two sections. The oldest part, the Kunya-Ark citadel, was a small fortress around which Ichan-Kala grew. In the mid-nineteenth century the suburbs, too, were encircled by a wall with towers and 10 gates and given the name of Dishan-Kala (outer town).

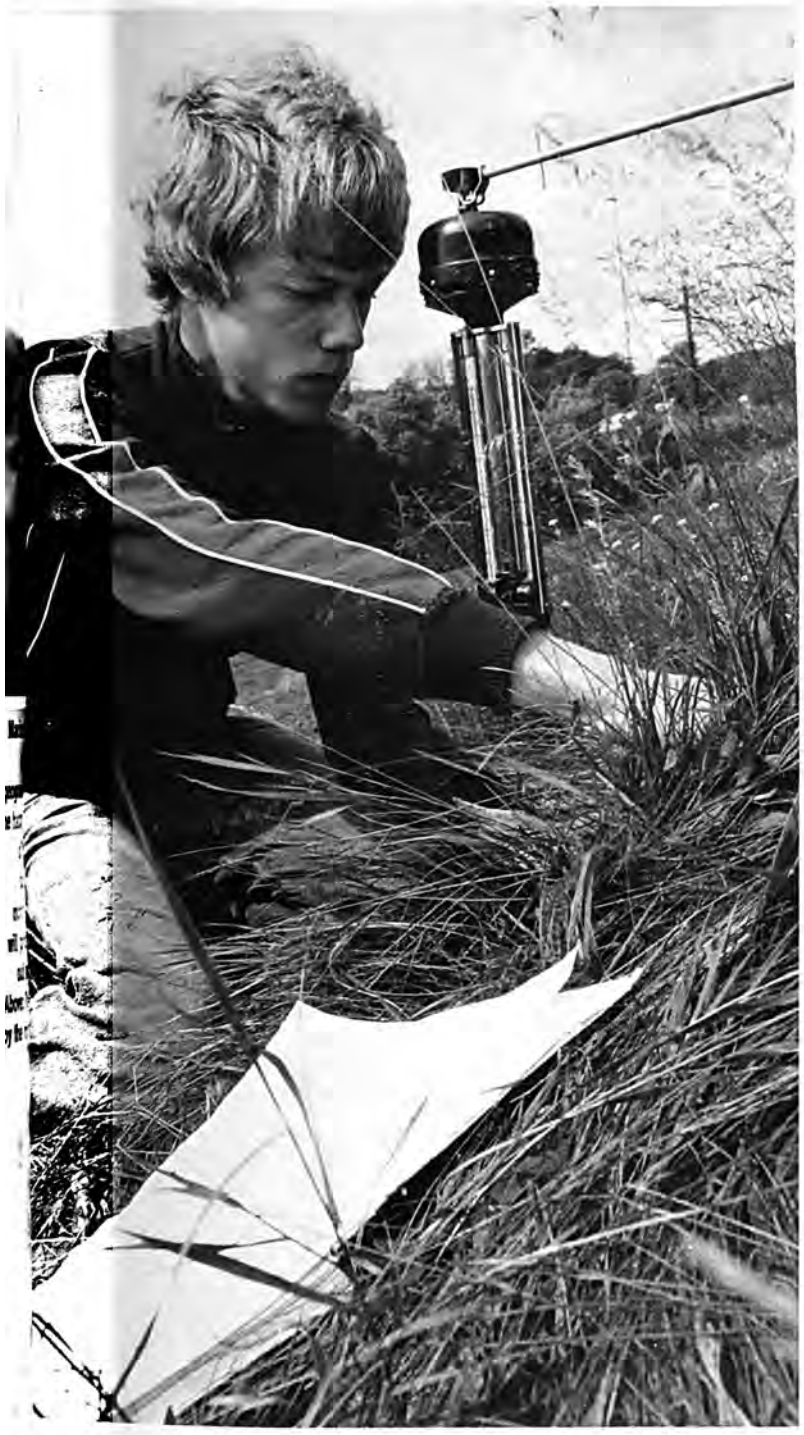
You do not have to be a great lover of antiquity to be impressed by Khiva and its palaces, mausoleums and minarets with their original or restored ornamentation. The moment you set foot in it, you are immersed in a different mode of life, a world over which time has no power and which finds expression in stone buildings that tell their story as well as any book ■



Marina Chistyakova plans to be a biogeographer. Among the happy memories of her student days, the two months in Satino will probably stand out most vividly. Above: Transformed by the morning dew.

By Yuri Shevelyov
Photographs by Marina Barbashova

BUSY SUMMERTIME FOR STUDENTS



The students live here when they are doing their field work. Conditions resemble those they'll encounter on the job.

Professor Makunina (right) starts the landscape practicals with a story of "the crocodile." This is the name generations of students have given to this tree trunk. Left: A microclimate survey has to be made every 30 minutes, work that requires care and concentration.

What do graduates of the Geography Department at Moscow State University remember best about their school days? They recall the picturesque village of Satino, Moscow Region, the ampsite on the riverbank, endless conversations der the stars, singing around the campfire, ater lilies on the river, wild strawberries and esh milk. How could they forget such a lovely ace? Satino is not a summer camp, as you ght think, but a place where 200 first year eography students go to do their field work.

Field camp may sound like a summer vacation, t in reality it means hard work. The daily chedule is full—the aim is to give the students a good idea of the various aspects of geography.

People enter the Geography Department for a variety of reasons. Some students come straight out of high school, others after a two-year stint in the army and still others after working in industry or taking part in expeditions for several years. What brings them together, however, is their love of nature and of travel.

Summer in the field means a lot to the students. There they become familiar with the geographer's work, and they begin to specialize in one area or another, for example, in geomorphology, hydrology, meteorology, mapmaking, biogeography or soil science.

The two months in Satino pass quickly. First the students do field work, which is followed by laboratory work in a specially equipped two-story building, and finally they go on ecological field trips because future geographers should study nature with an eye to preserving it.

When the workday is over, it's time to relax. The students play soccer or volleyball and tennis with each other or some of the local residents. And, of course, there are the traditional evening campfires with singing and endless discussions.

During their senior year, the students travel to many exotic places: the Kamchatka Peninsula, Sakhalin Island, the glaciers of the Pamirs or Tien Shan, and the White and the Black seas. But they never forget their first summer in Satino. ■

The surveying equipment and the student surveyor on their way to work. Above: Inga Goryainova reviews the Latin names of plants with her class.

The spot near the church is everybody's favorite place. The students get their topography training here. Left: Rain and wind complicate the water measuring procedure, but the job has to be done regardless of the weather.

PAVLOVSKY SHAWLS- A WOMAN'S DREAM

Photographs by Yuri Kaver

Pavlovsky Posad (in old Russia, *posad* meant settlement) is an ancient Russian town about 60 kilometers from Moscow. The fantastic labyrinth of its streets sprawls along the bank of the picturesque Klyazma River. In the eighteenth century Pavlovsky Posad was a center of peasant silk weaving. To this day it is famous for its textiles. It is especially known for the originality of its printed woolen shawls and kerchiefs which are manufactured by the Textile Finishing Factory, one of the largest textile plants in the country and probably one of the oldest. It will be celebrating its 170th anniversary in 1982.

Why are the Pavlovsky shawls considered so artistic? What makes them so attractive, so beautiful? Why have the creative triumphs of Pavlovsky craftspeople invariably won the highest awards, gold medals and prizes at international exhibitions in Paris, New York, Brussels, Montreal, Cairo, Damascus, Leipzig and other cities? One look at them, and the answer becomes obvious. The designs are unlike anything made anywhere, and the colors are a joy to behold.

A typical feature of the shawl designs is flowers and leaves. The flowers are most often roses, clearly outlined and skillfully arranged. Meadow flowers, like poppies, cornflowers and daisies, are also used frequently and are very popular. Interesting compositions are created by intertwining flowers and leaves with lace designs and other kinds of tracery. The flowers are so realistically reproduced that the effect is three-dimensional.

Top left: The art studio staff of the textile factory in Pavlovsky Posad discussing new designs. Top right: Hand printing a scarf. Above: The finished product is a real work of art.

As a rule, the corners of the shawls are reserved for the comparatively larger forms or smaller forms joined together (a nosegay, for instance). To fill the empty spaces, small flowers and buds are scattered here and there. This design is just one of the many pattern variations used.

Pavlovsky shawls are dyed in most saturated colors in the traditional combination of red, blue, green and yellow, with each color presented in two or three shades. The total number of colors in the design usually ranges from 10 to 12, not counting the color of the background. The designs of some shawls require 18 colors. This naturally enriches and intensifies their effect.

Printing, one of the most widespread methods for impressing a design onto fabrics, is closely bound with folk art. In old Russia the method of decorating cloth with a printed pattern was known by the eleventh century, when, with the development of the town, textiles became marketable goods. ■

Top: Various stages of preparation for hand-printing the shawls. Bottom, left to right: Traditional flower motif by Sergei Ryzhov; *Flowers and Medallions* by Yevgeni Shtykhin; flower motif on a white background by Ksenia Zinovyeva

Things cultural

GRAPHIC ARTS

THE well-known Moscow artist Sergei Alimov illustrated a book of American folklore titled *Riding the Hurricane*, recently put out by Detskaya Literatura Publishers. According to the preface, it includes "true stories and fantasies about the heroes and pioneers who tamed the Wild West, legends and tales of the American South and New England, and stories about fantastic animals." The stories were translated by Natalia Shereshevskaya.

Alimov graduated from the USSR State Institute of Cinematography in 1960 and worked as artist and director at the Soyuzmultifilm (animated cartoons) Studio. He made several fine cartoons, which earned him a reputation in the film world. However, for the past 10 years he has been doing book illustrations and has worked only intermittently in films, most recently on *The Story of the Wise Gudgeon,* based on a tale by Saltykov-Shchedrin.

Among the books illustrated by Alimov are works by Gogol, Chekhov, Saltykov-Shchedrin and Somerset Maugham. *Riding the Hurricane* is his second American book. Several years ago he designed and illustrated Rebecca Caudill's *A Pocketful of Crickets.* He says he enjoys working on American books because of their whimsical humor and clever way of combining the grotesque with the commonplace.

BITIONS

and toys are Lyubov Yukina's passion though s a graphic artist by profession. She puts her ned fantasy and inventiveness into the toys. s them out of all kinds of material, sometimes sual, combining them in remarkable ions. She gives every doll a character of its own ching expression.

llection of animals is also fascinating. While a very specific "animal" personality, it human traits. There are the red velvet tomcat olored felt boots, a checkered bear with six cking out in all directions, and a knitted snail ody coiled in a way that makes it look like a shell. There is one animal that is hard to e. It has a yellow muzzle with funny little on its ears, red overalls and green paws. Its age personifies absurdity and gentleness.

contrasting types of material, the artist achieves formal expressiveness but imparts aning to the images. Her toys live in a special th special relationships.

v Yukina invents all kinds of stories for her s and hopes to write a book about them one day.

RECORDS

RECORDS for children are no small part of the large number put out by the Soviet firm Melodia. One of the most popular is Walt Disney's *Three Little Pigs*, licensed by Capitol Records, USA. Soviet children, especially the ones studying English, love both the music and the narration.

e arts

FTER graduating from an arts and crafts cational school, vel Gut worked as an ist and restorer for years in the search department of e State Museum of story in Moscow. He rticipated in many cheological xpeditions which took m to the Crimea, the aucasus and the orthern regions of ussia. He mended and olished ancient ectorals and rings and arned a great deal bout the art of ifferent nations. He as especially fond of rimitive art objects.

Many years later, hen Gut left the nuseum and began culpturing, the mpressions and nclinations of his outh revived. His igurines—a young voman, a rearing horse, hen, a rooster and rook—are deliberately crude and monumental despite their small size. His jewelry is an mprovisation on the theme of rings (shown here enlarged) and bracelets rather than an adornment in the ordinary sense of the word. He emphasizes the contrast between rounded forms and precise planes and creates intricate designs.

MOVIES

THE film *Teheran-43*, a joint Soviet, Swiss and French production, won a gold prize at the Twelfth Moscow International Film Festival this summer. French actor Alain Delon, shown at left as Inspector Foch, has one of the leading roles. Soviet actress Natalya Belokhvostikova plays opposite him. The film's story centers around the plot to assassinate Stalin, Roosevelt and Churchill during the Teheran Conference in 1943. The scheme, hatched by the Nazis, was exposed by Soviet counterintelligence.

MUSIC

THE Lipinky Girls Choir of Vilnius, capital of Lithuania, often participates in the singing competitions that are so popular in the Baltic republics. Like any adult choir, the Lipinky has its own soloists. Yelena Klickaite (above) is one of them.

THE COMMUNIST PARTY OF THE SOVIET UNION:
THE VANGUARD OF THE SOVIET PEOPLE

Continued from page 13

ors to keep moving ahead, to achieve even more, to realize to an even greater extent the opportunities of developed socialist society. That is why the Twenty-sixth Congress of the CPSU further oriented the economy toward resolving the diverse tasks connected with raising the Soviet standard of living. But, of course, an improvement in the people's well-being depends directly, as before, on the successes of our economy.

To put it in a nutshell, the essence of the economic program for the Eleventh Five-Year Plan and for the period until the end of the 1980s is as follows: We must ensure steady, progressive economic development, the acceleration of scientific and technological progress and the intensification of industrial production.

The call of the times is to completely transfer the economy to predominantly intensive development. To do this properly, we must perfect our scientific, technological and structural policy, planning and control, and improve management standards. Only in this way can we ensure a steady rise in the national standard of living and strengthen the USSR's economic and defense might. Only in this way can we overcome the difficulties that exist in our economy, the shortcomings that were strongly criticized at the congress: the insufficiently rapid rise in labor productivity, a lag in some branches of the economy, the scattering of capital investments and the not always thrifty use of our resources.

Nor should it be forgotten that it is precisely now, in the eighties, that the foundation is being laid for the national economic structure with which the Soviet Union will enter the twenty-first century; this structure must embody the integration of science and industry, the indestructible alliance of creative thought and creative labor. And it is from the viewpoint of this perspective that we must also examine the current state of our economy.

One of the fundamental distinctive features of the economic strategy outlined by the congress for the next period is a fuller, more effective and thrifty use of our production potential and resources, that is, the more efficient use of everything we have. Maximum results at minimum cost is the essence of the party's slogan: "The economy must be economical."

It is clear to every sensible person that you cannot promise to give people more than you are able to produce. The main criterion for the distribution of goods and services under socialism is work—its quantity and quality. Our approach is clear: If you want to live better, you must work better and more efficiently. Our party's humane objectives and policy are inseparable from the irreconcilable struggle against everything that stands in the way of the Soviet people's tranquil and worthy life, their successful work. Addressing the congress, Leonid Brezhnev said, ". . . all organizational, fiscal, and juridical levers should be used to close once and for all every opening for parasitism, bribery, profiteering, unearned incomes, and infringements upon socialist property."

The reader has, perhaps, some idea of the main parameters of the new Soviet five-year plan; both the Soviet and foreign press have written much about it. I will state only the most important points. Over the five-year period from 1981 to 1985 the national income is to be increased by 18 to 20 per cent, industrial output by 26 to 28 per cent and agricultural output by 12 to 14 per cent. Real per capita income is to grow by 16 to 18 per cent. Aware of the economic situation in the developed countries of the West—industrial recession, soaring prices, galloping inflation and other crisis phenomena—the reader can duly appreciate the Soviet Communist Party's plans. But nothing comes by itself. This will take the creative efforts and initiative of millions upon millions of people. It will take a new and even higher level of management for plans to be realized in such fields as electric power, metal, machines, grain and housing. Hence, the necessity of the Communist Party's growing role in the economy and other fields. Lenin's words come to mind in this connection. He said:

> The greater the scope and extent of historical events, the greater is the number of people participating in them, and, contrariwise, the more profound the change we wish to bring about, the more must we rouse an interest and an intelligent attitude toward it, and convince more millions and tens of millions of people that it is necessary.*

The Communist Party, its Central Committee and the Politburo permanently devote much attention to economic issues and raise and resolve fundamental timely questions of economic development. This is exemplified by the comprehensive target-oriented programs that are currently being drawn up to ensure a rise in the key economic branches—energy, the metallurgical and chemical industries, transportation, the production of consumer goods and the country's food program. The implementation of these programs will bring about fundamental changes in the operation of the most important industrial sectors, and consequently of the entire economy, and will have far-reaching political consequences.

The Twenty-sixth Congress has put forward as a most important demand of the times the bringing of all economic branches to the frontiers of science and technology. It orients workers to the final product, so that the whole functioning of the economic machinery will be evaluated according to this principle. There is another no less important aspect. The congress stressed that the more efficient use of the production potential was a task of primary importance. Our main emphasis now has shifted, not to the construction of new projects (although this will continue on the necessary scale) but to the effective utilization of everything that has already been created.

These examples, more of which can be cited, indicate that the party is sensitive to the economy. Without substituting itself for executives in the economy, without interfering in their functions, the party broadens their vistas and provides examples of a thoughtful, planned approach to the solution of economic problems.

When we speak of the party leadership of the economy, we have in mind not only the Central Committee and its Politburo, but also the local party organizations. The party organizations in Moscow, Leningrad, Kazakhstan, Azerbaijan, Byelorussia, the Ukraine and a number of other areas have accumulated valuable experience in this work. Thus, for example, the party committees of Armenia and Latvia have succeeded in setting their industrial sights on improving the quality of industrial products. Uzbek Communists have headed the effort to ensure bumper cotton harvests. The Communists of the Don Region have initiated a campaign to put projected facilities into operation ahead of schedule. These Communists were praised from the rostrum of the Twenty-sixth Congress. Initiative, creativity, bold ideas and permanent quest by Communists and the successful work of party organizations are our most precious assets. The more fruitfully Communists work in their local organizations, the more successfully the entire party conducts its affairs.

The CPSU and Sociopolitical Processes Under Developed Socialism

Soviet society is dynamic. It is undergoing deep-rooted changes. There is an irreversible process taking place that is steadily gaining in scope: The classes and social groups are drawing closer together, and the friendship among the different nationalities is growing stronger. The socialist way of life is being perfected; the Soviet state and democracy are being strengthened. An important role in this is played by the social policy of the party and the state. Our experience has shown that only the Leninist party, the party of scientific communism, can resolve the most complex social problems.

The Twenty-sixth Congress approved the Guidelines for the Economic and Social Development of the USSR for 1981-1985 and the Period to 1990. The very name of this document is symbolic. It stresses that the party views economic issues together with social ones. It sees the country's future not only in the growth of economic and scientific potential, in a rise in the living standards of Soviet people. No less important is the task of a further development of society's social, class and national structure.

The party's policy is directed at enhancing the role of the working class in society. The results of this have been significant. In the seventies the number of workers increased—there are now nearly 80 million workers or two-thirds of the gainfully employed population—and the ideological maturity of the working class, its education and professional standards have grown.

The collective farm worker is changing. The policy of the Communist Party of industrializing agricultural production has resulted in fundamental changes in the character of farm labor. It increasingly becomes a variety of industrial labor. The agrarian-industrial integration, whose development was started on the party's initiative, has far-reaching social consequences. The creation of agro-industrial complexes is contributing toward the integration of two forms of socialist property—state and cooperative—which is an important prerequisite for forming communist society.

The goal of the CPSU is the elimination of the distinctions between mental and physical labor. In the course of everyday concerns, in the diversity of practical deeds, our party does not lose sight for a single moment of this objective and advances its implementation step by step. Convincing figures were cited at the Twenty-sixth Congress: Every fourth working person in the country now has a job connected with mental labor. In turn, the work done by industrial workers and collective farmers increasingly combines two of its forms: physical and intellectual work. Indeed, how can one classify workers who are innovators, inventors, writers, public figures or political leaders? They are workers but at the same time they are intellectuals, erudite people.

Leonid Brezhnev proposed at the congress that the development of society's classless structure will proceed mainly within the historical framework of mature socialism. This conclusion, which has considerably enriched Marxism-Leninism, sets the guidelines for the party's social policy for many years to come.

I would like to say a few words about the party's national policy. Its practical implementation has contributed to strengthening friendship among all the peoples of the multinational country, to drawing the socialist nations closer. The CPSU pursues a policy of increasing the material and spiritual potential of every republic and at the same time its maximum use for the well-balanced development of the whole country.

The dynamic development of the multinational state has certainly given rise to new problems. All of them are being resolved in a spirit of equality and fraternity, disinterested cooperation and mutual assistance. The

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* V. I. Lenin, *Collected Works,* English edition (Moscow: Progress Publishers, 1965), vol. 31, p. 498.

resolutely struggles against everything that might mar the fraternal
:e of the peoples of the Soviet Union. It is against any artificial
·ation of national identities or the cultural, linguistic and everyday
ements of citizens. It wages an uncompromising struggle against
inism or nationalism, against any nationalistic aberration.
ew words about the problems of perfecting society's political sys-
The party directs its efforts, above all, to further intensifying and
:ting the work of the Soviets of People's Deputies. The Soviets are
than 50,000 elected bodies, more than two million deputies and
of millions of activists. There are almost a million Communists
g the deputies. It is through them that the party guides these repre-
tive bodies of state authority without substituting for them and
ut permitting any petty patronizing. It sees to it that the attention of
oviets to the local economies and services for the population does
lacken and that they make an increasingly greater contribution to
ing the comprehensive character of economic and social develop-
ever more actively coordinating and controlling the work of the
·ies and organizations under their jurisdiction.
e adoption of the 1977 Constitution marked a new stage in the
opment of socialist democracy. Nowadays increasingly broader
s of our citizens take a direct part in the efficient administration of
and public affairs. The party forum has itself graphically demon-
d socialist democracy in action. The most important precongress
ment—the Central Committee's Draft Guidelines for the Economic
Social Development of the USSR for 1981-1985 and the Period to
—was put forward for national discussion, and an optimum version
drawn up with due regard for the views of the participants in the
ission. Taking counsel with people on the most important issues of
estic and foreign policy is the law of party life. That national discus-
was a vivid manifestation of this law.
e range of affairs and concerns of the CPSU as the political leader
ciety has no boundaries. Everything that concerns the life, work and
day living conditions of the Soviet people is the direct concern of
arty. Within the sphere of its activities is a concern for increasing
country's spiritual potential, the development of socialist culture and
arts. Of course, it does not dictate to the writer or artist what and how
r she should create. This kind of understanding of party leadership is
itive and vulgar. The essence of the matter is different: The party con-
s itself with how truthfully and deeply Soviet life is reflected in the
and what ideals are advocated and upheld by artists.

At the Helm of State Foreign Policy

ne area that is a matter of the party's daily and hourly concern is
ign policy. I can say from my own experience that there has never
n a meeting of the Politburo at which the fundamental issues of rela-
s between the USSR and foreign governments have not been dis-
sed.
he world today is multifaceted, complex and contradictory, and events
happen swiftly. In the course of these events it is important for the
y not to get sidetracked from a correct policy, not to lose its perspec-
. In spite of complexities, our party confidently pursues a policy of
ce.
he early eighties have been marked by a serious aggravation in the
rnational situation that threatens to eliminate much of what was
ieved in the seventies during the relaxation of tensions. The threat
war, which somewhat lessened in the middle of the past decade, has
wn again. It is understandable, therefore, with what riveted attention
world looked forward to the Twenty-sixth Congress of our party.
he prestige of the CPSU as the standard bearer of peace and détente
immeasurably increased in the world since the Twenty-sixth Con-
ss. Western political observers prophesied that discussions of the
gress would, in the final analysis, be reduced to sharp polemics be-
en Moscow and Washington. But they miscalculated: Our party, our
ntral Committee clearly realized that mutual accusations do not con-
ute to cooperation and peace.
On behalf of the CPSU Leonid Brezhnev proposed a number of initia-
s that considerably broaden and complement the Peace Program of
Twenty-fourth and Twenty-fifth Congresses. These initiatives cover a
de range of the most acute and urgent problems pertaining to the
evention of war and the preservation of peace. They include initiatives
widening the zones of confidence-building measures, proposals on
Persian Gulf and the situation concerning Afghanistan, an invitation
the United States for a dialogue on the limitation of strategic weapons
d their reduction. Then there are also proposals on imposing a mora-
rium on the deployment in Europe of new medium-range nuclear missile
eapons by the NATO member countries and the Soviet Union, on setting
an authoritative international committee to show the possible conse-
uences of nuclear war. Finally, there are proposals to convene a special
ecurity Council session with the participation of the heads of state.
These proposals have been praised by people around the world. They
ave reaffirmed that the Soviet Union and its allies are now, more than
ver before, the main buttress of peace on Earth.
The implementation of the Soviet Peace Program is designed for more
an one year. But, as a matter of fact, our program is already involved
important work. It has stimulated many governments to reassess their
tand on burning international issues. The program serves as an incen-
tive for invigorating the activity of broad democratic antiwar forces of different political orientations. It gives people confidence that there is a real way out of the present tense situation.

In inviting the leaders of the Western powers to a constructive dialogue on the problems of curbing the arms race and disarmament, the prevention of nuclear war and other urgent issues, the Soviet Union has not put forward any preliminary conditions, has not made any ultimatums. It expects the same attitude from its partners. We are ready to hold talks at any level, including at the summit level, examine any proposals if, of course, they do not prejudice our security. The Soviet leadership has explained this stand many times.

The Communist Party and the Soviet state assign a central place in their foreign policy activity to the USSR's relations with the socialist countries. The life-giving force of friendship and cooperation on the basis of Marxism-Leninism, socialist internationalism and mutual trust, which has been strengthened in common trials, is a weighty factor at the present stage in the development of the countries of the socialist community. The congress stressed the pressing necessity and importance of studying and utilizing the experience accumulated in the socialist states. This experience is the most valuable asset of all the socialist countries, a powerful reserve for their successful development.

The practices of socialist construction show that, for the successful resolution of creative tasks, it is necessary to enhance the party's leading role, to listen attentively to the voice of the masses and to develop socialist democracy actively. As for economic cooperation, the whole course of the development of the socialist countries has put forward the task of supplementing coordination of individual plans with coordination of their economic policy as a whole.

The Report of the Central Committee of the CPSU to the Twenty-sixth Congress gives a broad panorama of the Soviet Union's cooperation with countries that have liberated themselves from colonialist oppression. It reaffirmed the CPSU's unvarying policy directed at developing the USSR's cooperation with the liberated peoples, at strengthening the alliance of world socialism and the national liberation movement.

The Party Headquarters

The organizational plenum of the newly elected Central Committee of the party held on the closing day of the congress chose its Politburo. There were no changes in its composition. This is evidence of the fact that the party's policy has received full support from the congress, from Soviet Communists. This also indicates that a collective of experienced leaders has taken shape in the party's highest bodies and that it is successfully resolving through joint effort the key issues of domestic and foreign policy. The Politburo is truly the vigorous headquarters of our multimillion communist organization. It is precisely here that collective wisdom is accumulated and its policy, which meets the interests of all society, is formed.

Many warm words were said at the congress about Leonid Brezhnev, our party's tested leader. The speakers pointed out his far-sightedness and integrity, his profound knowledge of the life of the nation, his talent as an organizer and his ability to see the cardinal problems of social development and to direct the efforts of the party and the people toward resolving these problems. They spoke about Leonid Brezhnev's services as a consistent and staunch champion of peace and international détente and the unity of the world communist movement.

Leonid Brezhnev's authority in our party and among the people of the country was won by the way he lived his whole life—the life of a Communist-Leninist. In October 1981 it will be 50 years since Leonid Brezhnev joined the party. Over these years he has gone through a remarkable school. He was a worker and an engineer. During the war he was in charge of political work in the army. Later he was the head of large party collectives. Under his leadership were implemented such major programs as the restoration of the economy in Zaporozhye and Dnepropetrovsk, destroyed by the Nazis, the development of the virgin lands in Kazakhstan and the exploration of outer space. For 17 years now he has headed the Central Committee of the CPSU. He combines the qualities of an outstanding organizer with those of a theoretician. His report to the Twenty-sixth Congress has become, as is generally admitted, a document which has creatively developed the theory and practice of scientific communism and has answered many of the questions that life has put to social thought.

Leonid Brezhnev firmly represents our country's interests in the world arena. In the eyes of all honest people of the world his name and his work symbolize the policy of peace and social progress, the policy initiated by Lenin.

* * *

The tasks put forward by the Twenty-sixth Congress are colossal. In the Eleventh Five-Year Plan period the country is to make new economic and cultural advances. We want to achieve an even higher standard of living for the Soviet people. We must preserve peace and prevent war at all costs. The CPSU has both the desire and the vigor to carry out the mission placed before it. It knows that its strength is equal to the tasks set it by history. The political experience of the party, its wisdom and the people's full support for its policy guarantee that the plans of the Twenty-sixth Congress will be carried out. ■

AUTUMN AT THE MINERAL SPRINGS

By Oleg Shibko
Photographs by Vladimir Rodionov

WHEN the descending plane starts its smooth turn, I see mountains mushrooming up from the flat steppes below. They are obviously of volcanic origin—bald or overgrown with woods. I can also see a narrow river meandering through the mountains and sky-blue dots of small lakes. Sparkling in the Sun on the horizon is the Greater Caucasus, a mountain range crowned by the twin cones of Mount Elbrus more than 5,600 meters above sea level. Elbrus is Europe's highest peak.

Several minutes later the plane touches down at the Mineralnyye Vody Airport, which is, in a sense, the gateway to a unique spa area. There are more than 120 mineral springs of 16 different types here, nearly all of the ones known in the world today. They are of diverse chemical and gaseous compositions, temperatures and radioactivities, and their curative properties, along with the area's mild climate and picturesque landscape, attract people from the most distant corners of the country. Approximately one million people a year come to Mineralnyye Vody for therapy or their vacation.

The spas are open all year round—there are no slow months here—but most people prefer to come in the autumn. September and October are as sunny as the summer months, so it is easy to get a tan. Besides, the autumn months are not as hot, and the air is more refreshing. The variegated forest changes color gradually, providing a spectacular array. Meanwhile the fragrance of mid-mountain herbs permeates the crisp, clear air. ▶

From the Czar's Physician to Our Time

Along with the other passengers, I leave the plane and board the bus for the Leninskiye Skaly Sanatorium in Pyatigorsk. An excellent highway runs parallel to a railway. Both connect the main railroad and air terminal at Mineralnyye Vody with four spas: Zheleznovodsk, Pyatigorsk, Yessentuki and Kislovodsk. Since the spas are no more than 15 to 20 kilometers apart, it is easy for both visitors and the area residents to get to any of them.

The tour guide on the bus gives us the history of the territory. The first description of Mineralnyye Vody was provided by the czar's physician, whom Peter I dispatched there in 1717 to study the mineral springs. Dr. Chauber reported a hot spring and an acidic mineral spring in the Circassian area.

After 1780, when the Konstantinogorsk Fortress was built near Mount Mashuk (czarist Russia was waging a war in the Caucasus at the time), the Russians who lived in the fortress began to use the curative springs, following the mountaineers' example. Later, small medical facilities were built there.

In 1830 the settlement was named Pyatigorsk (Five Mountains) and raised to the rank of a regional center. Gradually up to 1,500 patients from among the aristocracy and high-ranking military officials came there each year.

General Alexei Yermolov, Commander of the Detached Caucasian Corps and hero of the Patriotic War of 1812 against Napoleon Bonaparte, was instrumental in developing the spa at Pyatigorsk. Adoring the area, he obtained funds from the czarist government and invited two outstanding Italian architects to come to Pyatigorsk from Switzerland—the brothers Giuseppe and Giovanni Bernardacci.

The other spas in the region were also being developed, and by the middle of the nineteenth century Mineralnyye Vody had won fame as a mineral water drinking and balneological spa that successfully competed with the best European resorts.

But in spite of its fame, relatively few people came here for treatment before the Revolution. Those who did belonged to the privileged strata of Russian society. With the advent of Soviet power a new stage in the region's development began. By a special decree issued in April 1919, the new government proclaimed the nationalization of all the spas and resorts in the country.

The first Soviet spa season at Mineralnyye Vody began in 1920. That same year a State Balneological Institute was opened here. It drew up a plan to turn the formerly small, exclusive and expensive spas into resorts for the people. From that time on the state covered all expenses involved in running the country's resorts. Large-scale construction work began, and the network of sanatoriums and rest homes grew at an unprecedented rate. In 1960 the Soviet Government put most of the country's sanatoriums, rest homes and balneological spas, including those at Mineralnyye Vody, under trade union management.

Television has added a new dimension to medical treatment.

Who Goes to a Sanatorium?

The Leninskiye Skaly Sanatorium accommodates up to 15,000 patients a year. Its five buildings form a terrace at the foot of Mount Mashuk. A yellow and red cable car takes you in a few minutes to the 100-meter television tower located at the top of the mountain, 1,000 meters above sea level. From here there is a breathtaking view of the Caucasus Mountain Range and the picturesque environs of Mineralnyye Vody. On the surface of a huge rock about 500 meters from the sanatorium is a portrait of Lenin that was painted in oil in the early days of Soviet power. In fact, the sanatorium got its name from the portrait. The town of Pyatigorsk is located further down, so that you can see nearly all of it from here.

All the people who have come here reserved their accommodations through their trade unions. The new patients receive a sanatorium-spa folder that contains a diagnosis of their ailment, their case history, cardiogram, X-rays, test results and a written statement from their internist back home describing the spa treatment they need. That notwithstanding, the new arrivals have to spend the first two or three days at the sanatorium adapting to the local climate and undergoing a complete physical examination. After the diagnosis is verified, the course of treatment is chosen.

At the end of the adaptation period, each patient meets with the physician who will be responsible for him or her until the end of the treatment. The doctor examines the patient every three to four days, or more often if necessary. Besides being checked at the routine morning rounds, each patient receives individual treatment and a specific diet. Both can be changed, depending on the patient's condition. All activities scheduled at the sanatorium, for example the walks, physical exercises and even recreational activity, are perceived as a curative factor and geared to the individual.

I asked a few of the new arrivals to tell us something about themselves.

Muzafar Abbasov, 50, a technical school teacher from Baku, capital of Azerbaijan, has been at Zheleznovodsk five times, so this is his sixth visit to Mineralnyye Vody. He suffers from chronic gastritis and cholecystitis. He paid 48 rubles for his standard 24-day accommodations, including the cost of treatment, sanatorium room and board. The actual price is 160 rubles. The difference was covered by his trade union.

Each sanatorium has its own specialty. This is the Narzan water pump room. Accommodations for all the spas are handled by the trade unions. The patient pays 48 rubles for a 24-day stay that includes treatment, room, board and all facilities. The difference between the actual cost and what the patient pays is made up by the individual's trade union. Right: Exercise machines are used in treatment at the Yessentuki spa.

Dr. Konstantin Iordanov is chief physician at the Salyut Sanatorium for children in Zheleznovodsk.

A sanatorium at one of the spas in the Caucasus Mountains.

Riding has been considered good therapy at the Zheleznovodsk spa for a long time. Left: With an annual 310 sunny days, swimming and sunbathing are possible year-round in Kislovodsk.

"Forty-eight rubles is all right with me," Abbasov says. "I earn more than that a week teaching. I could go to a spa every year if I had to. The therapy here is effective, and I only have to undergo treatment once every few years."

Nadezhda Kazakova is an economist from Magadan Region. This is her second visit to the mineral springs. Three years ago she underwent treatment at Yessentuki and was very pleased with the results. She also had to pay only 48 rubles for 24 days, the standard fee. The management of her enterprise also covered her travel expenses to and from the spa, an added benefit for people who work in the Far North and the Far East of the country.

This is also the second visit here for two workers—Anna Belova of Sakhalin and Mariya Arsentyeva of Yakutsk, Siberia. Both women noted marked improvement in their health after their first stay at the spa.

Key to Effective and Inexpensive Treatment

Specialization in medicine in general, and in health resort treatment in particular, has been the key to effective therapy. This principle has always been taken into account at Mineralnyye Vody. Each of the four towns has its specialty: Yessentuki for gastroenterology, Zheleznovodsk for gastroenterology and urology, and Kislovodsk for cardiology. Pyatigorsk is more versatile because of its diversity of mineral waters, large quantities of medicinal muds and favorable climate. But it still comes within the framework of specialization because its sanatoriums are strictly specialized, as is all the medical personnel.

Specialization, however, involves additional expense and greatly increases the cost of treatment. The key factors in slashing costs are the all-round cooperation of health resorts and the centralized use of the resources.

Here is an example. With Pyatigorsk so rich in, say, radon springs, radon baths could be installed at every sanatorium. But at what cost? First, long pipes for the Narzan mineral water would have to be laid; and second, special premises would have to be built and staffed with skilled personnel who would be working only part of the day since not all the patients in any sanatorium need such baths. If the cost of maintenance and routine repairs are added, it comes to quite a sum.

The solution to this problem is to build large specialized centers to be used by all the patients of a spa. Accordingly, a unique radon center, the biggest in Europe, has been built in Pyatigorsk. It can now accommodate from 2,500 to 3,000 patients a day, which is sufficient for the entire spa. On its scheduled day and hour, the patients of each sanatorium are brought there by minibuses. Naturally, this takes careful planning, and the schedules have to be strictly adhered to, but it saves vast sums of money.

The same principle underlies the functioning of a big spa inhalation center catering to 3,500 patients a day, dietetic dining halls and a number of other health centers.

Trade Unions Are in Control

There are territorial trade union councils at all the Mineralnyye Vody spas to check on the fulfillment of the rules governing the use of health resorts. They are independent of the local authorities and are financed by and accountable to the All-Union Central Council of Trade Unions (AUCCTU), whose headquarters are in Moscow.

While I was in Pyatigorsk, I talked to the chairman of one of the councils, Ivan Lysenko, 42, a licensed physician born in the area. Before receiving an invitation to work for the trade unions in 1980, he was a doctor at a polyclinic, a health resort physician and later the chief doctor of a sanatorium in Pyatigorsk.

The council has a staff of 38 specialists in various areas of resort treatment. They receive their salary from the AUCCTU. No decision of any significance concerning the functioning or development of the spa is taken by local authorities without consulting Lysenko's council.

"Quite recently," Lysenko told me, "one agency decided to build a hotel for 250 people within the protected zone. We protested since it would violate the hydromineral regimen. But the agency tried to bypass us. As soon as I learned about it, I cabled AUCCTU headquarters in Moscow, and the agency had to cancel its plans."

Dr. Lysenko spends half of his workday at sanatoriums and balneological centers talking to the staff and the patients. Once a week he receives people in his office to listen to their complaints and suggestions.

Learn and Cure

The "busiest" patients in Zheleznovodsk are those at the local children's sanatoriums. Unlike adults, the children have to combine treatment with school studies.

I spent one day at Salyut, a children's sanatorium specializing in urology and gastrointestinal diseases. Every year hundreds of children from all over the country take a two-month course of treatment (or a one-and-a-half-month course in the summer so that two groups of children can be accommodated during school vacation months). This is substantiated both medically and pedagogically. Schoolchildren from 7 to 14 years of age are usually treated at Salyut. A small group of preschool children, whom the older children pokingly call "loafers," are also treated there. With the vast expanses of the country and the time it takes to [illegible] Zheleznovodsk and back, the pedagogical expediency of a [illegible] course is obvious, since each of the four terms at school is that [illegible] children can therefore travel during their vacation time without [illegible] a single day of school.

Each day at Salyut is filled with activities. In the morning the [illegible] gather in the sanatorium's park for therapeutic exercises. After [illegible] washed up and eaten breakfast, they either drink mineral water [illegible] medicinal mud treatment. After a brief recess and lunch, the child[illegible] for two and a half hours. Then they have another drink of mineral[illegible]

School classes begin at 5:00 P.M. sharp. They are kept to 35 minutes [illegible] that they don't tire the children. Preschool children draw, sing, play mu[illegible] cal instruments, dance or simply play games under the supervision [illegible] teachers.

After classes a light supper is served. At 9:00 P.M. quiet descends [illegible] the sanatorium.

But even with their tight schedule, the children still have time for re[illegible] and recreation. Twice a week they can see films at their club. The puppe[illegible] theater puts on new plays regularly. Dances are held at the sanatorium [illegible] the evenings, and sightseeing tours of the spas are organized in t[illegible] daytime.

People from Abroad Like Kislovodsk

Kislovodsk, which compares favorably with Switzerland's famous Dav[illegible] for both sunshine and clean air, is a first-rate cardiology spa.

Patients from Western Europe often come to Kislovodsk. It is not s[illegible] prising because they are close neighbors. But I was amazed to s[illegible] Americans there. I thought Kislovodsk couldn't compete with simil[illegible] spas in the West because of the cost of getting to it. But it turns out th[illegible] the treatment is so inexpensive that it is cheaper for Americans to co[illegible] here rather than go to spas in Western Europe or on their own contine[illegible] Sofya and Yaroslav Rzhevsky, a New York couple of Russian desce[illegible] have been coming to Kislovodsk for treatment and rest for several yea[illegible] This time they brought their daughter Svetlana with them. She, too, lik[illegible] the Mineralnyye Vody spas.

Twenty Years from Now

At the mayor's office in Kislovodsk I was told there are three ma[illegible] problems they are solving at present. First, the structure of the spa a[illegible] its layout are being improved. "It must be as quiet at our spas as in[illegible] forest. So we are building homes for local inhabitants away from the s[illegible] zone, and when we tear down old houses of no historical value in to[illegible] we just plant trees and shrubs in their place."

The second problem is clean air. "To keep it clean, we are install[illegible] electrical equipment at the sanatoriums to replace the equipment worki[illegible] on natural gas. We are also introducing trolley buses in town instead [illegible] motor buses. And we are building beltways for trucks to bypass the spa[illegible]

The third problem is drinking water. "Today Kislovodsk has just enou[illegible] fresh water to drink. But with vast sources of artesian water tapped [illegible] kilometers from the town several years ago, the water conduit now nea[illegible] ing completion will satisfy the demand besides providing reserves f[illegible] future development."

In Yessentuki I met Dr. Nikolai Krivobokov, director of the Institute [illegible] Health Resorts and Physiotherapy in Pyatigorsk, the biggest of its kind [illegible] the country. It has four clinics, one at each spa. Dr. Krivobokov was [illegible] Yessentuki to go over its clinic's plan for next year.

The institute was set up in 1920, and since then, besides the trainin[illegible] and advanced training of specialists for health resorts, it has been leadin[illegible] and coordinating the research and practical work throughout the regio[illegible]

Over the past few years, Dr. Krivobokov said, the institute staff ha[illegible] been engaged—together with the builders and planning specialists fro[illegible] Moscow and the local territorial trade union councils—in drafting th[illegible] 20-year program of development for Mineralnyye Vody to the year 2000. "[illegible] involves solving quite a few highly complicated problems," he said, "lik[illegible] providing facilities for the predicted increase in the capacity of the spas[illegible] rationally distributing health resort, catering, agricultural and industria[illegible] institutions and enterprises; and developing transport and communica[illegible] tions." In order to preserve the area's natural wealth, the institute re[illegible] searchers have drawn up a statute for a health resort preserve, envisaging[illegible] ways to preserve the landscape and the climatic peculiarities of th[illegible] region, as well as its mineral water resources, and to establish protected[illegible] green zones. The program stipulates that new buildings are to be erected[illegible] at Mineralnyye Vody and the old sanatoriums are to be renovated.

Dr. Krivobokov gave us a lift to Pyatigorsk in his car. There, in a pic[illegible] turesque forest on the southeastern slope of Mount Mashuk, a big health[illegible] resort complex for 14,000 patients (more than 160,000 patients a year) is[illegible] under construction.

"By the year 2000," Dr. Krivobokov said in conclusion, "the capacity of[illegible] the sanatoriums at Mineralnyye Vody is to increase greatly. We are getting[illegible] ready for that now. Geologists are prospecting for new mineral springs, [illegible] planners are doing their job, while experts are deciding on the specialized[illegible] educational establishments to be opened to guarantee that the number of[illegible] specialists and service people will be on hand when they are needed. We[illegible] are proceeding unhurriedly and in a planned way to forestall any diffi[illegible] culties in the future." ■

THE GOALS OF SOVIET YOUTH ORGANIZATIONS

Vladimir Aksyonov, 34, who is interviewed here, is an engineer by training. He has been involved in Young Communist League work since 1971. He was elected chairman of the USSR Committee of Youth Organizations in January 1980.

Will you describe the Committee of Youth Organizations?

is a voluntary alliance of more than 40 public, professional, cultural nletic organizations. The most active of these is the Young Communist , which has 40 million members.

What are the tasks being tackled by Soviet youth groups?

he committee is made up of organizations with different profiles. their goals differ. But I would say one of the main objectives of all uth organizations is to encourage young men and women to become and use their rights and opportunities for the benefit of society. The most important objective is to work for peace and cooperation young people throughout the world.

How do you go about achieving these objectives?

here are numerous organizations in our country that help draw girls oys into social activities at a rather early age. For schoolchildren be- the ages of 7 and 9, there are the Octobrians. In this group they begin rn about collectivism, comradeship and helping one another. At the 10 schoolchildren can join the Young Pioneers. Various hobby groups neet after school acquaint Young Pioneer members with trades and sions.

he age of 14 girls and boys are eligible to join the Young Communist e (Komsomol), which offers ample opportunities for social activities. urse, desire alone will not get a youngster in. Only the most active people are admitted to the Komsomol.

Komsomol takes a direct part in the administration of state and social , economic management and cultural affairs. In keeping with the itution, it has the right to initiate legislation and propose candidates to al and local bodies of government.

Why is it that more people have joined the Komsomol in the last five than in the preceeding five years?

Young people have an increasingly greater role to play in decision- ng at all levels. In the Soviets of People's Deputies, which are local ning bodies, an average of 32.4 per cent of all deputies are young le under 30, whereas in the Supreme Soviet, the highest governing body e country, the corresponding figure is 21.1. The trend is for more young le to get involved in government. Ten years ago the number of young ties was half of the current figure.

also interesting to note that during the nationwide discussion of the of the new Constitution four years ago, an overwhelming majority of le favored lowering the age requirement for a candidate to be elected to the Supreme Soviets of the union and autonomous republics from 21 to 18 and to the USSR Supreme Soviet from 23 to 21.

Q: What forms do the international activities of Soviet young people take?

A: The largest organizations like the Komsomol and the Young Pioneers have international friendship clubs. Members of these clubs read Soviet and foreign publications and see films about life in other countries They also exchange delegations with youth groups in various countries. This offers a unique opportunity for young people to get to know each other. Last year, for instance, Sputnik, an international tourism agency for young people, paid host to 218,000 youngsters from various countries and sent 170,000 Soviet young men and women to other countries.

Professional youth organizations, the youth groups of writers and artists unions and public organizations stay in touch with their counterparts in other countries.

We maintain contacts on a regular basis with 1,350 youth organizations in more than 130 countries.

Furthermore, the committee represents Soviet young people in the World Federation of Democratic Youth and the International Students Union and cooperates directly with other public organizations in the Soviet Union.

Q: Would you say a few words about your committee's contacts with youth groups in the United States?

A: Cooperation between youth organizations in the USSR and the USA is of special importance. Today, when the threat of nuclear war hovers above us, cooperation, friendly relations and understanding between representatives of our countries' younger generations can make an effective contribution to the consolidation of peace and détente and the expansion of all-round contacts between our two countries.

The USSR Committee of Youth Organizations actively cooperates with a number of organizations in the United States, including the American Council of Young Political Leaders, the Young Workers Liberation League, the Speech Communication Association, the National Student Association and the Young Men's Christian Association. Annual meetings of Soviet and American young people sponsored jointly by our committee and the Forum for U.S.-Soviet Dialog are one of the most interesting forms of cooperation among our youth. The tenth meeting was held this summer in Lock Haven, Pennsylvania. Like the previous forums, much was said and done, and many Soviet and American delegates went away friends. But the most important thing is that they again proved that, with mutual desire, young people from both countries can discuss and solve the most complicated questions.

AN INVITATION FOR A DIALOGUE FROM THE USSR COMMITTEE OF YOUTH ORGANIZATIONS

MOST PEOPLE would say that young people tend to dream. And they are correct. We do dream because the future lies ahead.

There are as many hopes as there are people. But will they come ue? That depends upon each one of us and our resolve. But to an even reater degree it depends upon whether the skies over our planet Earth emain quiet. Peace is the only requirement for happiness, which is the ommon goal of everyone everywhere.

We know this well. We haven't forgotten the lessons of history. The JSSR Committee of Youth Organizations was founded 40 years ago as n association of young antifascists. This happened while the Second World War was still going on. Incidentally, the battles against our common enemy—nazism—gave birth to contacts and mutual sympathies between he young Soviet and American men in uniform. They fought side by side against the "Brown plague" for a peaceful future. And they paid for it with their own blood.

Soviet young people actively champion the cause of peace and détente. We do it in the hope that the better young people from different countries get to know and understand each other, the safer the world in which we live will be.

Young people from the Soviet Union and the United States have opportunities to meet each other and exchange views during travel tours, as well as at various meetings, symposiums and festivals.

We believe that this dialogue could be even broader. Why not also get acquainted and exchange opinions by correspondence? Our committee has prepared a questionnaire for young SOVIET LIFE readers.

The questionnaire will be circulated through Novosti Press Agency (APN) channels to Soviet youth, too. Replies from both will be published in SOVIET LIFE. We would like to invite young SOVIET LIFE readers to answer our questionnaire and continue the dialogue. Please send your responses to the Washington office of SOVIET LIFE, Questionnaire for Young People, 1706 Eighteenth Street, N.W., Washington, D.C. 20009.

Questionnaire for Young People

1. ***What did the seventies mean to you? What have they given you? What do you remember about them most of all?***
2. ***What do you expect from the eighties? What goals have you set for yourself? How do you plan to accomplish them?***
3. ***What events in Soviet-American relations during the seventies do you regard as most significant? How would you like to see relations between our countries in the eighties?***

DOSTOYEVSKY
A FAMOUS NOVEL TRANSLATED INTO BALLET

By Yevgeni Yevtushenko, Poet

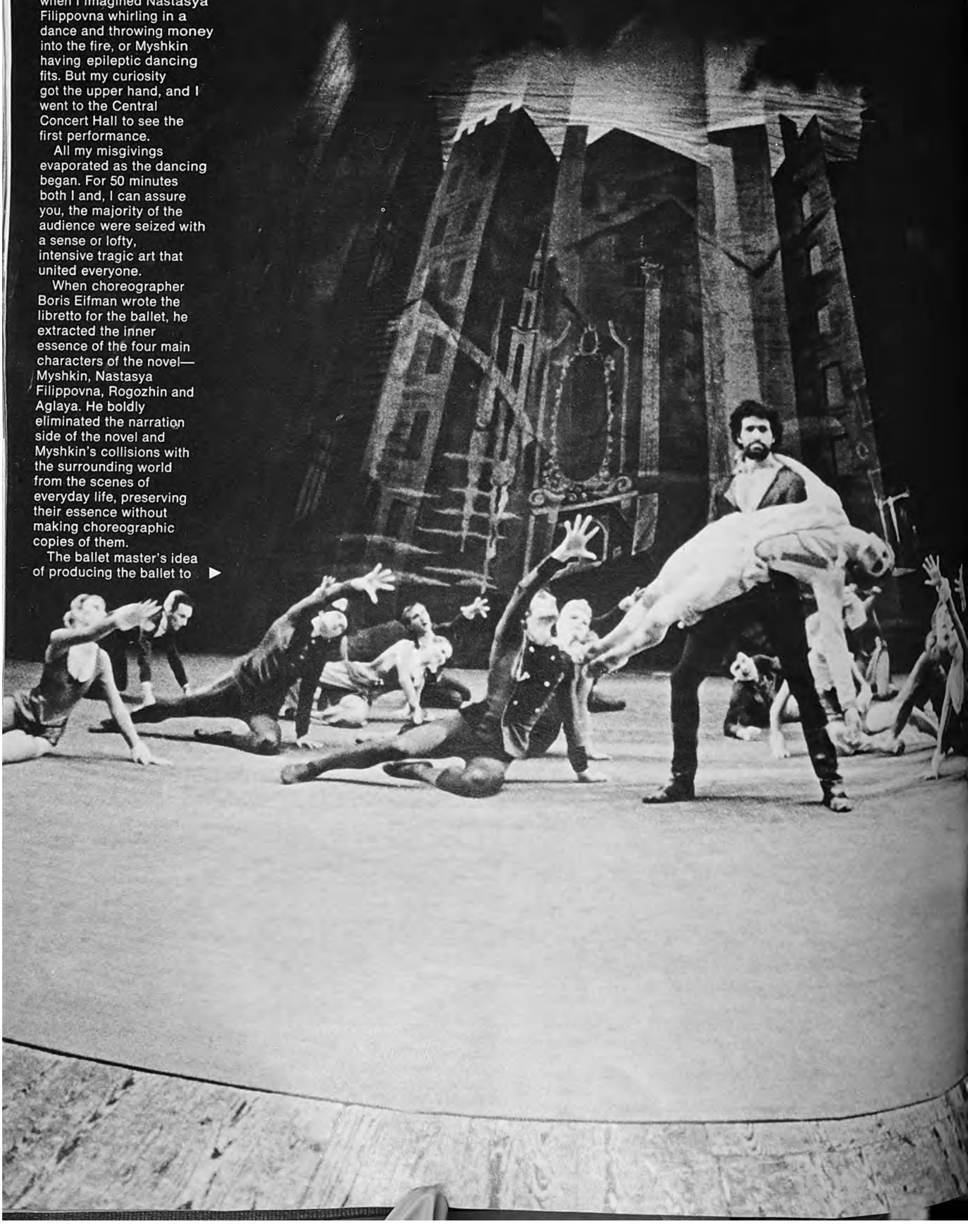
Photographs by Yuri Rybchinsky

A DANCING Prince Myshkin may evoke the surprise or smile of some readers. I must admit that I, too, was surprised when I learned that the Leningrad ensemble had staged a ballet based on Dostoyevsky's novel *The Idiot*. A kind of inner opposition developed in me when I imagined Nastasya Filippovna whirling in a dance and throwing money into the fire, or Myshkin having epileptic dancing fits. But my curiosity got the upper hand, and I went to the Central Concert Hall to see the first performance.

All my misgivings evaporated as the dancing began. For 50 minutes both I and, I can assure you, the majority of the audience were seized with a sense or lofty, intensive tragic art that united everyone.

When choreographer Boris Eifman wrote the libretto for the ballet, he extracted the inner essence of the four main characters of the novel—Myshkin, Nastasya Filippovna, Rogozhin and Aglaya. He boldly eliminated the narration side of the novel and Myshkin's collisions with the surrounding world from the scenes of everyday life, preserving their essence without making choreographic copies of them.

The ballet master's idea of producing the ballet to ▶

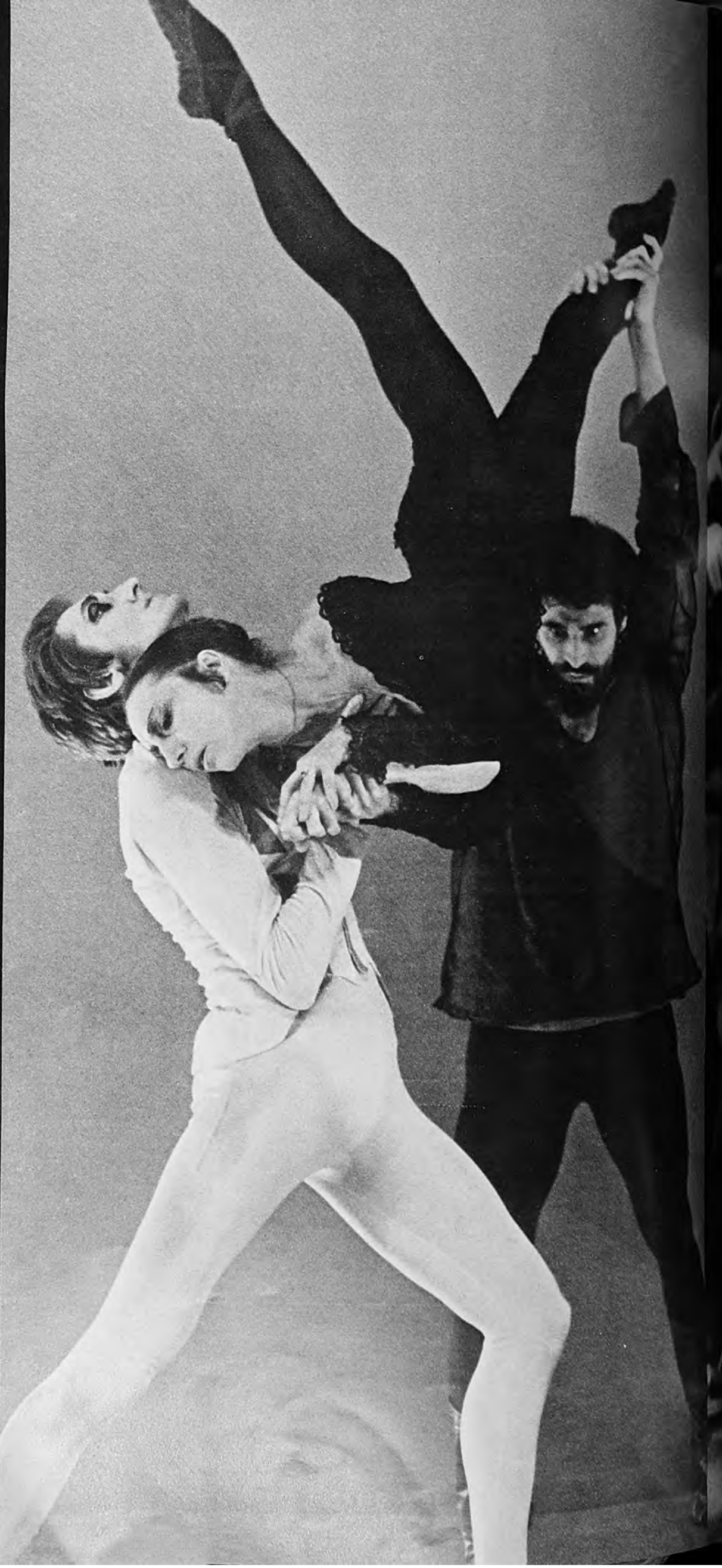


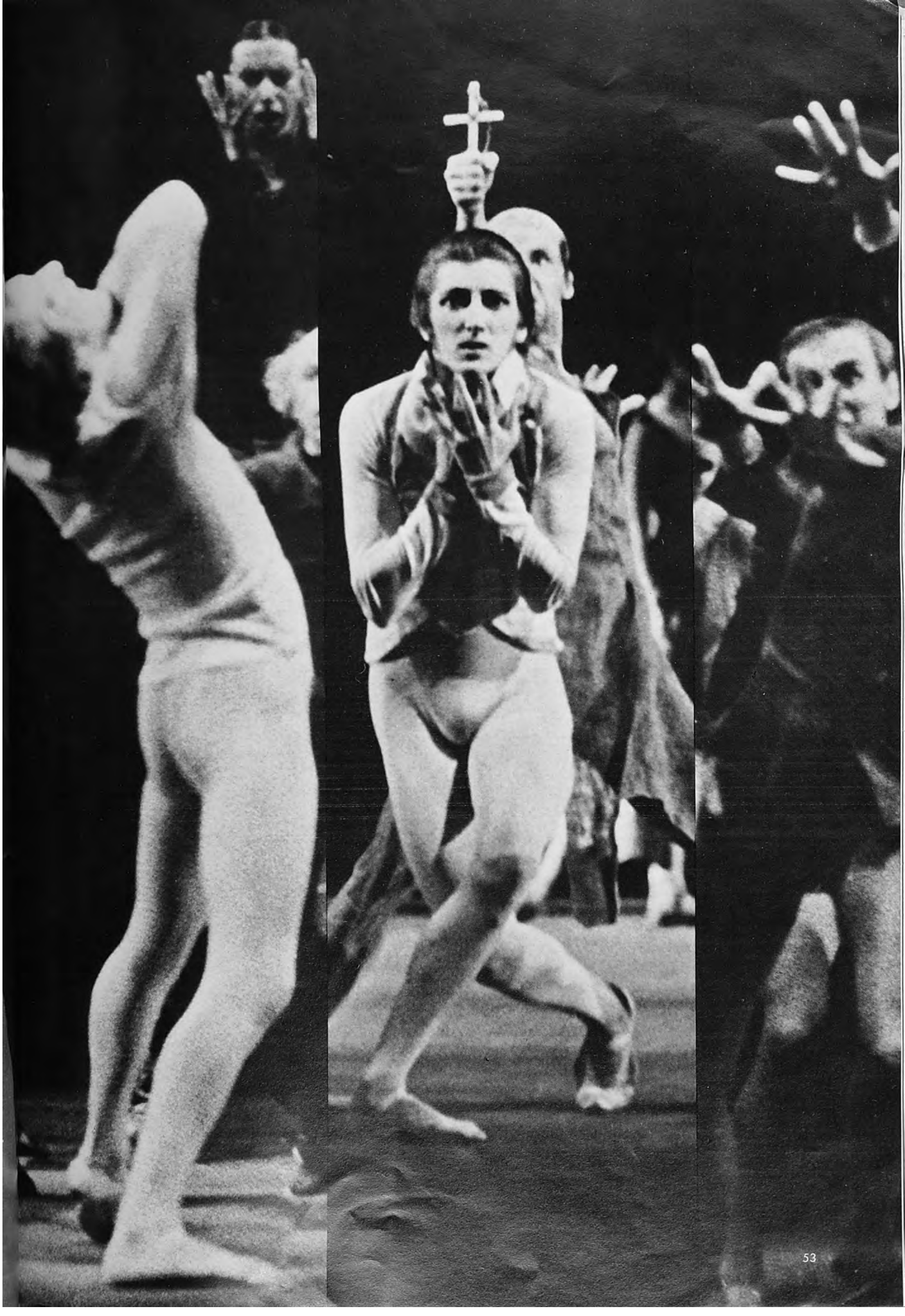
the music of Tchaikovsky's Sixth Symphony justified itself completely. The brilliant music made it possible to express the brilliant novel through the dance. The combination of movement and music was so striking that it seemed as though the dancers were not adapting themselves to the music, but that the music was unobtrusively dictating their movements. The music rejoiced, suffered and was indignant. Together with the dancers' faces and bodies, it turned into the fifth invisible soul of the production. The emotional attitude of the actors was so tense that in one of the scenes tears began running down the cheeks of Valeri Mikhailovsky, who was performing the lead role. This is a very rare occurrence in ballet. John Markovsky was splendid as Rogozhin, quite naturally changing from violence and frenzy to the quiet shyness of a hurt child.

Alla Osipenko not only danced brilliantly but also acted brilliantly all the subtle nuances of Nastasya Filippovna's moods, from admiration for Prince Myshkin to despair. Aglaya was danced by Valentina Morozova with a gentleness no less filled with emotional tension than the sharp character of Nastasya Filippovna.

The group scene, symbol of the philistine crowd watching with avid curiosity a suffering that it cannot comprehend but undertakes to judge, was also a great success. To my mind, there is nothing excessive, nothing tactless in the production. It has proved that classical literature and the ballet have wonderful prospects for creative blending.

Courtesy of the newspaper
Sovetskaya Kultura
(*Soviet Culture*)





PEOPLE AND FILMS

NOTES OF A SOCIOLOGIST

By Mikhail Zhabsky

AT THE RESEARCH INSTITUTE of the Theory and History of the Cinema, I took part in a special sociological survey of the needs of typical groups of Soviet film audiences. At the outset we recognized the wide scope of functions of motion pictures to which most filmgoers orient themselves intentionally.

As could be expected, the esthetic function did not go unnoticed. After all, film art, if it is true art, arouses the artist in everyone. It makes one feel involved, and that in itself develops art appreciation.

When asked why they went to the movies, some people pointed not only to the esthetic effect but to psychological aspects as well. The most characteristic answers were:

"I go to the movies to experience what the film heroes are experiencing."

". . . To enjoy what I see on the screen. When I see a film that interests me, I get carried away and feel as though I'm one of the characters in the picture."

"I go to the movies for relaxation . . . watching a film, I'm transported to the world that is on the screen, and I go through everything with the characters."

Directly or indirectly, movies encourage people to associate with others. For this reason the communication function of the cinema is also very important. It can be broken down into three aspects: 1. involvement with film art proper ("to associate with the world of art," "to see my favorite actors and actresses"); 2. meeting and associating with friends ("to meet my friends," "to go out"); 3. associating with other people apropos of a film just seen ("to talk and argue about a film after the show"). It has been established that a meaningful film even has an impact on people who haven't seen it, and the message becomes the subject of extensive person-to-person communication.

Here is a telling illustration. A poll of residents of Smolensk, an old town in Central Russia, revealed that 49 per cent of the moviegoing public had seen and discussed in the family and with friends the film *The Guelder-Rose,* directed by the late Vasili Shukshin, which deals with the reform of an ex-convict. (Altogether 65 per cent of the moviegoing public saw the film.) In this way, films as an aspect of social consciousness have an additional, roundabout way of penetrating the individual's consciousness. This is enhanced by the fact that the cinema originated as a form of group entertainment and continues to be such today.

A film, if it is genuine art and not a poor imitation, invariably presents a view of life, of human relations and destinies and in so doing becomes an important source of knowledge. An example from recently released Soviet films is the epic documentary *Liberation,* which portrays most convincingly the decisive role that the Soviet people played in wiping out fascism.

I can recall a conversation connected with the picture that I'd like to tell you about. On one occasion I heard a sixth grade student say, "We lost 20 million people in the war [meaning World War II], the British lost 390,000 and the Americans 170,000." When I asked her how she knew this, she surprised me by saying, "From the movies. In *Liberation* . . ." Of course, art is not meant to be a reference for statistics, but the fact that people every so often get factual information from the movies is very revealing. Incidentally, while I was writing this, I recalled how I tried to get a picture of what New York looked like when I saw *Taxi Driver* because the protagonist drove his car along many of the city's streets. In general, the moviegoers' attention to a particular fact or detail, if it is important to them, is quite natural. On top of other reasons, many moviegoers explain their visits to the cinema as the desire "to see how the rest of the world lives," "to broaden my outlook," and so on. As one young man put it, "You get to know more about life from films and start to look at some things differently."

We also discovered during our survey that many people take a creative approach to films. They don't rest content by digesting ready-made truths, but they try to find their own answers to the conflict on the screen. For such people, going to the movies is a "creative form of relaxation," and they go to see a picture with the intention of "thinking over the actions of the characters later on" or "meditating on what I've seen."

Such a creative moviegoer derives satisfaction from a picture wh stimulates independent thinking. In this case, pictures with an unresol ending are most effective. For the creative moviegoer this kind of a ture is a social puzzle that has to be solved later. The explanation for prolonged effect, it seems to me, lies in the psychological nature of comprehension of the film as an integrated human activity.

From the psychological point of view, a film with an unresolved end especially an exciting film, can be regarded as interrupted activity, as unfinished narrative. Seeing such a film is, in a sense, the same as leav the theater five or 10 minutes before the end of a film like *One Flew o the Cuckoo's Nest.* Moviegoers in general, and those with a keen int of art in particular, are prone in this case to keep returning to the fi their thoughts.

The ideas of a film, once they reach the audience, cannot help but fluence the social thinking of an individual and shape his or her soc experience. This is especially true for children. In many respects mo take the place of the traditional forms of "growing into" society. brings up the educational function, which many whom we polled indic was one of the main reasons for going to the movies. Some of the m characteristic statements in this regard are: "I go to the movies to co pare myself with the characters in the film," "to learn to do the r things and be like the heroes," "to learn restraint, integrity, politeness learn to understand people and myself." And the apotheosis: "I try imitate the best of what I see in films and avoid repeating all the b things."

People also go to the movies to relax as well. It's quite natural Soviet moviegoers should value the theater for the opportunity it offe "a good rest after work," "a break from family problems," and the Many people regard the movies as a pleasant pastime. Here are som remarks on that score:

"It distracts me from my daily cares."

"It helps me to forget the daily routine."

Some people go to the movies "to soothe their nerves" or "to ligh their hearts." That, evidently, points to the function of catharsis for a kinds of nervous and psychological tensions like anxiety, distress an grief.

Films seem to double our sense of reality. They don't simply rep what we already know, but they open new horizons. Thus, the moviego can find and, to a certain extent, live through what he or she is missin in real life. For instance, movies can satisfy the craving for a show o emotions or satisfy a need to communicate. Some say:

"I go to the movies to see what never happened in my own life."

"I go to reminisce about my youth and the war years. I only go to war films."

"I want to remember my youth, to live through it again."

"I want to forget my hard life and rejoice with my children now."

Among the opinions cited above, I'm sure the reader's attention w grabbed by the words of the war veteran: "I go to reminisce about youth and the war years. I only go to see war films." I must say that th theme of war is popular in our country. I said as much to a Swedish sociologist who was a guest of our institute, and he was quite surprised "What! Films about war?" Yes, films about war, not war in general, World War II.

I believe the explanation for it is that the war theme, no matter ho far removed it may seem from our peaceful life today, is very close to the life experience of our people. Judge for yourself. There were 20 million war dead who fell a little more than 40 years ago. There are 267 mill Soviet citizens alive today. That makes one dead for every 13 now liv And those 13 remember that one for he was a father or a son or a brothe On top of that, there are many people still living who went through the war.

One decisive factor in favor of war films is the heroism they portra particularly if this heroism is not given a standard interpretation, but presented in the spirit of the times. In the war films of recent years th moral implications of that national feat are presented with realism.

Alyosha Cherstov as Alyosha Bertenev in *The Orphans*, made by Mosfilm Studio.

Leonid Filatov as flight engineer Igor Skvortsov in *The Crew*, put out by Mosfilm Studio.

Vasili Shukshin and Lydia Fedoseyeva in *The Guelder-Rose*, produced by Mosfilm Studio.

A still from the lm *Bim, a White, lack-Eared Dog*, produced by the Maxim Gorky Central Children and Youth Film Studio.

Nurgazy Sydaliyev as young Nurgazy in *The White Steamer*, made by Kirghizfilm Studio.

The Modern Moviegoer

The Soviet moviegoer is guided by a very wide spectrum of values. Let's take a look at where the emphasis is distributed here.

This is not easy to do since few moviegoers rest content with one function alone. They have a broad outlook, I would say. The moviegoer says to himself: "I go to the movies to get to know life and people better.

Desirous of finding a serious and meaningful message, the average moviegoer at the same time expects a film to offer entertainment and relaxation. He wants to see films that combine the cerebral with the entertaining, the educational with the recreational. And he is not usually disappointed, as the best films of recent years show. *Liberation, The Guelder-Rose,* and several others, recorded high attendance and good criticism from moviegoers.

The movie audience's attitude toward the functions of films manifests itself in its evaluation of pictures. What films, for instance, have been chosen as the best films of the year? Here I will cite the final results of polls taken within the past few years by a popular Soviet screen magazine called *Sovetsky Ekran.* One of the most popular films was *Bim, a White, Black-Eared Dog.* The story line is very simple. A trusting English setter named Bim suddenly finds himself without his kind master. The devoted dog searches for him everywhere and meets up with different types of people who show their true selves.

Gavriil Troyepolsky, the author of the book on which the movie was based, has an interesting remark: "Not one dog in the world thinks that devotion is something extraordinary. But people applaud this quality in a dog only because few of them possess this sense of devotion to a friend or dedication to duty to the extent that it is the root of their life. . . ." This, then, is what the film about the unfortunate dog called Bim urges us to meditate upon. Although the film wasn't intentionally entertaining, it turned out to be very popular. Which goes to show that the average moviegoer is oriented to serious film fare dealing with all manner of problems.

Painted from Life

There are many facts that point to a deliberate drive for cultural enrichment through film. A sociological survey of young workers in Moscow, film fans in Togliatti (an auto-manufacturing town) and Riga, the capital of the Latvian Republic, showed that the current film idol was a person who did not look for an easy life, adventure or pleasure, and the like. According to what these moviegoers say, they are fascinated by willpower, a sense of duty, honesty, kindness, daring, responsiveness, a sense of honor and a principled attitude.

Surveys have shown that the most popular heroes on the Soviet screen are: Korchagin, a representative of the first generation of Young Communist League members, in the television serial "How the Steel Was Tempered" (the character had a model in the person of writer Nikolai Ostrovsky); Chapayev, the legendary Red Army commander in the civil war, in the film called *Chapayev;* Gubanov, the heroic Communist, in the film *The Communist;* Meresyev in *The Story of a Real Man* (who also had a model in the person of a pilot who lost both legs in World War II and returned to flying inspite of it); Trubnikov, the main character in *The Chairman* (who also had a model, a man who was the manager of a collective farm practically ruined by the war); and Stoletov, a young Communist League leader, a contemporary, in the television serial "This Is All About Him."

I could go on and on. But the main point I'm trying to make should be clear. Soviet moviegoers prefer heroes whose thoughts and deeds go beyond the narrow confines of everyday interests. It's curious that most of these heroes had models in real life. They have been painted from life. An analysis of the moviegoers' opinions reveals that very often they identify with the heroes. This is an important fact because it shows that the characters in feature films have acquired the strength of living examples in the eyes of the audiences, thereby multiplying the educational effect of the cinema. ■

PRICE POLICY IS A SOCIAL POLICY

By Gennadi Pisarevsky
SOVIET LIFE Commentator

THE SOVIET GOVERNMENT'S position on retail prices is such that I as an economic commentator have few occasions to write about changes. In the past five years there were only three times when I commented on the raising of some prices and the cutting of others—in March 1978, July 1979 and September 1981.

This situation naturally appeals to me as a consumer. And I must say that I wouldn't mind if prices were never raised again. But alas, that's impossible. Price hikes are inevitable. From 1971 to 1980, for example, in spite of extremely rigorous state and public control over prices, the price index in the Soviet Union rose by 2.9 points, that is, by an average of no less than 0.29 point a year (taking compound interest into account). Meanwhile, the incomes of people in urban areas increased by 50 per cent, and the incomes of people in rural areas jumped more than 100 per cent.

Of course, compared with other countries, prices in the Soviet Union are very stable. This stability, against the backdrop of inflation in the world economy, is a welcome development. It demonstrates the tremendous potential of socialist planning. But inflation is affecting the Soviet economy, too. In particular, the ups and downs of prices for gold and other precious metals force us continually to raise prices for those commodities.

There have been price hikes for coffee and citrus fruit on the domestic market in recent years in our country. The bulk of these two items is bought on the world market. The price of gasoline has risen twice in the past four years. Oil production costs have grown substantially because oil is largely extracted in northern Siberia. The climate and the distance from the central part of the country involve additional outlays. The state has also increased prices for furs, cut glass, rugs and carpets, furniture, books (except textbooks), alcoholic beverages and a few other items.

But, at the same time, the state reduced prices on refrigerators, television sets, tape recorders, clocks and watches, many kinds of textiles and footwear, household chemicals and numerous other products. However, on the whole, about 90 per cent of the goods in Soviet shops are sold at the same prices as they were in 1970.

How Are Prices Fixed?

Price formation is a complex process, one little understood and almost mysterious to the layperson. In order to make it easier to understand, I will deliberately simplify some matters. So I beg the forgiveness of those readers who feel at home with economics.

Prices for most goods and services are established by the state. This is done with due account for both the interests of consumers and those of industry. These interests are difficult, but possible, to reconcile, and this is done by planning. In the Soviet Union planning is organized in such a way that every enterprise trys to make profits by lowering production costs.

The major factor in the system of planned prices is wholesale prices. They regulate the marketing of more than half of the social products in our country. Wholesale prices are fixed for each enterprise by a special government agency—the State Committee for Prices. This arrangement ensures that prices are fixed objectively and without bias, and that production costs (the base price), profit, supply and demand, and the like, are considered.

As a rule, wholesale prices are reviewed every five years. During this period every enterprise is in a good position to cut production costs and increase its profits. This procedure, however, does not cover all items. Prices for obsolete equipment, for example, are continuously reduced all the time, while those for new plants are, on the contrary, increased. As you can see, prices are an important planning tool. They create a financial incentive for an enterprise to increase efficiency, develop new technology and cut production costs. Planning, in a sense, incorporates in the economic machinery a device for lowering the cost of products while posing a "veto" to push up prices.

The actual picture, of course, is much more complicated, a bit differe and, if anything, not so smooth as I have described here. But that's o natural. Economic processes are involved, and they are contradictory a occasionally unpredictable. Prices, you must admit, can only be fix objectively and with maximum scientific certainty by an outsider. The e terprises themselves are unable to fix prices for their products. There too much temptation to get extra profits through higher prices.

There are instances of managers overpricing products. Customers p test. They write to newspapers. They speak out on television. The arbi in such cases is the State Committee for Prices. The violator is fined, a rule, and the prices of its products are reduced. In an effort to cut do on such practices, the Twenty-sixth Party Congress decided that state a public control over prices should be tightened up in the eighties.

The Right to Basic Necessities and Services

The Soviet Constitution doesn't say anything about the right to ba necessities and services, but in reality it has been in existence for a lo time thanks to the consistently low prices on staples, housing, transp medicines and drugs, power (except gasoline), and so on. For exam rates for electricity, gas for home heating, fares for all types of pub transport (except taxis), telephone and most postal services have changed for more than 30 years. Prices for bread, sugar, vegetable many fish products and textiles have not been raised since 1955, a those for meat and milk have not been raised since 1962. The cost medicine and drugs is going down all the time, while medical services general are free.

One of the factors taken into consideration when planners fix prices f goods and services is social significance. This, as you can see, is not a economic category, but a political one. And politicians aim to ensure th basic goods and services are available to every family, whatever its in come. Thus, many goods have to be sold below production costs. Dire losses go to the state. For example, the average retail price of a kil gram of beef is one ruble 65 kopecks (one ruble is about 1.3 U.S. dolla at the official rate of exchange), while the state's total outlay to procur and market it amounts to three rubles 21 kopecks. In other words, li every other customer I buy beef at half price, on a 50-50 basis with th state. State subsidies for meat and milk products in our country total mor than 25 billion rubles a year, or, put another way, 100 rubles for eac Soviet citizen.

Subsidies for the municipal economy (rent for housing, communal ser ices make up 2.7 per cent of an average family's budget) and public transp port (no matter how far you ride, the fare on the Metro and buses is 0.0 ruble, trolley buses 0.04 ruble and streetcars 0.03 ruble) have reached al most nine billion rubles a year. There are also considerable subsidies fo the production of almost all goods for children, the maintenance of pre school institutions (parents pay less than 20 per cent of the costs), and the like.

The Soviet system of state subsidies, free housing, free education of a kinds, free medical services and much more (which is a deliberate viola tion of economic laws) is often criticized in the foreign press. But without these subsidies and allocations for education, medical treatment and other services, I, for one, would have never been able to get an education, graduate from a university and restore my health, which was impaired in childhood during those dreadful war years.

Of course, in terms of pure economics, our critics are right. But eco nomics, after all, serves people. It's not the other way around. In the Soviet Union all industry belongs to society, which is represented by the state. And it is quite natural that the profits of industry should belong to every one and should be spent for the needs of everyone. That is why the real incomes of the population have grown steadily over the decades.

ONE STEP AWAY FROM THE ABYSS

Gennadi Gerasimov
IET LIFE Commentator

THE LATEST SESSION of the UN General Assembly, the thirty-sixth ession, the Soviet Union proposed that a declaration "To Prevent ar Catastrophe" be adopted.

country has also suggested concluding a treaty on banning the yment of weapons of any type in outer space. The 1967 treaty al- prohibits the deployment of weapons of mass destruction in space. aiming complete "military absence" in space would rid every nation rry about "military presence" there. And star wars would be waged on film screens, where they belong.

t let's return to the first proposal concerning prevention of a nuclear trophe. The letter from Soviet Minister of Foreign Affairs Andrei myko to UN Secretary-General Kurt Waldheim expresses the belief a nuclear war "would have catastrophic consequences for human- " In the draft declaration attached to the letter, it is suggested that countries who sign it agree with the view that the use of nuclear ons is capable of destroying civilization.

is forecast must be familiar to the reading public because scientists any countries have made it. A report titled "A Comprehensive Study uclear Weapons," submitted by UN Secretary-General Kurt Waldheim e thirty-fifth session of the UN General Assembly in 1980, states that outbreak of nuclear war would mean the threat of destruction of zation.

keeping with this pessimistic assessment of the results of a third d war, such concepts as "war-fighting capacity," for instance, or a ited" nuclear war do not figure in the Soviet political and strategic abulary. Nor do we apply the ideas of "victory" to these results. It is ntial to take this into account in assessing Soviet intentions. They ot include a desire for mass suicide.

e believe that in the present aggravated international situation the blem of peace has become even more important than before. We call oblem No. 1. There are numerous other questions closely tied to the vorable development of world problems, such as the protection of environment, the establishment of a just international economic order he solution of social problems. But, in the final analysis, they are all ondary problems. They are all problems for a period of peaceful de- pment that will be pushed to the rear during the very first moments nuclear conflict. As the saying goes, if you sell a cow, you sell her too. I don't think the survivors in radioactive ruins would give a n about the flora and fauna or stock exchange rates.

oviet leaders have been continuously searching for ways to secure rnational peace. The current proposal is one more illustration of this. he proposed draft declaration says that the states and state figures would be the first to use nuclear weapons would be committing the vest crime against humanity.

rom the juridical point of view, one could object to the proposed claration on the grounds that resolutions adopted by the UN General sembly are not binding. But they do reflect the opinion of the interna- nal community, and this in itself can have a deterring effect.

One could also say that in the context of our "weak" international law, connection between crime and punishment is frequently easy to break. few, if any, negate its existence on this basis. When it comes right wn to it, violations of criminal law also take place. But this does not an that the law doesn't exist or that it is necessary to renounce it.

As it is laid down in the preamble to the UN Charter, the main task of United Nations Organization is to save succeeding generations from scourge of war. Hence, concern for the destiny of our civilization is a al duty of the UN member nations. The draft declaration submitted the Soviet Union manifests this law-based concern for future genera- ns and also includes, according to logic and without any claims for a vision of the charter, the people who are now living. The draft also mentions the incompatibility of any doctrine that allows a first use of nuclear weapons with the lofty ideals of the United Nations.

From the viewpoint of international law, the Soviet proposal could also be regarded as a reiteration of the Nuremberg principles. Article six of the Charter of the International Military Tribunal, adopted in 1945, contains a definition of crimes against peace, war crimes and crimes against humanity. The criteria mentioned in it, for example, "inhuman acts done against any civilian population" or, in general, "waging of a war of aggression," are also present in the crime of the first use of nuclear weapons.

One may argue that Nuremberg was a special and unique case. But I'm more inclined to agree with Princeton University professor Richard A. Falk, who speaks of the emergence of a "Nuremberg tradition" and says that it is "a precedent whose significance would, with passage of time, reach beyond the original circumstances of its application." The world does not want to see a repetition of war crimes.

Moving on from law to ethics, one could voice the objection that international relations are dominated by selfish national interests or, even worse, by personal ambitions of certain individuals. History, from ancient to modern, readily provides illustrations of this. What principles did Atilla the Hun or Hitler have? For all that, moral values do exist in society, including the international community, and it is possibly due to them that society is human.

Paradoxical as it may seem, politicians, intentionally or unintentionally, hypocritically or with conviction, judge their own deeds and the deeds of others in terms of morality and cynically ignore them only in extremely rare cases.

Thus, with ample reason the Soviet draft declaration refers to "the laws of human morality."

In this case the matter concerns the correlation between the end and the means. The Soviet Union holds the view that there are no reasons or motives, circumstances or situations that would give states the right to make a first strike with nuclear weapons. It would be a crime against all people everywhere, against life on Earth.

The Soviet proposal may meet with strategic military objections, too. One could surmise, for instance, that the Soviet side, while coming out against nuclear war, gives preference to "conventional" military operations in which it may have "the advantage." In my opinion, the probing for double-dealing in the Soviet motives can be offset by a reference to the broad range of Soviet initiatives on reduction of arms and on disarmament, conventional weapons included.

Acceptance of the Soviet proposal could also influence the current strategic pattern of reasoning and the military buildup.

The idea of banning the first use of nuclear weapons is not at all new. The consequences of its translation into reality were considered by Robert Johansen from the New York-based Institute for World Order, among others. He believes, and I am inclined to agree with him, that a no-first-use pledge may become the first step in the process of delegitimizing nuclear weapons in general. "If taken seriously," Johansen argues, "it would immediately dampen nuclear arms competition between the Super Powers because there would be no point in developing a nuclear war-fighting capability beyond a minimum deterrent—something that existed more than a decade ago." In other words, both sides possess invulnerable retaliatory strike forces that are enough to do unacceptable damage to the enemy.

The Soviet proposal reflects the currently existing "nuclear stalemate" situation and opens up opportunities for abolishing the nuclear "game" as a whole.

It is an offer to people everywhere to take one step away from the abyss.

THE GRANDEUR OF TITIAN

By Tamara Fomicheva
Art Critic

TITIAN (1485/90-1576) belongs in the ranks of the great Renaissance painters with Leonardo da Vinci, Raphael and Michelangelo. Faith in the power and meaningfulness of human character, optimism, love of life and a purely emotional and sensual perception of life—symbolic of the Venetian school of that epoch—are embodied in his paintings with magnificence and grandeur.

The State Hermitage Museum in Leningrad has eight canvases by Titian, as well as four old copies of his famous paintings.

In 1581 Titian's son Pomponio sold his father's house and all the works of art in it to Cristoforo Barbarigo, a Venetian patrician. Titian's paintings stayed in the family of that nobleman for almost 270 years. When the last of his descendants died in 1845, a catalogue was compiled and the lot was sold. Seven pictures of that famous collection were bought for the Imperial Hermitage Museum. The canvases are from different periods in the artist's work and date from his very earliest painting in the 1520s to those of the 1570s, shortly before his death. They bear witness to the evolution of Titian's art, to his personal achievements and contributions to art.

Until recently the collection of Titian's paintings at the Hermitage was little known. This explains why the authenticity of some of the pictures in the collection was regarded as problematic. After the publication of an article I wrote for *Arte Veneta* in 1967, much interest was drawn to the collection. The Hermitage's paintings by Titian were acknowledged and correctly evaluated by art historians.

Flight to Egypt is the earliest work by Titian in the Hermitage Museum. In keeping with the traditions of the fifteenth century, it is painted with minute attention to detail and a somewhat naive treatment of human and animal figures.

In 1566, while working on the second edition of his famous book *The Lives of the Most Eminent Italian Architects, Painters and Sculptors*, art historian Giorgio Vasari went to Venice and visited Titian. In his book he gave an exact description of the *Flight to Egypt* canvas, now in the Hermitage. Vasari also mentioned the owner of the canvas, the Loredan family. This information was confirmed again by the Italian author Carlo Ridolfi in the seventeenth century, but by that time the Colergi family had inherited it from the Loredans. The canvas, which dates back to the beginning of the sixteenth century, is remarkable for its extensive and elaborate landscape. Such landscapes were a subject of painting only in Venice. It should be enough to recall here Giorgione's famous painting *The Tempest* in the Accadèmia in Venice.

The second painting by Titian in the Hermitage is the *Portrait of a Young Woman*, which dates back to the mid-1530s, when Titian was already well established as a painter and his fame widespread. It was at that time that Titian began to make copies of his paintings. Although his earlier work was represented by famous unique canvases, beginning in the mid-thirties and then later more frequently, he began to make copies of his own compositions. It is also an established fact that he kept the *modelli* of his own paintings in his studio for future reproduction. Thus, a copy of the *Portrait of a Young Woman* in the Hermitage is in the Kunsthistorisches Museum in Vienna.

The model for the Hermitage's portrait was probably a Venetian courtesan. The only difference between the two pictures is that the woman in the Hermitage painting is wearing a hat with ostrich feathers. An X-ray examination revealed that initially Titian painted her bareheaded, but with the same hairdo and strands of pearls spliced in the same fashion as on the canvas in Vienna.

In the nineteenth century, restoration artists slightly spoiled the contours of the figure, shoulder and arm by putting on too much paint and thus somewhat "dehydrating" the painting. This made the authenticity of the canvas questionable for some time at the beginning of this century, and it was attributed to Titian's follower Padovanino. The picture was acquired for the Hermitage in 1772 from Pierre Crozat's famous collection in Paris.

In 1545 Titian made a journey to Rome at the invitation of Pope Paul III. There he was introduced to the surviving pieces of ancient art and the works of Raphael and Michelangelo. The great sculptor's remarks on Titian's work have survived and are well known today. After visiting Titian's studio in Rome, Michelangelo, according to Vasari, highly praised the painter for his style and color, but criticized him for incurate drawing, expressing great regret that in Venice they did not teach drawing properly and that the artists there lacked good painting techniques. The criticism brings out in bold relief the principled difference in the understanding of what painting as art is all about between the followers of the Venetian school, on the one hand, and their colleagues in Rome and Florence, on the other. The latter believed that the main purpose occupation of art was drawing, the linear presentation of form, and not color. The point at issue was the approach to depicting reality and not Titian's allegedly poor drawing.

While still in Rome, Titian painted the first version of his composition *Danaë* for Cardinal Alessandro Farnese, the grandson of Pope Paul III. Later he returned to the same subject several times, as he did with *The Reclining Venus*. There is no doubt that Titian was inspired by the ancient reliefs he had seen in Rome. Painting these mythological heroines allowed the artist to depict the beauty of the female nude, and Titian knew how to make it look alive, sensuous and shimmering with breathless expectation.

Various compositions on the *Danaë* theme can be found in many museums throughout the world: in the Capodimonte National Museum and Gallery in Naples, the Prado in Madrid, the Kunsthistorisches Museum in Vienna, a private collection in Switzerland and in the State Hermitage Museum in Leningrad.

Some art historians had their doubts about the authenticity of the Hermitage's *Danaë*, too. But X-rays of the canvas revealed revisions made by the artist while painting it. The nursemaid was younger and wore a different kind of hat; the position of Danaë's arms was also changed. In addition, the canvas had suffered from restoration attempts, as a result of which part of the top layer of paint on Danaë's body was washed off.

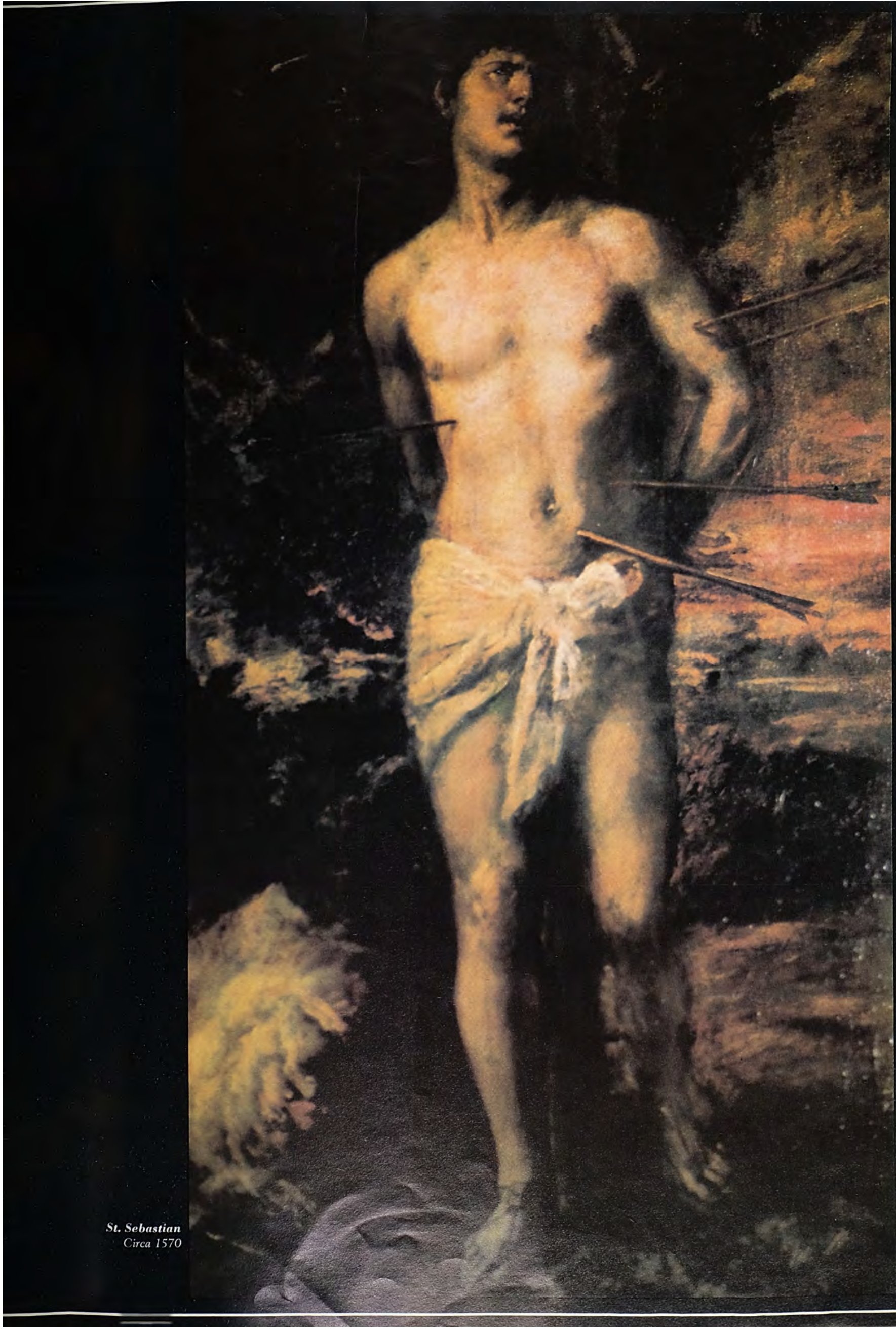
In the thirties and forties of the sixteenth c

Continued on page

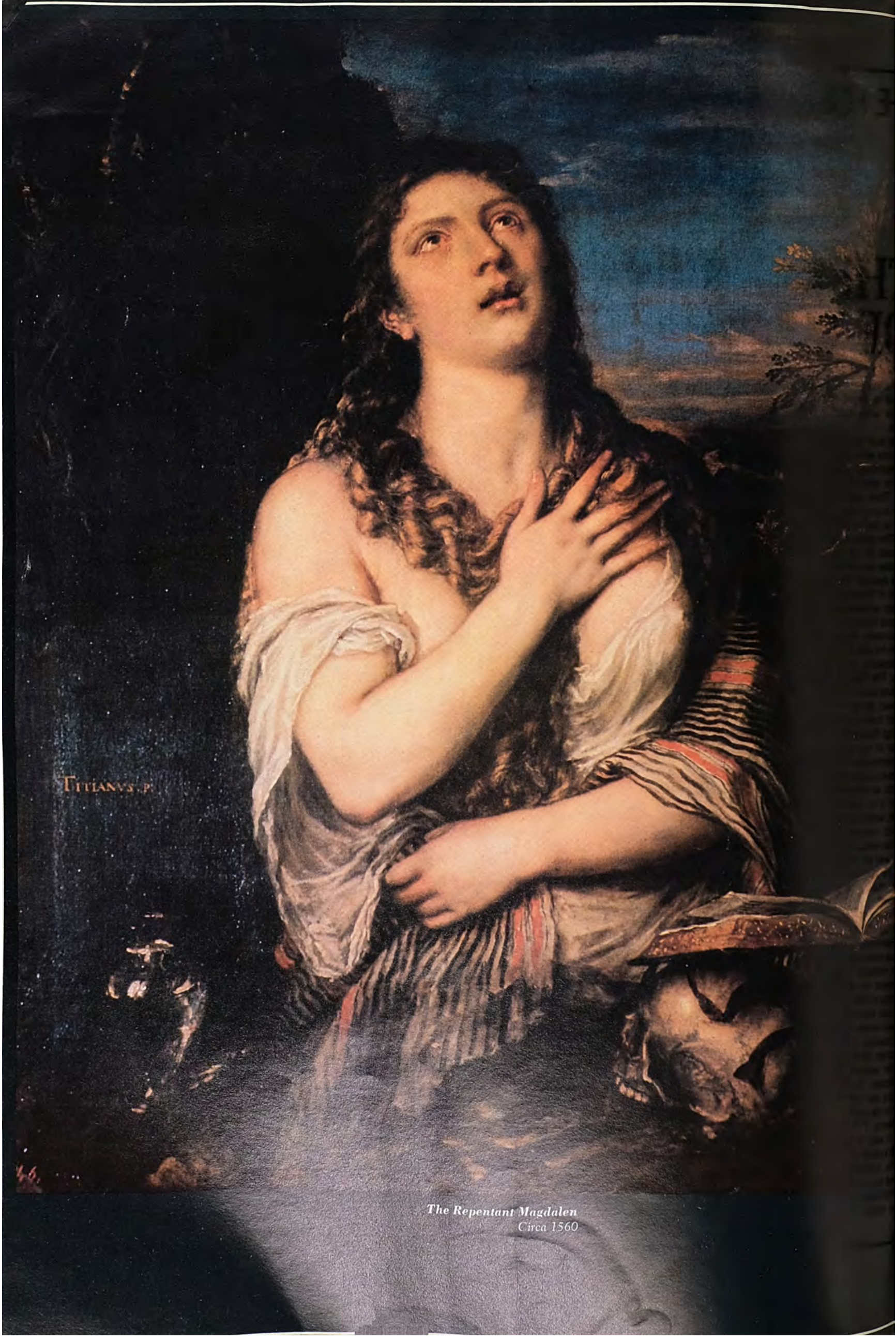
Madonna with Child and Mary Magdalen
Circa 1560

THE HERMITAGE

Bearing of the Cross
Circa 1560



St. Sebastian
Circa 1570



The Repentant Magdalen
Circa 1560

HE GRANDEUR F TITIAN

from page 58

the peak of his creativity, Titian mostly mythological figures and portraits. Ma- were rather an exception during that

uch rare exception in the 1540s was his *with Child and Mary Magdalen,* now in mitage collection. The figure of Christ eyes filled with tears is a glorious suc- tian painted two copies of it. One be- a private collection in New York, the part of Duke Nuñez's collection in Ma- e figure of Christ is repeated in all three s, but the faces of the Madonna and Mary n are different.

ecade from 1550 to 1560 marked the last f Titian's art. In those years he made his achievements as a painter and created t striking and moving works. He painted raits, relying on religious themes instead, he did not completely give up mythologi- tects. *Christ Pantocrator, Bearing of the he Repentant Magdalen* and *St. Sebas-* e back to that period.

s during that time that the artist freed from the compositional canons of classi- Renaissance to strengthen the emotional of his paintings. Titian also discovered hniques that reformed the art of painting. up clear-cut contours and began to paint as though they were one giant mass in t is impossible to distinguish dabs and when seen close up, appear to be just a conglomeration of colors. They only image when viewed at a distance. This as an innovation that filled his canvases true breath of life. It was an accomplish- that none of his predecessors had d.

ugh *The Repentant Magdalen* theme was y Titian several times, the painting in mitage is recognized the world over as a masterpiece. Along with profound repent- ndered in highly emotional tones, Titian d the worldliness of things—the trans- of tears, the silkiness of hair, and so on.

t *Pantocrator* repeats the composition of -known colorful Byzantine mosaics. Christ inted in this manner in the cupolas of s. Christ holds in his hand a transparent executed with such perfection that it ates the techniques of the seventeenth and might be considered Titian's signa- the canvas.

ing of the Cross has aroused much inter- was among the canvases stored in the studio and was probably the first version composition. This is known from the copy at the Prado Museum in Madrid. In rmitage's painting Titian was only in the stages of creating the composition. He used a canvas on which another picture of *Christ Pantocrator* had already been partially painted. It appears that the canvas was too small, and Titian sewed a small strip on the left side. Apparently the addition still wasn't large enough, and another piece of canvas was added. All of this was revealed by X-ray.

The same thing must have happened to the *St. Sebastian* canvas. At first Titian thought of doing a half-length picture. But while he was painting, the canvas must have appeared to be too narrow and Sebastian's left arm could not be painted in, so Titian took another piece of cloth and sewed it onto the main canvas. The woven patterns of the two cloths were quite different, but the fabric of the extension was identical to that used for the additional strip on *Bearing of the Cross.* During the painting of the composition, however, Titian decided to make it a full-length picture. To do this, he had to sew on a large stretch of canvas, upon which the lower part of the composition was painted.

The figure of St. Sebastian lit by the unsteady shimmering light of a smoking fire conveys a sense of anxiety. There are no clear-cut contours. This technique allows the artist to integrate the man and his surroundings, a tremendous achievement for Venetian art in the sixteenth century.

But having given St. Sebastian's image a tragic tension, the artist expressed his faith in the selflessness and greatness of human beings as he did in his image of *The Repentant Magdalen.* We see in Sebastian a man of extraordinary beauty and strength. Titian remained true to the life-asserting ideas of humanism to his last day.

In addition to the original paintings by Titian, the Hermitage has several copies of his works that were done in his studio. Some of these merit our attention.

Until only recently the *Portrait of Pope Paul III* had been considered by some art historians to have been done by Titian himself. However, an X-ray examination brought out the weak handling of the body contours. This has nothing in common with the sure hand of the master, who could convey a form with several strokes of the brush, as we see in his paintings.

Venus with a Mirror and Two Cupids has aroused exceptional interest. The canvas was painted in Titian's studio, but an examination disclosed that it was a copy done by Titian's son Orazio from his father's original, which is now lost. The original, known only from a sketch by Van Dyck and an engraving by an unknown artist, was done by Titian in the 1540s for a lawyer in Venice named Crass. The composition is an earlier version of the *Venus with a Mirror* on display at the National Gallery of Art in Washington, D.C.

NEXT ISSUE

LEONID BREZHNEV'S BIOGRAPHY

From Worker to President

Leonid Brezhnev, General Secretary of the Central Committee of the Communist Party of the Soviet Union and President of the Presidium of the USSR Supreme Soviet, will be 75 years old in December. Associated with this outstanding political figure are many important stages of the contemporary history of our country, its economic and social achievements and successes on the international scene. A photo biography appears next month.

TRAVELING AROUND KIRGHIZIA

Modern Ways and Old Traditions

The Kirghiz Soviet Socialist Republic, one of the union republics of Central Asia, is distinguished for its exotic mountainscapes. Changes have occurred quickly in Kirghizia. In a relatively short period of time, this outlying territory of czarist Russia has turned into a sovereign, industrialized republic. One fact alone, namely, that industrial production has increased more than 300-fold over the years of Soviet power, speaks for itself.

TRACK AND FIELD MEET IN LENINGRAD

Top Athletes Receive Prizes

At the latest track and field meet between the Soviet Union and the United States, held in Leningrad last summer, the top four athletes—two American and two Soviet—were presented with SOVIET LIFE prizes. A report appears in December.

COMING SOON

A Street in Donetsk Named After an American Miner

WORLD CU
SENSATION

"Alexander Zhirov is a skilled and bold athlete who is famous for his build and an elegant and pure style in even the most difficult events. His ascent has been wonderful. He has been one of the main eye openers of the post-Olympic season in alpine skiing."
Ingemar Stenmark

By Andrei Pronin
Photographs by Roman Denisov

RIVALRY for the 1981-1982 World Cup in alpine skiing promises to be keen. Many sports journalists regard Soviet athlete Alexander Zhirov, who won third place in last year's competition, as one of the favorites.

Zhirov's swift ascent was an eye opener at the beginning of the year. He caused a number of sensations in the history of Soviet downhill skiing. On March 14 he became the first Soviet athlete to win the giant slalom at one of the stages of the World Cup in Furano, Japan, while on March 24 and 25 he emerged victorious in the giant slalom and the special slalom in Borovets, Bulgaria, and again on March 28 in the giant slalom in Laax, Switzerland. This gave Soviet skiers the bronze medal of this prestigious tournament for the first time.

Though Zhirov made a good showing in previous years as well, the coaches of the national team consider him to have moved toward his victories gradually but rather unevenly. In a single season he found himself in the same event either among the prize winners, the top 10, the top 20 or even worse. The reason for this was not only that he drew late starting numbers but that he lacked experience in major international competition. Zhirov's performance on icy and wet slopes was unsteady, and, as he himself said, he doesn't like flat courses. His results were also dependent upon his mood and general physical condition.

Zhirov made 14 starts at the 1978-1979 World Cup competition but finished only 10 of them.

In 1979-1980 he made 16 starts, finished 11, scored 71 points, was fifth in the slalom, twenty-first in the giant slalom and fourteenth in the over-all totals.

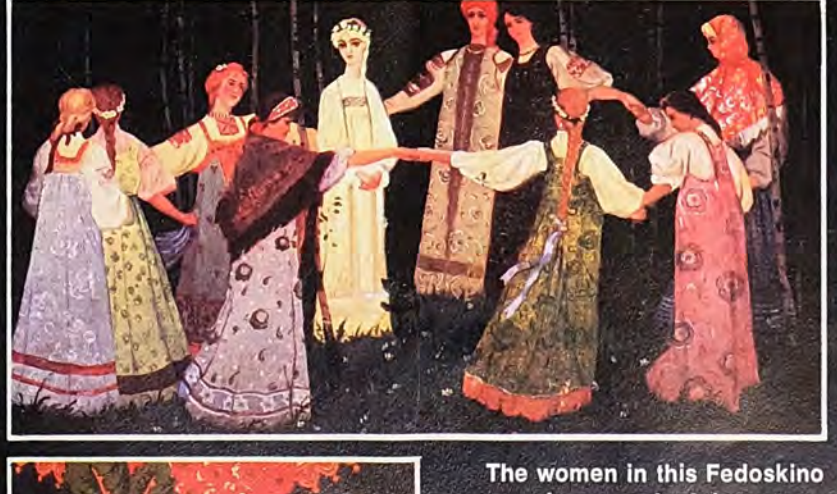
His results in 1980-1981 were as follows: 20 starts, 15 finishes, 185 points, sixth in the slalom, second in the giant slalom and third in the totals.

Zhirov takes a common-sense view of his strengths and weaknesses. This is what he said about his 1979-1980 season: "I think I was simply unlucky, but there are also more serious reasons: for example, dry snow whereas I had trained on wet. I have not been able to show everything I'm capable of, and I still can't find my own style." He has been trying to find it since childhood.

Zhirov was born in 1958 in a village not far from Dmitrov, a district center near Moscow. His father has been working at a plant for more than 30 years. His mother works at a children's hospital not far from their home. He has three brothers: Anatoli, Igor and Andrei, all of whom have loved alpine skiing from childhood. Anatoli began skiing on the small mountains in the vicinity of their native town. Today he is the senior coach of the Dmitrov Sports School, which opened in 1965. When he was nine, Zhirov went to one of the school's training sessions. His elder brother gave him his equipment: The ski boots were too big for him, and the boy put them on without taking off his *valenki* (bulky felt boots). Don't think that Zhirov became a master then and there and that everything came easy to him. But from that day on he has been regularly attending training sessions at the school. He quickly mastered the ABCs of skiing under his first coaches Vladimir Shirokov and Yuri Rakhmanin, instructors at the school, and soon knew everything that distinguishes a professional from an amateur. Finding a manner and style of his own was much more difficult. "Alexander often paid no attention to our advice, especially when it concerned the details of his turns," Rakhmanin recalls. "Each of us recommended something, but Zhirov was looking for his own style."

Zhirov won the junior championship of Moscow Region in 1971, became the bronze medalist of the Russian Federation's championship for schoolchildren and was eighth at the national competition in 1974. The following year he won the USSR championship for schoolchildren, and since 1976 he has been the USSR men's champion. They say that is when he made up his mind to win a place on the victor's podium with the famous skier Ingemar Stenmark.

Has Zhirov found "his own" style? According to him, last season was lucky for him, especially at the very end. But he still has to work on his turns, says Zhirov. How has Alexander prepared for next season, and what will his time be on the slopes of the 1981-1982 World Cup? Let's not even try to guess—we'll see soon enough.



The women in this Fedoskino lacquered miniature are wearing Pavlovsky shawls. Left: Detail of the shawl *Russian Beauty*, designed by artist Zinaida Olshevskaya. Top and right: *Jubilee* and *Rowan*, designed by artist Elena Regunova. There is a picture story about these beautiful shawls on pages 38-39.

SOVIET LIFE

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OF LEONID I. BREZHNEV

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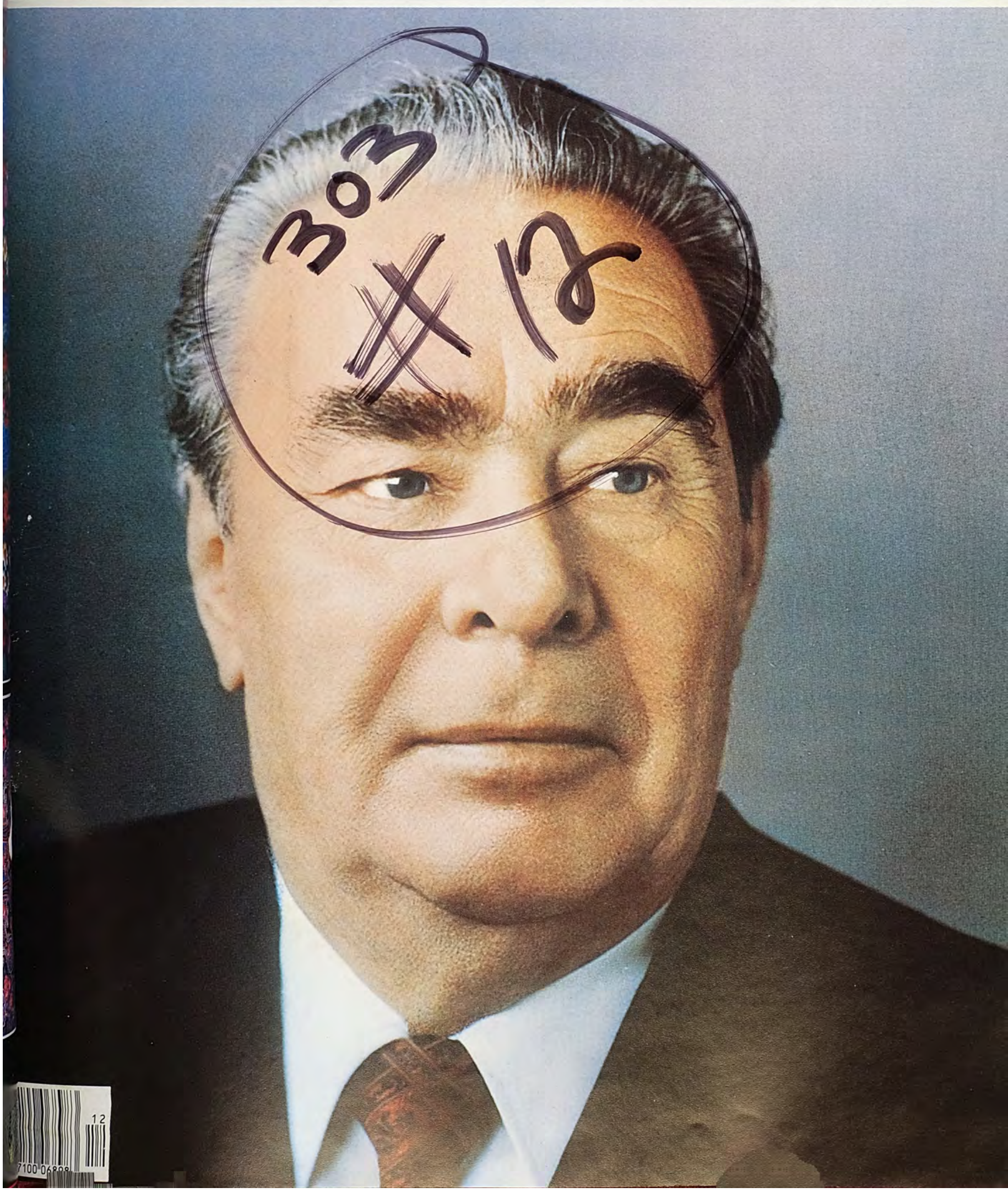

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SOVIET LIFE

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Front Cover: Leonid I. Brezhnev, General Secretary of the CPSU Central Committee and President of the Presidium of the USSR Supreme Soviet, will be 75 years old this month. A biography of the Soviet leader begins on page 1.

LETTERS TO THE EDITOR

May I extend to you warm congratulations on printing the enlightening and persuasive USSR Supreme Soviet Appeal to the Parliaments and Peoples of the World of June 23. The case with which mankind is today confronted could not possibly have been more realistically or adequately described.

The Supreme Soviet's sincere declaration that "the Soviet Union does not threaten anyone," its candid warning that "the risk of a nuclear conflict increases with each day lost for negotiations" and its sound allegation that "all those who . . . encourage the arms race . . . are . . . pushing humankind toward the abyss" are most heartening and, no doubt, must have found a deeply felt response in the hearts and minds of many of your readers.

Henry H. Metzger
Chicago, Illinois

I have just received my first issue of SOVIET LIFE (The Silver Jubilee), and I cannot tell you how pleased I am!

It is absolutely beautiful! Being an artist and sculptor who specializes in drawing people of the world, I am always interested in communication between countries of the world.

I travel worldwide to do on-site research for my drawings and am presently studying Japanese in preparation for a trip next year to Hokkaido to do my MFA on the ancient Ainu.

I would like one day to travel to the Soviet Union to see your art treasures, your artists, writers and people in all walks of life.

Kathryn L. Vilips
Miami Lakes, Florida

I have read with great interest and hope the article "Soviet and American Young People Hold Ninth Meeting" (SOVIET LIFE July '81 issue).

With the very existence of humanity hanging in continuous and frightening limbo, I hope more American and Russian people will come together for peaceful and friendly exchanges such as the past January meeting and that we can encourage the chances for working out our national and political differences through reason and understanding instead of bitterness and the threat of catastrophe.

The majority of people everywhere want peace. This being so, there must still be a way to resolve the tensions of our countries for the benefit and welfare of all.

Charles Johnson
Cleveland, Ohio

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LEONID BREZHNEV

A Short Biography

The Brezhnev family in 1930. Leonid Brezhnev is standing far left. His wife Victoria Petrovna is next to him. Seated are his father Ilya Yakovlevich (third from left) and his mother Natalya Denisovna (far right), who is holding Leonid and Victoria's daughter Galina. Right: During the fighting for the town of Tuapse on the coast of the Black Sea, Brigade Commissar Brezhnev presents a membership card of the Communist Party to soldier Alexander Malov, September 1942.

Leonid Brezhnev (left forefront) among young engineers at the Dneprodzerzhinsk metallurgical institute, 1935. Right: Brezhnev (right forefront) was a cadet at a training school for tank drivers in 1935 and 1936.

Brezhnev (right) in the hospital, 1943.

Major General Leonid Brezhnev, 1945. Right: At the Victory Parade in Red Square marking the triumph of the Soviet people over nazi Germany, a regiment of the 4th Ukrainian Front was led by Major General Brezhnev, June 24, 1945.

With machine gunners at the front in the area of Novorossiisk, 1943.

First Secretary of the Dnepropetrovsk Regional Party Committee, 1946. Below: A still from the television documentary "The Virgin Lands," based on Leonid Brezhnev's book of the same title.

During the rehabilitation work at the Zaporozhstal Iron and Steel Plant in Zaporozhye, 1947. Below: The traditional bread and salt welcome is offered to Brezhnev on one of his trips.

Leonid Brezhnev, a 1971 photograph. Right: At the opening ceremony of the Ukrainian State Museum of the History of the Great Patriotic War 1941-1945 in Kiev, May 9, 1981. Below right: At the Tbilisi airport, the Georgian Soviet Socialist Republic, 1981. Below: Leonid Brezhnev meets with veterans of the 18th Assault Army and the Red Banner Black Sea Fleet, September 1974.

On December 19, 1906, Leonid Ilyich Brezhnev was born into a Russian worker's family in the village of Kamenskoye, now Dneprodzerzhinsk, a large iron and steel center in the Ukraine. Both his grandfather and father worked for many years at the local iron and steel mill. Leonid Brezhnev also worked there, first as a worker and then as an engineer and later a shop superintendent. His brother and sister worked at the same mill. In all, the Brezhnev family put in a total of almost 100 years at that enterprise.

Leonid Brezhnev began to work in the early years of the Soviet state, born of the October Socialist Revolution in 1917. Those were hard years. Hunger, economic dislocation, poverty and illiteracy were the legacy the young Soviet Republic received from the czarist regime. The nation was faced with the task of bringing the economy out of the havoc wrought by World War I, the Civil War and the foreign military intervention. The Soviet people, led by the party founded by Vladimir I. Lenin, set about transforming old and backward Russia into a new and socialist state. They rebuilt factories, erected power stations and organized the first collective farms. They began eagerly to study and seek knowledge. These were the years in which a generation of pioneers of socialist construction emerged, and among them was Leonid Brezhnev.

At 17 Brezhnev joined the Komsomol (Young Communist League), within whose ranks, as he himself put it, he learned the difficult science of life, of class struggle and of building the new society. It was there that he found a source of energy and optimism which stood him in good stead for many years to come. When he was 25, he joined the Communist Party, whose cause he has faithfully served ever since.

Leonid Brezhnev has always been bound to the people by strong and close ties. At all the stages of the history of the Soviet Union he was invariably in the front ranks, where perseverance and fortitude were called for.

During the first five-year plan periods the entire nation was engaged in new building projects, in studying and acquiring knowledge. As a young Communist Brezhnev was an efficient worker and made rapid progress in his studies. It was a difficult, and at the same time a heroic and extremely challenging, period of time for the country. During those years the question of what the world's first socialist country would be like was being decided. A new society could not be built on an obsolete economic foundation. The Communist Party has, therefore, concentrated its efforts on building an advanced industry in the USSR. Industrialization alone would bring about fundamental changes in the social structure of the country, ensure prosperity for all its citizens, help establish a highly productive socialist agriculture and ensure reliable defense of the country, which was surrounded by hostile capitalist forces.

The collectivization of farming, that is, putting it on a socialist basis, which was necessitated by life itself, proceeded in the face of fierce resistance on the part of the *kulaks*, the rural exploiters. They stopped at nothing, including terror and arson, in their attempts to prevent the process of collectivization. Such was the epoch that the Soviet land lived through, and such were the complicated tasks that the Communist Party and the Soviet people had to tackle. And Leonid Brezhnev was among those who at the bidding of their hearts and consciences spared no effort to accomplish those tasks, fully aware of the great responsibility they had assumed.

In 1927, after graduating from a land reclamation and surveying technical college in Kursk, Central Russia, Leonid Brezhnev worked as a land

President of the Presidium of the Supreme Soviet of the USSR Leonid Brezhnev congratulates Yuri Gagarin, the world's first man in space, on his receiving the Pilot-Cosmonaut of the USSR title, August 9, 1961. Above: The Soviet leader presents awards to Pilot-Cosmonaut of the USSR Leonid Popov and Cosmonaut-Researcher Dimitru Prunariu of the Socialist Republic of Rumania, 1981. Below: Leonid Brezhnev with members of the Politburo and secretaries of the CPSU Central Committee, 1980.

surveyor in Byelorussia, Kursk Gubernia and the Urals, where he took part in organizing the use of land in the new countryside. In 1935 he graduated from a metallurgical institute in Dneprodzerzhinsk and started working at a plant in his native town. Living and working among factory workers, sharing their thoughts and aspirations, and working in the plant's party organization have left an indelible imprint on Leonid Brezhnev and were decisive factors in the forming of his outlook. What took shape then has, in Brezhnev's own words, remained with him to this day. The young engineer worked hard and with a singleness of purpose which distinguished him among his fellow workers. As the plant's newspaper *Znamya Dzerzhinki* noted at the time, "He is made of strong metal."

In 1939 Brezhnev was elected secretary of the regional party committee in Dnepropetrovsk, one of the largest industrial centers of the country. At that time the Soviet people were aware of the real threat of an aggressive war coming from nazi Germany. The defense of the country became a matter of concern for all Soviet citizens and one of the prime objectives of the Communist Party. It was then that the Dnepropetrovsk Regional Party Committee received an urgent assignment from the party's Central Committee to gear some of the plants to war production. To supervise the production, the regional party committee created the post of Secretary for the Defense Industry. The assignment was extremely important and could not be delayed. At an urgently called meeting of party officials S. B. Zadionchenko, at that time first secretary of the regional party committee, said the following:

> For the post of Secretary for the Defense Industry we need an energetic man, one with a technical education and a good background in production, and, most important, one who enjoys great respect among our workers, foremen and engineers. In short, we need a man possessing all these qualities in equal measure, and I believe that only one such person can be found among us, the present Secretary for Propaganda, Comrade Brezhnev. I therefore propose that he should be appointed to the new post.

The motion was adopted unanimously.

To preserve the plants and factories in Dnepropetrovsk Region and to make the best use of them to supply the front became the primary concern of the regional committee's Secretary for the Defense Industry from the early hours of June 22, 1941, when nazi Germany treacherously attacked the Soviet Union. Less than a month after the invasion of the Soviet Union by fascist troops, Leonid Brezhnev joined the army and fought in the war to the very end.

At the War Fronts

The path of Leonid Brezhnev lay through the flames of battles, from the first fierce engagements to the great victory. Soldiers and commanders who fought shoulder to shoulder with him firmly believed in their victory. That faith was instilled in them by our party, by Communists, commanders and political officers such as Leonid Brezhnev. They respected him for his self-control and calmness, courage and his ability to act in a difficult situation, to sense the mood of people, to raise their morale and to inspire them to acts of heroism.

Colonel Leonid Brezhnev, who was with the 18th Army, took an active part in many military operations, including the Battle for the Caucasus, which is one of the glorious chapters in the history of the war. He partici- ▶

pated in the heroic marine operation in the area of Novorossiisk. Launching a sudden attack, Soviet landing troops captured a small bridgehead on the Black Sea coast from the Nazis—it became known as Malaya Zemlya (Small Land)—and resisted fierce enemy attacks for 225 days.

There were more battles ahead. Ivan Kravchuk, a veteran soldier who fought together with Leonid Brezhnev, recalls:

> Early in the morning on December 12, 1943, from the front line of defense came a telephone message warning that the Nazis were attempting to break through at the village of Stavishche (only about 40 kilometers from Kiev). We all picked up our arms and rushed out. With us was Colonel Brezhnev, Chief of the Political Department of the 18th Army. He got into his jeep. I followed him.
>
> By the time we reached the trench, it had become the front-line position. We were swept with German machine-gun fire, and the enemy infantry rose to attack. We had only one heavy machine gun left, and, as ill luck would have it, even it went dead after a few seconds. Brezhnev made a dash for the silent machine gun along the trench. I ran after him. We stepped over several motionless bodies. Brezhnev turned and said to me, "Ivan, see if anyone is alive. You've got a first-aid kit, go and help them!" I stopped, felt two or three bodies and discovered all of them were dead. I ran toward Brezhnev and at that instant heard our only machine gun come to life with a staccato of loud bursts. When I reached it, I saw Brezhnev in the place of the machine gunner, who lay in a pool of blood. The Nazis were tearing their way forward, and they only had to cover another 30 or 40 meters before reaching our trench. . . . Brezhnev responded by firing short bursts carefully aimed at the advancing enemy. His usual self-control had not left him, but in the heat of the moment he had thrown off his fur hat and gloves.

Also referring to December 1943, Marshal of the Soviet Union Kirill Moskalenko recalls:

> I first met Brezhnev when we were transferring part of our sector of advance to the 18th Army which had arrived from the Northern Caucasus. I liked his simple, unaffected ways, the bold and resolute manner in which he acted and made decisions. In a word, we saw that in Leonid Brezhnev we had an excellent organizer of party political, ideological and educational work, a man who also had a sound grasp of military matters. He also proved to be a good comrade and an intelligent man, one interesting to talk with.

Having driven the invaders from the Soviet land, the Soviet Army went on to liberate the peoples of many European countries from the fascist yoke. Among the soldiers who fought for the liberation of Poland, Hungary and Czechoslovakia was Major General Leonid Brezhnev, Chief of the Political Department of the 4th Ukrainian Front. He had earned the right to be among the bravest Soviet fighting men who took part in the Victory Parade in the summer of 1945—a triumphant march through Moscow's Red Square. As Brezhnev later said, it "was the gravest war of all that have ever fallen to the lot of our people and in general any people on Earth."

The Years of Rebirth

After the war ended, the Soviet people devoted their efforts to repairing the vast damage done by the nazi invaders: More than 1,700 cities and towns, 70,000 villages and thousands of plants and factories were in ruins. Heading the party organizations of Zaporozhye Region and then Dnepropetrovsk Region in the Ukraine, Leonid Brezhnev worked with as much dedication and commitment for the economic rehabilitation of the regions as he had at the front. The scale of the work accomplished can

From July 30 to August 1, 1975, the Conference on Security and Cooperation in Europe was held in Helsinki, Finland. The conference was attended by delegations from 33 European countries and from the U.S. and Canada. Facing page: Leonid Brezhnev, head of the Soviet delegation, addresses the conference on July 31. Here, on behalf of the Soviet Union, the Final Act of the conference is signed by Leonid Brezhnev on August 1, 1975.

be seen from the following facts: The huge Zaporozhstal Iron and Steel Plant, where the Nazis had destroyed all blast and open-hearth furnaces, began to produce steel within two years after the end of the war. Also within two years workers repaired the Lenin Hydroelectric Power Station on the Dnieper River, at that time one of the country's largest. This project captured the imagination of the Soviet people, and the entire nation contributed to its construction during the prewar five-year plan periods. Leonid Brezhnev's work in those years fully revealed his gifts as an organizer, party leader and statesman.

As leader of the Communist Party of Moldavia from 1950 to 1952 Brezhnev directed the important work of developing the industry, farming and culture of Moldavia, one of the 15 republics of the Soviet Union.

The history of our socialist homeland is written by working men and women. By those who built the Lenin Hydroelectric Power Station, by those who put up a giant steel plant at the foot of Magnetic Mountain in the Urals, by those who are now constructing the ATOMMASH Plant in southern Russia, which manufactures nuclear reactors, by those who are opening up oil- and gas-bearing fields in Western Siberia and by those who are laying the Baikal-Amur Mainline (BAM) railroad.

The great labor exploit of those who turned up vast areas of virgin soil occupies a fitting place in the glorious annals of our people's heroic accomplishments. They plowed up millions of hectares of never-tilled land within a brief span of time. Kazakhstan, once a grain importer, has become the country's major grain-growing region. It was Leonid Brezhnev, as First Secretary of the Central Committee of the Communist Party of Kazakhstan, who led the drive to put those virgin lands under cultivation. The Central Committee of the Communist Party of the Soviet Union picked him for the job because they knew that he was a man who could rouse people to an unprecedented performance and organize the solution of the most complicated problems. The party was right in making that choice. It is the unanimous opinion of those who worked together with Brezhnev in those years that he put all his heart and soul into that nationwide undertaking.

Leading the Party and the State, At One with the People

Whenever you go through the pages of our country's recent history, you will see Leonid Brezhnev in the forefront every time the nation has had great tasks to tackle. That is how it was in the virgin lands, and that is how it was when the country's entire progress brought it face to face with the problem of breaking through into outer space. He was directly concerned with the development of Soviet space science as a Secretary of the Central Committee of the Communist Party of the Soviet Union. Brezhnev's office in the Central Committee building in Moscow's Staraya Ploshchad (Old Square) was a kind of headquarters where the major problems associated with the development of artificial Earth satellites and manned spaceships were solved. It was a meeting place for prominent scientists and specialists in various areas of technology and engineering.

Leonid Brezhnev was often to be seen at the factories that produced rocket equipment. The launching of the first artificial Earth satellite in October 1957 and Yuri Gagarin's space flight in April 1961, which ushered in the space age, were fitting accomplishments to crown the heroic labor efforts of Soviet scientists, designers, engineers, technicians and workers. Brezhnev made an outstanding contribution to that historic achievement. ▶

Leonid Brezhnev with President of the Republic of Finland Urho Kaleva Kekkonen (far right) and Minister of Foreign Affairs of the USSR Andrei Gromyko (far left) in Helsinki, July 1975. Below: The Soviet leader in the Kremlin with Olof Palme, chairman of the Independent Commission on Disarmament and Security and chairman of the Social Democratic Labor Party of Sweden, June 1981.

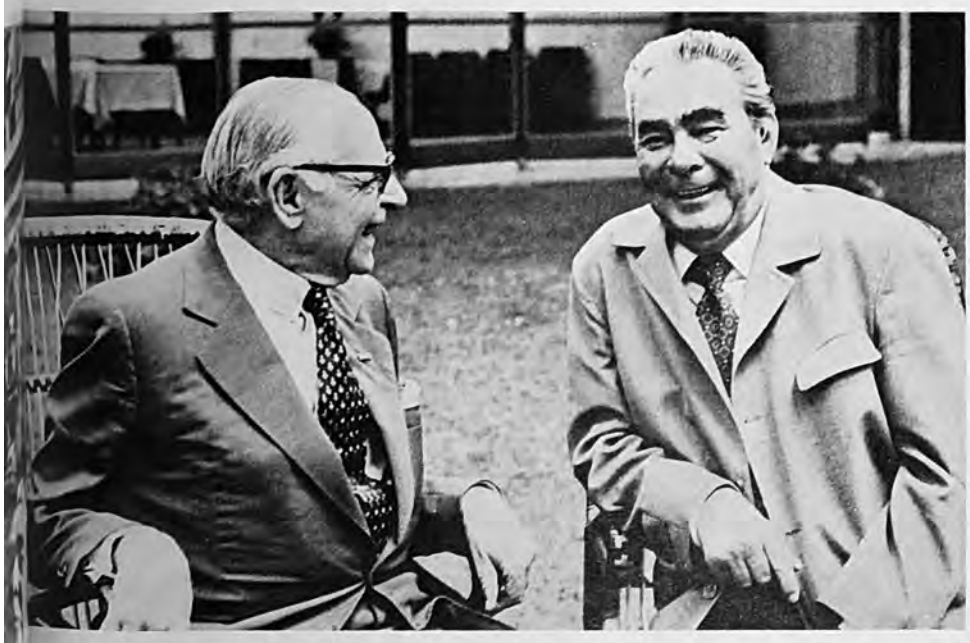
Right: The Soviet leader with Ali Naser Mukhammed, General Secretary of the Yemen Socialist Party Central Committee and Prime Minister of the People's Democratic Republic of Yemen in Moscow, May 27, 1980.

At the opening ceremony of the 22nd Olympic Games. Lord Killanin, President of the International Olympic Committee, is to the left of Leonid Brezhnev; Ignati Novikov, chairman of the Olympiad-80 Organizing Committee, is to his right, July 19, 1980. Right: During his visit to Paris, October 1971.

Leonid Brezhnev with Indian Prime Minister Indira Gandhi (center) and President Neelam Sanjiva Reddy (far left) in New Delhi, December 8, 1980. Below: Kurt Waldheim, Secretary-General of the United Nations, meets with Leonid Brezhnev in the Kremlin, 1981.

The Soviet leader talks with Chancellor of the Federal Republic of Germany (FRG) Helmut Schmidt, May 1978. Below: Leonid Brezhnev and Armand Hammer, 1978.

Below right: At Sheremetyevo Airport in Moscow with King Carl XVI Gustav of Sweden (center) and Queen Silvia, July 1978.



Seeing off Willy Brandt, chairman of the Social Democratic Party of Germany, Moscow, July 1981.

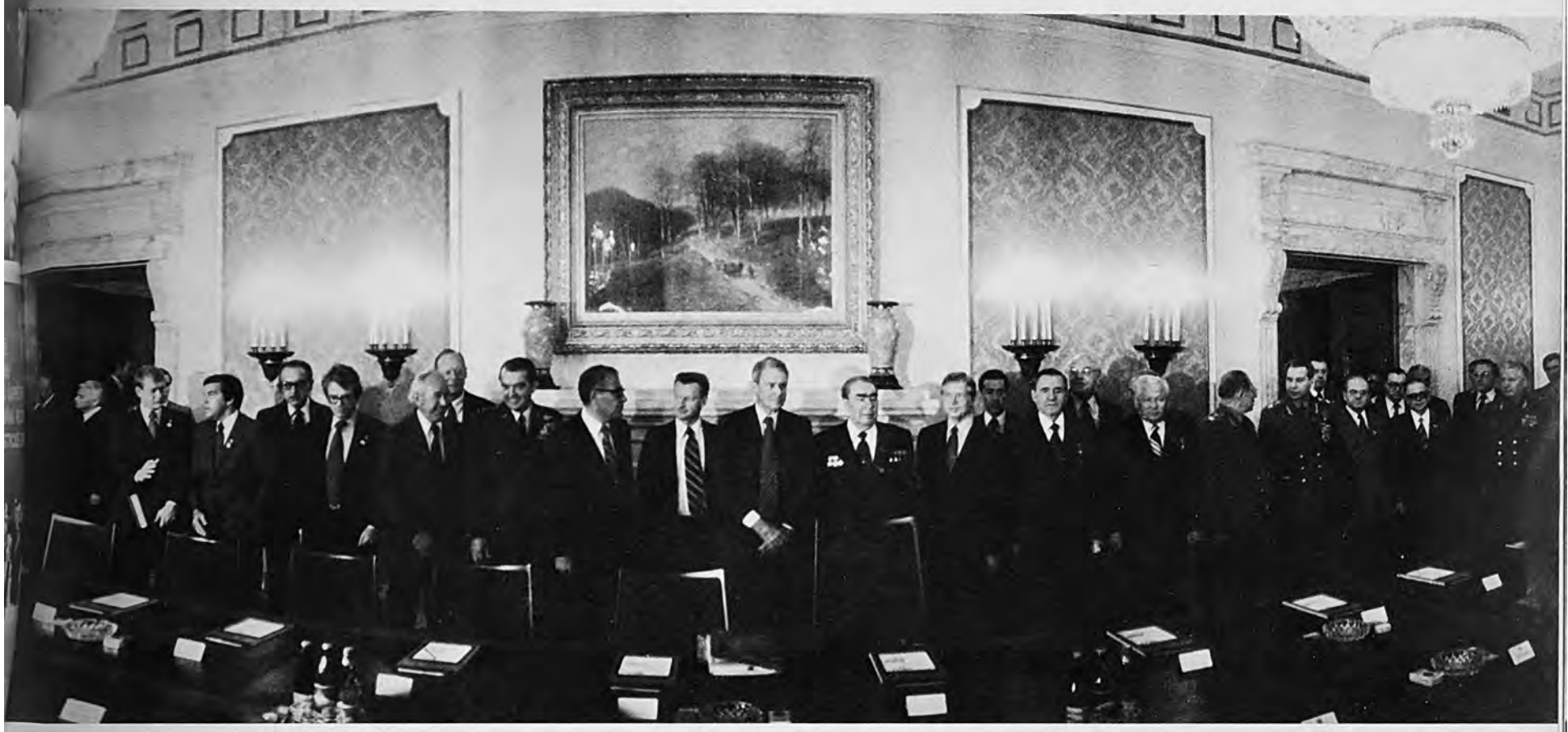
Leonid Brezhnev receives a delegation from KEIDANREN, the Japanese Federation of Economic Organizations, August 13, 1976.

Czechoslovaks greet Leonid Brezhnev at Ruzyne Airport in Prague during his visit to their country, May 1978. Below: With Luis Corvalan, General Secretary of the Communist Party of Chile.

Leonid Brezhnev addresses the Sixteenth Congress of the Communist Party of Czechoslovakia, April 1981. Above left: A meeting of the Conference of Communist and Workers' parties of Europe, Berlin, June 1976. Right: A sitting of the Thirty-fifth Session of the Council for Mutual Economic Assistance, 1981.

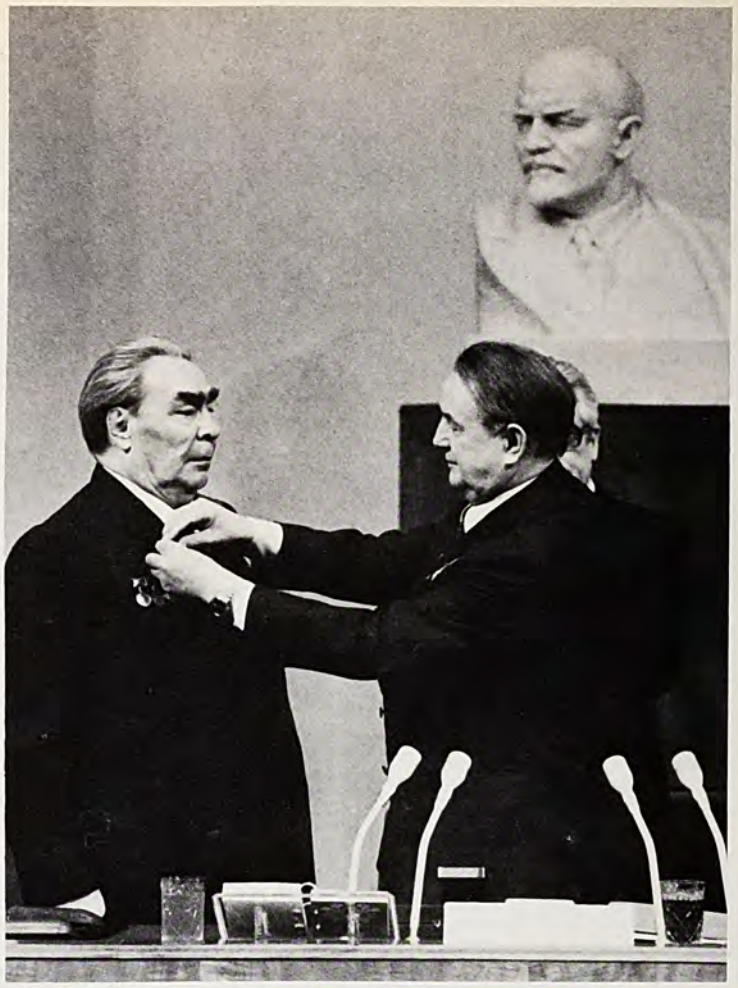
Leonid Brezhnev at a meeting with Le Duan, General Secretary of the Central Committee of the Communist Party of Vietnam (right), and Pham Van Dong, member of the Politburo of the CPV Central Committee and Prime Minister of the Government of the Socialist Republic of Vietnam (left), July 1980. Right: With Fidel Castro, First Secretary of the Central Committee of the Communist Party of Cuba, during the Soviet leader's visit to Cuba, January 1974.

Soviet and American dignitaries pose for pictures before the beginning of the summit talks in Vienna, June 17, 1979.

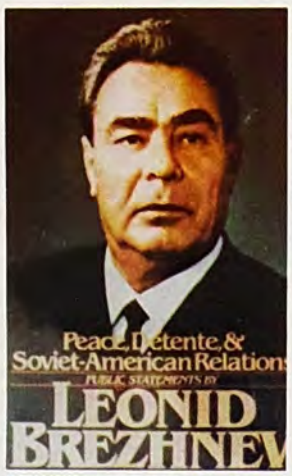


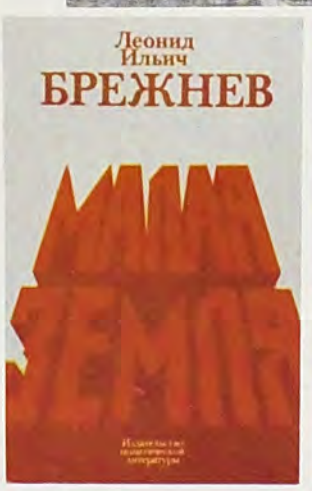
At a reception for a delegation of the Kampuchea United Front for National Salvation and of the People's Revolutionary Council of the People's Republic of Kampuchea held in the Kremlin, February 1980. Left: Babrak Karmal (in the right forefront), General Secretary of the Central Committee of the People's Democratic Party of Afghanistan, chairman of the Revolutionary Council and Prime Minister of the Democratic Republic of Afghanistan, arrives in Moscow on a visit, October 16, 1980.

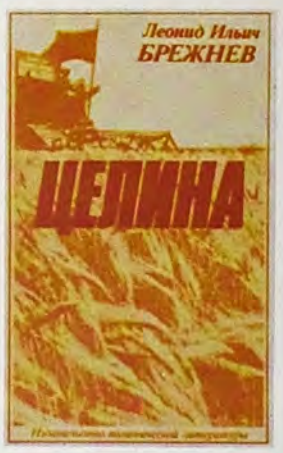
The Lenin Prize is awarded to Leonid Brezhnev for his books *Malaya Zemlya (Small Land), Rebirth* and *The Virgin Lands,* for his untiring efforts for peace, March 31, 1980.



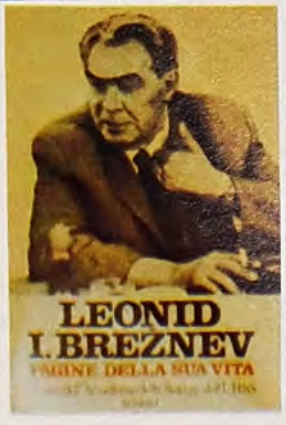
Facing page: "I wish you, dear children, joy, happiness, peace and a kind Sun!" said the Soviet leader at the International Children's Festival held at Artek, August 1979.

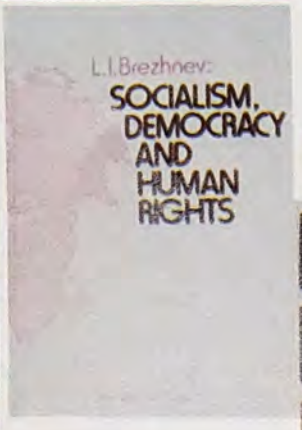


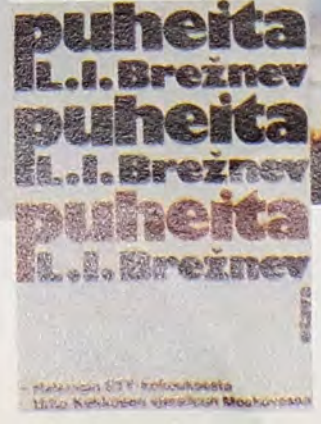




Leonid Brezhnev's books have been issued in millions of copies in many languages of the world. Shown here are just a few of his titles.







In October 1964 Leonid Brezhnev was chosen to head the Central Committee of the Communist Party of the Soviet Union. A tried-and-tested leader and a true Leninist, he was promoted to the highest post in the party by the will of the Central Committee and by all Communists at a time when the party and the nation faced new tasks, when it was necessary to resolutely break with subjectivist tendencies in leadership and restore the Leninist principles and standards of party life. For 17 years now he has been leading the party and the nation reliably and confidently toward the achievement of a communist society.

Throughout these years the Communist Party of the Soviet Union, its Leninist Central Committee and its Politburo, with Leonid Brezhnev as leader, have been working collectively, analyzing modern socioeconomic and political processes, investigating trends of social development and elaborating home and foreign policies.

The Soviet society's advance into a new period of history—one of developed socialism—and the elaboration and implementation of the CPSU's general strategy in this outstandingly challenging period of history are inseparably associated with the name and diversified activities of Leonid Brezhnev as General Secretary of the CPSU Central Committee and President of the Presidium of the USSR Supreme Soviet.

Our country is forging ahead toward communism, from one party congress to another, paving the general course for us to follow to achieve this goal. The Twenty-sixth Congress of the Communist Party of the Soviet Union, which met in February and March of 1981, occupies a special place among the party forums. Its central document, the report presented by Leonid Brezhnev, was a comprehensive and thorough review of the most urgent and vital problems of modern times. It opened up a further prospect before the society of mature socialism and indicated the ways of resolving the overriding issue of world politics—that of promoting détente and preventing a general war.

The Twenty-sixth Congress, like the three previous congresses, was distinguished by the thought and will of an outstanding politician of our times, Leonid Brezhnev, a man who carries forward Lenin's cause.

The General Secretary's report presented a broad panorama of the achievements gained, problems tackled and prospects opening up over the course of communist construction and, above all, in the sphere of economics, its major area.

The Soviet Union has made notable headway in every line of progress toward building the material and technical foundation of communism. Our society's productive forces have attained a qualitatively new level. The scientific and technological revolution has been advancing far and wide, refashioning many sectors of production. Our industrial image is now being shaped by the electronics and radio-engineering industries, chemicals and petrochemicals industries, space and laser technology, nuclear power engineering, machine building and instrument making. A sharp turn has been made toward raising the efficiency of production and improving the quality of work. Major change has taken place in the distribution of productive forces. A large-scale industrialization program is under way in new regions, such as the oil- and gas-bearing areas of Western Siberia. Heavy industry, the core of the nation's industrial power, has been developing at a stable rate. During the past 10 years alone, capital goods production has grown as much as it did throughout the previous 20 years. Industrial capacities have been expanded with the launching of such giants as the auto and truck plants in Togliatti and Naberezhnye Chelny, ▶

the Sayano-Shushenskoye Hydroelectric Power Station, the Armenian Nuclear Power Station, the Tomsk Chemical Works and thousands of other enterprises.

Big gains have been scored in agricultural development. More stability in the production of grain and other products has been achieved. The farming community is increasingly active in introducing modern technology on a widening scale, advancing more intensive farming techniques. Soviet science has advanced to leading positions in major areas of knowledge during these years.

Leonid Brezhnev has played a tremendous role in these achievements. A thorough knowledge of industry, agriculture and of the processes of scientific and technological development enables him to foresee national economic and scientific problems and to find solutions to them. It is on his initiative that the tapping of Western Siberia's oil resources has been undertaken. On his proposal the party has set a course toward large-scale development of agro-industrial integration and toward the establishment of modern industrialized agricultural production complexes. Planning agencies are busy drawing up goal-oriented development programs for key industries: power engineering, metallurgy, transport, machine building and the food industries. This extensive and important work, which has great potential in the future, has also been started on Brezhnev's initiative.

Soviet Communists and the Soviet people in general know Leonid Brezhnev not only as an outstanding organizer but also as a theoretician who creatively develops the theory of Marxism-Leninism. He is the author of many books that consider the major problems of socialist and communist construction, the modern revolutionary process and the struggle for peace and international security. Brezhnev's works present the motivation for the concept of developed socialism as a historical stage of society's advance toward communism and formulate and analyze new theoretical inferences and propositions on questions which the course of life has raised for social thought to answer.

For example, he has advanced an extremely important postulate about the Soviet people as a new historical entity. "This means," he said, "that it is the common features of the behavior, character and outlook of the Soviet people, which do not depend on social and national distinctions, that are progressively assuming decisive significance in our country."

In the Report of the Central Committee to the Twenty-fifth Congress, Leonid Brezhnev formulated the CPSU's economic strategy at the present stage. "Just as any other strategy," he said, "the party's economic strategy begins with the formulation of tasks, with the identification of fundamental, long-term aims. The most important of these has been and remains a steady rise of the people's living standard and cultural level."

Of course, this conclusion is not only one of immense scientific importance. It has been the basis of the practical politics of the party and the state. The Soviet people's well-being and cultural standards are rising all the time. Wages and salaries have gone up by 40 per cent during the last 10 years. The pay rates for collective farmers have been rising even faster. The public consumption funds have almost doubled. Housing construction has proceeded on a broad scale. The Soviet Union has, indeed, become a nation of housewarming parties. Over 50 million people have moved into new homes and apartments during the past five years.

At the Twenty-sixth Congress Leonid Brezhnev postulated the idea that the formation of a classless structure of our society would basically and essentially take place within the historical limits of mature socialism. The meaning of this finding is that it sets precise guidelines for social policy. It is this finding that the social program of the Twenty-sixth Congress was based upon. The idea behind it was to give a free rein to all the processes that bring the classes and segments of our society closer together and remove the distinctions between town and countryside, between manual and mental labor.

A whole new stage in the development of socialist democracy and the Soviet system of people's government is also associated with the name Leonid Brezhnev. It is under his guidance that the new Constitution—the charter of developed socialism, marking the new historical frontiers in Soviet society's advance toward communism—had been drafted and adopted in 1977. It provided the legislative confirmation of the realities of social justice, the rights and freedoms of citizens which socialist society alone can provide.

The Soviets—the most representative bodies of people's government—have attained a higher level of performance since Brezhnev took office as President of the Presidium of the Supreme Soviet of the USSR in 1977.

The impact of the personality of Leonid Brezhnev on every aspect of public life is determined by his great, genuinely Leninist commitment to party principles. He looks at any matter from the standpoint of the party's cause and from the standpoint of the interests of the working people. Brezhnev has a perfect command of the art of organizing the vast amount of work being done by the Politburo, by the entire Central Committee and by all Communists, and directing their efforts toward resolving the problems the party has before it. Concern for the good of the people carries with it everybody's high sense of responsibility for one's own performance, for there is no other source of wealth, except work, in socialist society. It is in frank and exacting terms that at the Twenty-sixth Congress Brezhnev referred to some negative occurrences in the economy, in national economic management, in the social services and in party work, thereby setting a good example of intolerance for shortcomings and complacency, and a model of unity between one's words and deeds.

Leonid Brezhnev can be credited with creating a climate of confidence and respect for labor power in the party and the nation. This climate serves to bring out the best qualities in people and stimulates creative work, the search for more reserves and daring enterprise. But the trust in labor power has to be indispensably and unfailingly combined with a highly exacting attitude to it. Modern executives, Brezhnev points out, must integrally combine their fidelity to party principles with profound competence, their discipline with initiative and a resourceful approach to the job in hand, and they must constantly take into account socioeconomic, political and educational aspects, they must be considerate to people, sensitive to their needs and requirements, and must themselves be a model at work and in the home.

The leader of the party and the state is linked with the people by a thousand threads. He travels throughout the land, visiting plants and factories, meeting with collective farmers, scientists, party workers and people of various ethnic backgrounds. He has been to many areas of the country. Among his most memorable visits have been those to Siberia and the Far East. The dialogue of the General Secretary of the CPSU Central Committee, President of the Presidium of the USSR Supreme Soviet, with the country's working people goes on from day to day. Soviet newspapers almost daily carry Brezhnev's letters to production groups having attained outstanding goals. Correspondence for Leonid Brezhnev is received in an endless stream. His Kremlin address is the most popular one in the nation. None of the letters is left unheeded; all are properly acted upon. "I am in the habit," Brezhnev says, "of systematically looking through not only the official papers that reach the party's Central Committee, but also the letters from Communists and nonparty working people of our country, and these letters to the Central Committee are many."

Leonid Brezhnev has a lot of things to do, indeed, he has his hands full, and it is simply amazing how he finds time to do all that he has to do, resolving the problems he has to resolve expeditiously, with a thorough knowledge of the subject he deals with and with great competence.

For Peace on Earth

Leonid Brezhnev devotes much of his time and energy to international relations. Under his leadership the Soviet Communist Party formulates the principles and strategy of its foreign policy and prepares major Soviet positions in the international arena. Brezhnev visited many countries as head of Soviet party and government delegations and participated in major world conferences. He put his signature under the Final Act adopted by the Conference on Security and Cooperation in Europe. At the Twenty-fourth and Twenty-fifth CPSU Congresses he proclaimed the Soviet Peace Program. The implementation of that program resulted in a substantial improvement in the international climate in the 1970s. Détente was gaining ground, making the forces of cold war and confrontation give way to it.

Large sections of public opinion, all unbiased people in the world, regard Leonid Brezhnev as a consistent, staunch and active champion of peace. The peace initiatives formulated in the Kremlin meet the hopes and aspirations of all humankind. Their sole objective is to maintain peace and avert war. Our country does not seek to achieve military superiority over the West. It is exerting efforts to halt the arms race and arrange good-neighborly relations and cooperation with all states, irrespective of their social and political system.

The Twenty-sixth Congress of the CPSU has shown once again that our party, its Politburo and Central Committee have no task more important than that of building communism and maintaining peace. Addressing the congress, Brezhnev presented a wide range of proposals aimed at maintaining and further promoting international détente and curbing the arms race. Specifically, he proposed extending confidence-building measures, bringing about a political settlement of a number of crisis situations, including the situation in the Middle and Near East, and resuming the Soviet-American dialogue on strategic arms control.

These proposals now constitute the backbone of the Soviet foreign policy today, and the Soviet Union is making big efforts to put them into practice. In his speeches in Kiev, Tbilisi and other places, Brezhnev reaffirmed that the door for negotiations was open for our Western partners. The Soviet Union does not lay any preconditions or make any demands. It will support any action serving the cause of peace.

At the session of the Supreme Soviet of the USSR, held in Moscow

last June, Leonid Brezhnev proposed adopting an appeal To the Parliaments and Peoples of the World. "The very nature of up-to-date weapons has become such that if they were used, the future of all humankind would be at stake," he said.

"There is only one way out," Leonid Brezhnev went on. "One must now, today, do one's utmost to bar the road to those who love unrestricted rearmament and military gambles. One must do the utmost to safeguard people's right to life. No one can be an indifferent onlooker in this matter: it affects each and all."

The world enthusiastically responded to the following appeal of the Supreme Soviet of the USSR:

> Peace is the common possession of humankind, and in our time it is also the paramount condition for humankind's existence. It is only through joint efforts that peace can and must be maintained and reliably safeguarded.

Having fought on the fronts of World War II for four years and experienced all the hardships of that war, which claimed 20 million lives in the USSR, Brezhnev loathes war with all his heart and has no greater cause to cherish than peace.

This is what he wrote in the first part of his reminiscenses *Malaya Zemlya (Small Land):*

> Our victory was a great step forward in the history of mankind. It revealed the greatness of our socialist land, it showed that our communist ideas were invincible and it yielded magnificent examples of selflessness and heroism. Yes this is all true, but may there be peace, because peace is what the Soviet people and honest people over the world need so very much . . . . There must never be another war again.

Leonid Brezhnev and the CPSU as a whole attach great importance to the further need to strengthen the socialist community and enhance the weight of its influence in international affairs. Brezhnev has traveled to almost all socialist countries, to some of them several times. All of his meetings with representatives of the fraternal countries and their friendly and cordial talks on a wide range of problems result in the adoption of joint decisions that are of great practical importance for the strengthening of friendship between the fraternal parties and peoples.

Leonid Brezhnev's meetings with the leaders of the fraternal parties in the Crimea have become a tradition. These meetings help the Communist and Workers' parties of the socialist countries further broaden their cooperation and adopt joint positions.

"Far be it from us, comrades, to paint the picture of the present-day socialist world in exclusively radiant colors," Leonid Brezhnev said at the Twenty-sixth CPSU Congress. "Complications, too, occur in the development of our countries." But the problems that arise over the course of cooperation are solved by the socialist countries by joint effort, and solutions that take into account the interests of each country and the community as a whole are found.

Our party and the General Secretary of its Central Committee are making a constructive contribution to the activities of the Political Consultative Committee (PCC) of the Warsaw Pact, which effectively safeguards peace and socialism. Brezhnev traditionally heads the Soviet delegations at the sessions of the PCC.

The Communist Party of the Soviet Union never slackens its attention to the development of economic cooperation between the member countries of the Council for Mutual Economic Assistance (CMEA). Brezhnev has made a great contribution to the drafting and implementation of the Comprehensive Program for the Development of Socialist Economic Integration and the long-term target program of cooperation which opened up a new chapter in the development of economic cooperation between the socialist countries.

Concern for raising economic cooperation to a higher level prompted Brezhnev to advance a new proposition on supplementing coordination of plans with coordination of economic policy as a whole at the Twenty-sixth Congress of the CPSU. Also being put on the order of the day, he said, are such issues as aligning the structures of economic mechanisms, further extending direct ties between ministries, amalgamations and enterprises participating in cooperation and establishing joint firms.

In pursuance of Lenin's ideas on the alliance of socialism and the national liberation movement, the CPSU Central Committee, its Politburo and Leonid Brezhnev, personally, follow a steady policy of expanding cooperation with the newly-free countries.This line received the full approval of the Twenty-sixth Congress.

Leonid Brezhnev's tireless efforts for peace have been duly appreciated. In 1973 he was awarded the International Lenin Prize "For the Promotion of Peace Among Nations," and in 1975 the Frédéric Joliot-Curie Gold Medal of Peace, the highest decoration given to champions of peace. He said:

> The foreign policy of the Soviet Union is the fruit of collective thinking and effort of our Communist Party. I therefore regard the award of the Lenin Prize to me as an honor conferred on the entire party for its work, as international recognition that the policy pursued by its Central Committee is correct. And I am happy that, as a member of the party and as one who has been reared and steeled by the party, I can participate in the struggle for the great goals of a durable peace and lasting security of nations—goals which working people everywhere are striving to achieve.

Leonid Brezhnev rightfully enjoys immense and well-earned prestige among Communists in other countries, among all revolutionaries in the world. His voice and that of the entire CPSU are heeded by the fraternal parties. He is doing much to promote the unity of action of the Communist parties. He led delegations of the CPSU at the international forum of Communists in 1969 and at the Berlin meeting of the Communist and Workers' parties of Europe in 1976. His analysis of problems of the world revolutionary process made in his reports at the Twenty-fourth, Twenty-fifth and Twenty-sixth Congresses of the CPSU is helping the fraternal parties to see their way better in the present-day international situation and has enriched the joint experience of struggle for socialism and against imperialism.

Of special importance is the further elaboration at the Twenty-fifth and Twenty-sixth CPSU Congresses of Lenin's teaching on the general laws and specific national features of socialist revolution in different countries, which has been a substantial contribution to the science dealing with revolution and victory of socialism.

The CPSU, its Central Committee and Politburo, as well as Leonid Brezhnev, are waging a consistent struggle against all forms of contemporary opportunism, both right wing and left wing, and against nationalism. They work for the unity of the world communist movement on a well-tested and reliable basis—the principles of Marxism-Leninism and of proletarian internationalism.

Among his many duties Brezhnev's post as Chairman of the Defense Council of the country holds an important place. Not one major question relating to increasing the defense capability of the Soviet state, the development and improvement of the Soviet Army and Navy are solved without Brezhnev's most active participation. In May 1976 he was made Marshal of the Soviet Union in recognition of his outstanding services in defeating fascism, enhancing the combat might of the Soviet Armed Forces and strengthening world peace and the security of the peoples.

* * *

For his outstanding services during the war and in peacetime Leonid Brezhnev has received high awards of the country. He is three times Hero of the Soviet Union and a Hero of Socialist Labor. The Soviet leader is a person who has been decorated with the highest distinction of merit of the Soviet state—four Hero stars. A bronze bust has been erected in his honor in Dneprodzerzhinsk, his native city.

Leonid Brezhnev is twice Hero of the Czechoslovak Socialist Republic and twice Hero of the People's Republic of Bulgaria. He has been decorated with high state awards by the German Democratic Republic, the Republic of Cuba, the Mongolian People's Republic, the Polish People's Republic and other countries.

In 1979 Leonid Brezhnev was given the Lenin Prize for literature and the arts. The highest award for creative activities was conferred on him for his books *Malaya Zemlya (Small Land), Rebirth* and *The Virgin Lands.* That trilogy has become an event in Soviet literature, a true textbook of life, which has been translated into many languages.

The life and work of Leonid Brezhnev—that of a worker and a party organizer, of a political instructor in the battles of the Great Patriotic War, of a party leader and statesman—are examples of dedicated service to his socialist homeland, to the cause of world peace.

Once Leonid Brezhnev observed that there are two things that have always been and will always be dear to his heart, have always been and will always be his main concern. They are bread for his people and the security of his country.

At the Twenty-sixth Congress of the CPSU Leonid Brezhnev had words of praise for the optimism of the Soviet people, who, he said, look to the future with confidence. He said:

> But their optimism is not the confidence of favorites of destiny. Our people know that everything they have has been created by their own labor and protected by their own blood. Also, we are optimists because we have faith in the power of labor, because we have faith in our country, in our people. We are optimists because we have faith in our party and know that the road it is indicating is the only sure one.

To these stirring words it should be added that the optimism of our people is also based on the knowledge that it has such tested and experienced leaders, leaders of the Leninist school, as Leonid Brezhnev. ■

PRIVATE CARS OR PUBLIC TRANSPORT

By Valeri Neyev

ALTHOUGH the Soviet Union puts out less cars for private use than the United States, it ranks, nevertheless, among the world's eight leading automobile producers. More than one million passenger cars, mainly compacts and subcompacts, roll off Soviet assembly lines annually.

All vehicles have four-cylinder engines. The Lada, which is made at the Togliatti Auto Plant on the Volga River, largely resembles a Fiat.(The plant itself was built under contract with Fiat.) The Moskvich, a four-seater, is manufactured in Moscow. The Zaporozhets, also a four-seater but with a rear-mounted engine, is produced at a small plant in the Ukraine, and the Volga, which is similar to a medium-sized sedan and slightly larger than the others, is made in Gorky.

The output of passenger cars in the USSR keeps increasing each year, but it is still not sufficient to meet demand. Besides, our priority is given to developing public transport, for example, subways, buses, trolley buses and streetcars, in an effort to neutralize the negative consequences of too many cars, which is currently a big headache in the West.

We hope that in the long run the Soviet Union will tackle the problem of how best to combine the advantages of private cars and public transport.

I am a Muscovite and have a Lada, but I mainly use it for drives into the countryside. I prefer to take public transport to work. This entails my taking a short bus ride to the subway station. From there, I go straight to the office. I live 12 kilometers away from my place of work, and the whole trip takes only 30 minutes. I buy a monthly discount ticket which is valid for all kinds of transportation. I estimate that my travel expenses to and from work are 30 per cent less than if I drove my car.

The subway covers the greater part of my journey. The Moscow Metro carries about seven million people a day. The total length of operating lines, thus far, ranks it fourth in the world. The point is that underground railroads appeared in the West at the turn of this century, whereas the Metro only went into operation in the mid-1930s. The speed of its trains, however, is the fastest in the world—an average of about 40 kilometers per hour (up to 90 in some places) compared, for instance, to 32 kilometers per hour in New York City or Tokyo. Also there is no long waiting for trains in Moscow: During rush hours, they run at one-minute intervals.

Seven other cities in the USSR, including Leningrad, Kiev and Tashkent, have subways. People who have traveled on them agree that the subway stations are spacious, clean and safe. There are no robberies, assaults or other offenses.

The Moscow Metro continues to expand. For instance, the long-term plans envisage the Moscow lines totaling 450 kilometers, which will extend out to the most distant outskirts of the city and even into the suburbs.

The network of trolley-bus lines is also growing at a fast pace. Taking into account that the trolley bus is a quiet and clean type of public transportation, I say it has great potential.

The "grandfather" of all city transport systems —the streetcar—still holds a modest place. Not so long ago it was predicted that it would disappear completely, but the situation is changing now. New models of noiseless, high-speed and comfortable streetcars have been built in Riga and other cities. The Soviet Union also imports streetcars from Czechoslovakia. Experts claim that this type of public transport will develop mainly on the outskirts of cities, where building subway lines is inexpedient for geological or other reasons.

There are also buses in all the large and small cities of the USSR.

One large advantage of public transport is time. For example, the majority of urbanites who use public transport spend 40 minutes at the most en route.

Another advantage is its low fares, which have not changed in the Soviet Union since the 1930s. For instance, it costs five kopecks (seven cents) to ride on the Metro or the bus, four on a trolley bus and three on a streetcar, no matter how far one goes.

The development of public transport in our country can be judged by the capital city. Moscow comprises a circle, 40 kilometers in diameter. Its population exceeds 8 million. The public transport system consists of 7,000 buses, more than 2,000 trolley buses, more than 1,000 streetcars, 115 subway stations and 16,500 taxis. Their daily aggregate conveyance of passengers tops [illegible] million.

However, as was recently pointed out by the magazine *Literaturnaya Gazeta* (this weekly constantly publishes lengthy discussions on all kinds of problems), "the Soviet Union has joined the automobile powers of the world. Cars in our country—their numbers are increasing all the time—have become a widespread commodity for everyday use."

The price of gasoline has risen twice in the past four years, and it now costs 40 kopecks a liter. This may not be cheap, but it is less expensive than in many other countries.

There are a number of economic factors that attract people to owning private cars. First is the matter of parking. It does not cost a Soviet driver a single kopeck to park on the street. To keep a car round-the-clock in a parking lot that has an attendant on duty costs only six rubles (about nine dollars) a month. If parking lots and garages are unavailable, then the drivers can leave their cars in front of their houses.

The second advantage is car insurance, which does not exceed 1.5 per cent of the automobile cost. Insurance premiums are reduced by 10 per cent if a person drives for two years without an accident.

Soviet drivers do not have the additional expense of paying at toll bridges and on toll roads either since they do not exist in the USSR.

There are still quite a few problems which have to be dealt with in order to improve car service. For instance, large car-care centers have opened in many cities, but their network must be expanded. This is envisaged in the economic development plan for the next five years. Construction of roads will also be increased, especially in Siberia and the Far East.

To put it in a nutshell, it is necessary to develop private and public transport simultaneously, without creating the problems that too many vehicles can cause.

An important announcement to our readers

DUE to steadily rising production costs over the past few years, we were forced to raise the cover price of SOVIET LIFE to $1.25 per copy beginning with the June 1981 issue. We did so reluctantly since it has always been our wish to bring our readers the finest magazine we can produce at the lowest possible price. For that reason we did not immediately increase the subscription price and seriously hoped that it would not be necessary to do so. Unfortunately, we must now increase that price, too, effective January 1982.

The increases are modest, and we believe you will agree that even at the new, slightly higher subscription price, SOVIET LIFE represents a remarkable value.

Please note, however, that all subscriptions entered prior to January 1, 1982, will continue to be honored at the previous price for the full length of their term. (For example: If your present subscription runs until July 1982, you will not be asked to pay the new price until your subscription is renewed in August 1982.)

The new introductory subscription prices are as follows:

1 year @ $8.35 (only about 69¢ a copy—you SAVE $6.65 over newsstand price!)
2 years @ $15.35 (only about 64¢ a copy—you SAVE $14.65 over newsstand price!)
3 years @ $19.50 (only about 54¢ a copy—you SAVE $25.50 over newsstand price!)

SOCIAL PROGRAMS AND ECONOMIC GROWTH

by Gennadi Pisarevsky
SOVIET LIFE Commentator

SOCIAL SPENDING in the USSR, which economists call "human investment," has for ears been rising faster than appropriations for eduction as such. This trend has been gaining ound, and during the Eleventh Five-Year Plan riod (1981-1985), state outlays for the develop- ent of educational facilities, health services, cial insurance and related areas will go up by per cent, with the total national economic in- tment rising by 12 to 15 per cent.

The growth of the Soviet economy, which has en developing without crises and has been on rise for decades, is due, above all, to its cial orientation. Soviet experience has long ce made it quite clear that the constant im- vement of the people's standard of living and conditions for their work, everyday life and reation is, at the same time, a humane and ective means of promoting the development of e community's productive forces.

To do as much as possible for all citizens has en a point of utmost concern during all stages the construction of a new society in the USSR. is includes everyone, indeed, since the growth everybody's well-being is the only way to hieve the social justice for which the people of s country fought the Socialist Revolution of 17. "As much as possible" meant quite a mod- sum until not so long ago. Today, however, it a sizable amount, although the USSR is not as althy as the U.S. Taking into account the his- rical background of the two countries, the gap tween our two countries has been appreciably rrowed, but it is still there: The starting point r country advanced from to attain its present ndard of development was quite low.

In 1981 Soviet party and government bodies opted a series of concerted decisions to gov- the procedure and timing of measures to pro- e more assistance in child care. As a result, r 4.5 million Soviet families will have their posable income increased again.

The increase is part of the wider-ranging social gram which was drawn up and adopted by the enty-sixth Congress of the CPSU. Let me recall t the real income per capita will rise by 16 to per cent during the current five-year plan iod. A top priority target is to advance what may call the "children's sector" of the Soviet nomy. This implies an improvement in educa- al facilities, extension of the network of pre- ool child-care facilities, pediatric clinics, sta- ns, swimming pools, resorts, health-building lities, and so on.

roviding goods and services for children is most expensive sector of the Soviet economy. ctically all types of children's goods in the SR are sold at stable prices below production t, with the difference being offset by state sub- es. Mid-September 1981 saw the first change rices in the USSR since the summer of 1979: prices of some items were lowered, while ers were increased. Yet there has been no nge at all in the prices of children's goods. se have remained unchanged for years.

The objective of keeping retail prices of goods and services for children low and stable is to give parents the opportunity to clothe and feed their children well, so that no parent should not be unable to afford a toy or item of sports equipment (boys are particularly keen on hockey equipment, which can run into quite a bit of money). The USSR has many specialized schools—music, sports, arts and crafts, vocational, etc. Tuition at these schools is either free or costs very little, depending on the parents' income.

More than 14 million Soviet children attend nurseries and kindergartens. The Eleventh Five-Year Plan (1981-1985) provides for preschool institutions to be built that can accommodate at least 2.5 million children. Parents have to pay only 20 per cent of the over-all cost of the upkeep at nurseries and kindergartens. The remaining 80 per cent is covered by state appropriations. Parents who have less than the average incomes are exempt from having to pay for their children's care in preschool facilities.

In the USSR every effort is made to prevent the parents' income level from affecting their youngsters' receiving the best education and well-balanced all-round development. The differences between family incomes (in my country they are not as large as they are in the West) does not mean anything in terms of employment opportunity, education, health care or improved housing. Our concern is to let all Soviet citizens, of whatever social origin and with any size of parental income, have the same opportunity to learn a trade or profession or to get a university education.

More benefits have recently been offered to working women with children as well as to young couples. Newlyweds enjoy preferential treatment as far as cooperative or individual home building is concerned. There has been an increase in allowances for unmarried mothers and an extension (up to 14 days) of paid leave time allowed to take care of a sick child.

Practically all women in the USSR want to work, all the more so since there is an adequate number of job vacancies for them. This creates certain problems which arise first from their responsibility for bringing up their children. That is why we have a fast-growing number of day-care centers where children can stay during school hours while their parents are at work. The children eat their lunches there too. Many schools also have extended day-care programs, where children of working parents can do their homework, go in for sports activities, and so on. The day-care centers and extended day-care programs at schools provide services for nearly 11 million children, which is about a quarter of the total school enrollment.

Of course, mothers and fathers will always have the primary responsibility for rearing their children. But it is a duty and an obligation of the community to help parents achieve their goal and to give them a guarantee that their children will get training and education. Soviet society is doing its best for all children as they grow up and strike out on their own to have equal opportunities without regard for their parents' station in life.

The public consumption funds have an important and growing role to play in progressively equalizing the standards of well-being and ensuring the equal opportunities. SOVIET LIFE readers know that these funds are made up of a large proportion of the State Budget as well as funds raised by factories and offices to defray the expenses for training, health care, rest and recreation, social security and other human needs. In 1981, for instance, the public consumption funds total 121.5 billion rubles, which is more than seven times the amount the state spends on defense.

Women who have raised five or more children are granted extra pension benefits. These women need to have no more than five years of service on record to be eligible for state-funded pensions. The retirement age in the USSR is one of the world's lowest: sixty for men and 55 for women. People who work underground or at foundries, textile, chemical or related enterprises that involve difficult working conditions may retire at age 45 or 50. Retirement and disability pensions were raised again beginning November 1, 1981. This will mean an increased income for 14 million Soviet people, nearly one in every three pensioners.

Wages and salaries are also rising at a stable rate. A recent decision provides for considerable pay increases for miners: More than 1.4 million workers of the coal-mining industry are to have their wages increased by up to 30 per cent. At the same time the over-all price index went up by a mere 2.9 points during the period 1971 to 1980. That means that any increase in the family income is always appreciable.

A general program of further improving the people's well-being has been drawn up for the Eleventh Five-Year Plan period and for the rest of the 1980s. "This program calls for improving all aspects of the Soviet people's life—consumption and housing, cultural and recreational facilities, working and living conditions," said Leonid Brezhnev at the Twenty-sixth Congress of the Communist Party of the Soviet Union. "The share of the consumption fund in the national income is to be increased in 1985 to 77.3 per cent. Let me remind you that in 1980 it was 75.3 per cent," he stressed.

Altogether, taking into account the rate of housing construction that is principally financed out of the State Budget as well as that of school buildings, hospitals, sanatoriums, stadiums, and so on, the current social spending will add up to more than 80 per cent of the national income.

The session of the USSR Supreme Soviet —the highest body of state authority—held in November 1980 approved the government program for national economic development under the Eleventh Five-Year Plan and the 1982 Plan and Budget. The resolutions of the session stated that top priorities in economic expansion continued to be the social programs to raise the real incomes of every Soviet family, every Soviet person. ■

KIRGH
AN EQUAL AMONG EQUALS

The Kirghiz Soviet Socialist Republic is one of the 15 sovereign union republics that make up the USSR. Occupyin an area of 198,000 square kilometers, Kirghizia is called the land of mountains since more than three-fourths of its territo lies at an elevation higher than 1,500 meters above sea level. The republic has a population of nearly 3.6 million peopl and its capital is Frunze. Turdakun Usubaliyev describes the republic's past accomplishments and its plans for the futur

Since 1961 Turdakun Usubaliyev, a teacher, has been elected First Secretary of the Central Committee of the Communist Party of Kirghizia. He is also a member of the CPSU Central Committee and a deputy to the USSR Supreme Soviet.

Thanks to the victory of the Great October Socialist Revolution, more than a hundred nationalities and ethnic groups in the Soviet land obtained the freedom of self-determination for the first time in world history. "Decide your national life freely and unimpededly," the young Soviet power proclaimed in 1917 in the address by the Council of People's Commissars "To All Working Moslems of Russia and the East." This paved the way for the actual equality between the peoples of our country that has been fully realized today. It was the first time in their centuries-old history that the Kirghiz people acceded to their own statehood. As a result of the national delineation conducted on the initiative of Vladimir Lenin, the Kirghiz Autonomous Region was set up in 1924. Two years later the region became an autonomous republic, and in 1936 the Kirghiz Soviet Socialist Republic was formed. This was the most significant event in the life of the Kirghiz people.

The years of Soviet power saw the process of the formation and development of the Soviet national republics based on the principles of their sovereignty, free development and fraternal mutual assistance. The more backward a union republic or other autonomous area or region was, the greater its rates of development were ensured by the state government and the greater per capita investments it received.

In the Family of Fraternal Nations

Life in Kirghizia, just as in other republics, is rich in examples that vividly show the fraternal cooperation among all nationalities of the Soviet Union. Here is just one. Cotton is grown in the valleys of southern Kirghizia. In order to use this valuable raw material on the spot, a decision was made to build a large textile mill in the city of Osh. At that time the republic did not have experience in building and mastering the production of such industrial facilities. Hence, technological equipment was brought in from Moscow, Ivanovo and Penza, and specialists came from Leningrad, Alma-Ata and Khabarovsk to take part in its assembly. Hundreds of Kirghiz went to the traditional textile centers of the Russian Federation to study. Today the output of the Osh Textile Mill—high quality cotton fabrics—is sent from Kirghizia to all the union republics.

There are many examples of the fraternal friendship among the Soviet peoples. A large number of Kirghiz young people are working on the construction of the Baikal-Amur Mainline (BAM) railroad and the Kama Automobile Plant. At the same time, representatives of many nationalities of the country are working together with the local population in Kirghizia, building plants, factories and electric power stations. These are good examples of internationalism in action. We, the representatives of various peoples of the Soviet Union, fully share the feelings and thoughts expressed by Leonid Brezhnev that "all the nations and nationalities of our country, above all, the great Russian people, played their role in the formation, consolidation and development of this mighty union of equal nations that have taken the road to socialism. The revolutionary energy, dedication, diligence and profound internationalism of the Russian people have quite legitimately won them the sincere respect of all the peoples of our socialist motherland."

What Surprises Foreign Visitors?

Kirghiz, Russians, Ukrainians, Uzbeks, Kazakhs, Tajiks and representatives of many other nationalities of the Soviet Union live and work in the Kirghiz Republic. Together they have achieved successes which surprise foreign visitors. The over-all industrial output in Kirghizia increased by 317 times during the years of Sovi power. The republic's industry is now represent by over 130 branches which turn out more th 3,000 types of products. The growth and dev opment rates of such branches as electronic electrical engineering and electricity generatic nonferrous metallurgy, mechanical engineeri and instrument making are rapidly increasin The superpure antimony produced in Kirghiz has been an international standard for more tha two decades. The increased technical level the republic's industrial production is evidenc by the fact that more than 80 kinds of produc are exported to the countries of the socialis community, the states in Africa, Latin Americ Asia and Europe as well as the United States.

The entire industry of prerevolutionary K ghizia consisted of a number of primitive co mines, small leather factories, breweries and flo mills, where about 1,500 workers were employe At present more than a million people are e gaged in the republic's national economy, inclu ing over 700,000 workers, almost half of who are Kirghiz.

Before the Revolution there were practically r electric power plants in Kirghizia. At present t republic holds one of the first places in per capi energy consumption, and the cost for electrici in the republic is the lowest in the country. Th effective use of the republic's rich water r sources underlies the development of energy Kirghizia. It is possible to build a string of ele tric power plants which could generate over billion kilowatt-hours on the Naryn River alon One of the largest of the string, the Toktogul H droelectric Power Station, with a capacity of 1 million kilowatts, is already in use. The pow plant was built and put into operation in only fi years—the first time such high rates of constru tion were achieved in this type of building.

By the end of 1980 the republic's energy sy tem was generating about nine billion kilowat hours of electricity. This figure is 4.5 times mo than was produced by all the electric pow plants in prerevolutionary Russia.

A reservoir with a capacity of 19 billion cub meters of water, set up together with the Toktogu Hydroelectric Power Station, ensures the constan

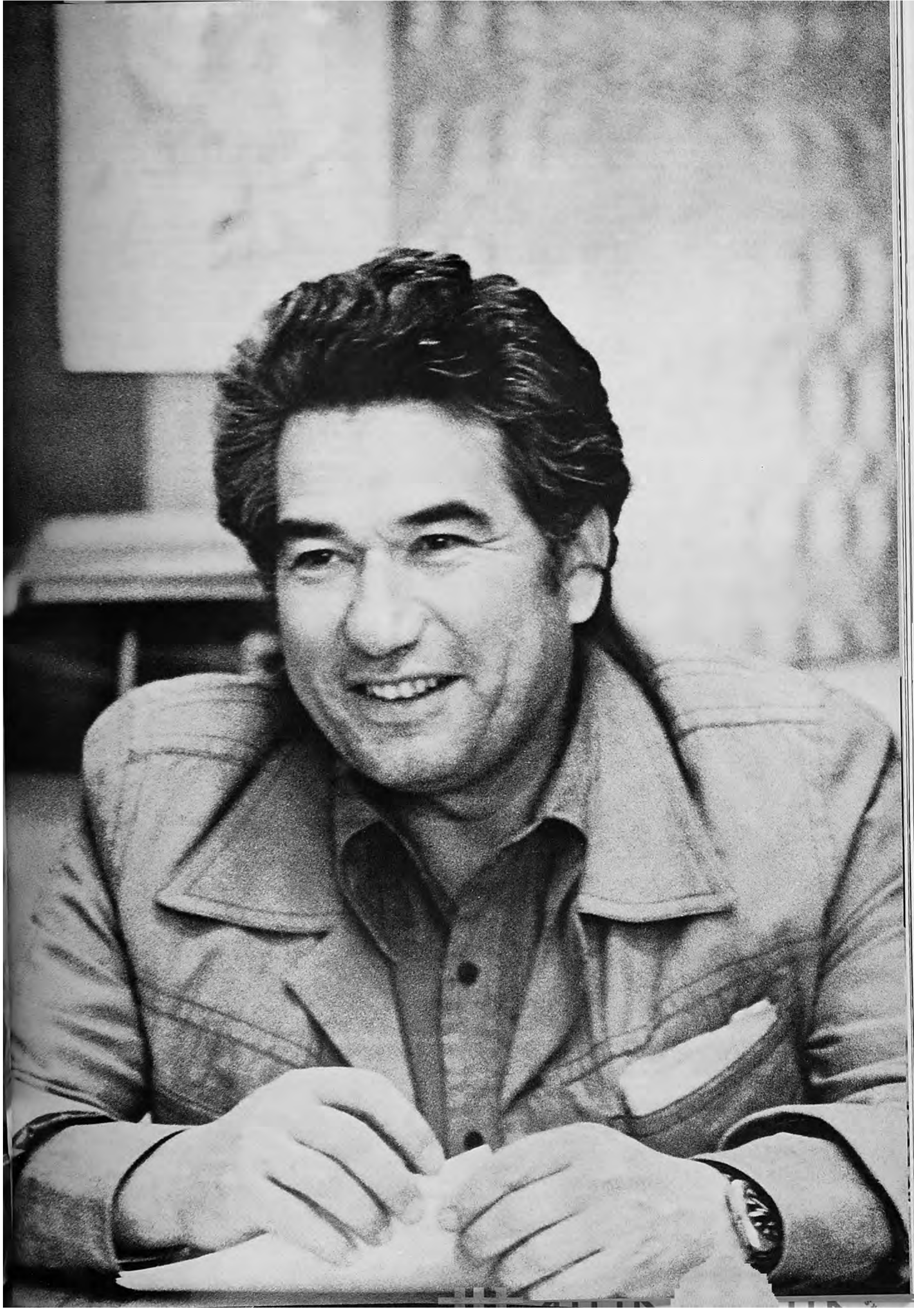
IZIA

In the mountains of Kirghizia cosmonauts train for landing in extreme conditions.

All photographs of Kirghizia were taken by Sergei Subbotin.

Using Kirghizia's water resources effectively underlies the development of energy in the republic. On the Naryn River alone, a string of hydroelectric power plants is being built. The largest of these—the Toktogul Hydroelectric Power Station with a capacity of 1.2 million kilowatt-hours—has already been put into operation.

"Chase the Girl," formerly a part of the ancient Kirghiz wedding ritual, has become a traditional folk game, popular throughout the republic.
Above: Situated among high mountain peaks, Sarychelek Lake is one of the mos picturesque spots in Kirghizia.
A nature preserve is located there.



"THE W

By Vera Martinova

The gong sounds. The race is over. The fans eagerly congratulate the rider of the winning horse. Immediately after the race I am introduced to the jockey, 22-year-old Kiymash Rysaliyeva. I am greatly impressed by this lively, charming young woman with a gentle manner and a soft voice.

This is not Kiymash's first year as a rider at the Issyk-Kul Horse-Breeding Farm and Stable in Cholpon-Ata, Kirghizia. She was born nearby, and as a child enrolled in a riding school. She started to race while still young. At present Kiymash is the only woman jockey at Issyk-Kul.

Several times Kiymash has managed to win on horses that have had poor showings with other jockeys.

"She knows how to pace a horse precisely, that is, she knows how to judge a horse's stamina over a long race. That's why she can compete with many male jockeys," says Nikolai Chumakov, director of the Cholpon-Ata Race Track.

Kiymash remembers a time when she had to sneak away from home in order to attend her first horse racing lessons because her mother was worried about her daughter, and, at first, was against her taking up jockeying. She only found out about her daughter's passion about six months later when Kiymash left the gate in her first race.

Now Kiymash's mother comes to the track regularly. She watches the race intently, like the most avid horse racing fan, and records her daughter's results. Kiymash's father, himself a former jockey and riding instructor, is happy that his daughter is following in his footsteps.

For Kiymash, however, jockeying was not her first choice. After she finished high school, Kiymash enrolled in a business school in Frunze, having decided to become an accountant. But her passion for riding never left her. And although she graduated from business school with honors and got a job at GOSBANK, the state bank, the thought of working there all her life struck her as monotonous and dull. That's when she decided to return to the Issyk-Kul Farm.

If You Love Your Work

When she came to the farm, Kiymash was assigned to trainer Ivan Bryukhovetsky. She was competent and ambitious and progressed rapidly. Since the farm is interested in training the most qualified personnel on its staff, it sent Kiymash to study in Yaroslavl, the Russian Federation, where the Horse-Breeding Department of the Timiryazev USSR Agricultural Academy is located.

At present Kiymash is in her second year of studies there. The farm is waiting for her to return a highly qualified specialist in three years. While she is studying, Kiymash receives a stipend from the farm. The young woman is also waiting to return home to her interesting work. In short, she has big plans.

"There are so many things to be done," she says. "We have to improve our riding school and set up new flood pastures. And why shouldn't we open riding stables for tourists? We've got lots of horses, and the visitors could hire them for a nominal fee. Then they could ride through the surrounding countryside. There are plenty of things to see here. Other localities do it; we could do it too."

Kiymash's dream is to work as a horse trainer and organize a division at Issyk-Kul mainly for girls.

"I'd give them my experience; I'd be their mentor and adviser," she says.

In the meantime, Kiymash is perfecting not only her mastery of sports but also her knowledge. She's doing well in school, and when she is home on summer vacation, she works as a jockey.

"Chase the Girl"

Kiymash loves to compete, not only in horse races, but also in Kirghiz folk games, which are performed regularly at all the republic's horse racing tracks. One of the most popular of these

events is "Chase the Girl." In the past this game was part of a traditional Kirghiz wedding. The bride and the groom, and often the bride's sister, who would help the young bride escape from the groom, took part in the ritual. Friends of the couple would also participate in the game.

According to the ritual, the bride was given the best horse and a head start. It was a matter of pride for the groom to catch up to her. But this was sometimes easier said than done because he rode an inferior horse. Incidentally, the bride —in any case—did not reject the groom and, after the game, a joyous wedding was celebrated.

Today the ritual has become a traditional event in which several pairs of men and women participate. There are usually three or four to a team. All the riders wear folk costumes. The distance covered usually does not exceed a kilometer, and, traditionally, the women are given a 20-meter head start.

I saw one competition where one of the men, the *djigit* (male rider), having caught up with his partner, kissed her while riding at full gallop. On another team the *djigit* gently touched his girl with his decorated felt *kolpack* (the traditional Kirghiz men's hat). That's how these young men signified their victory. On the way back one girl caught up to her partner and struck him lightly with her *kamcha* (riding crop) for not being agile enough to escape from her. Sometimes the women knock the *kolpacks* off the men's heads to signify their victory.

"Chase the Girl" is always a bright, beautiful spectacle enjoyed by many viewers. That's why it has been included in the Kirghiz National Equestrian Games ever since 1958.

Game for *Djigits*

Other competitions are held at Kirghizia's race tracks, too. An exciting Kirghiz equestrian game where the riders grapple for a goat's carcass is especially popular. The origin of this ancient game is most peculiar. Long ago, shepherds tended their flocks in winter and summer, despite the heat or the cold. They would roam the mountain pastures under the open sky with no shelter for their animals or any brought-in feed. Exposed to such conditions, the sheep were easy prey for wolves. Since the shepherds had no guns, they did battle with the wolves in their own fashion: On horseback they chased the wolf until it was half dead from fatigue. They would grab at the animal, catch it and throw it into the air, trying to steal it from each other.

Over the centuries the unfortunate wolf was replaced by a *ulak* (stuffed goat's skin), and the hunt has become a popular game. I was lucky enough to see it. The players were divided into two teams of four men each. A level field is chosen, 300 meters long by 150 wide. Opposite ends of the field goals, 10 meters wide, were marked with flags. The *ulak* was placed in a circle drawn in the center of the field.

At the referee's signal the captains of both teams rode into the center of the field and shook hands. At first the competition was only between these two riders. One of them grabbing the *ulak* was the signal for the rest of the teams to join in. The object of the game was to throw the *ulak* through the goal posts.

The riders picked up the *ulak* while riding, grabbed it from their opponents, passed it and, when they had to throw it to teammates, held it, placed it in the saddle or lowered it down the horse's flank so their opponents could not reach it. The more agile riders somehow managed to hold it between the legs of the horse while they rushed headlong for the other team's goal.

I was told that the rules of the game are quite strict: The players are forbidden to block the path of a galloping rider with their horse, rear their horse, grab an opponent by the arms or waist, or shout or talk to anybody. The team that has scored the most goals is the winner.

Horses for Europe

It is not easy to breed a horse; it is even more difficult to train one. The staff at the Issyk-Kul ▶

Joy is a feeling shared not only by athletes and trainers, but also by horse racing fans. At a race when you see how the spectators' eyes are afire, how enthralled they are and how excitedly they wish the jockey good luck, you know why the Kirghiz say,

HE HORSE IS
NGS OF MAN!"

Farm knows this all too well. The farm has had an exclusively great influence not only on horse breeding in Kirghizia, but also in Kazakhstan, Uzbekistan and other republics.

"The farm's horses are beauty incarnate, created by masters of horse breeding." This is one of the many comments left by guests in the visitors book.

"Horses from our farm have been sold in Scandinavia, West Germany, Holland, Denmark and Italy," Nikolai Chumakov, the director of the race track, tells me. "At present our horses are in great demand."

It all started on a small scale. In 1919 a little pedigreed horse-breeding farm was founded which was to become the basis for our industrial stable. It was the first in Soviet Kirghizia.

They have been breeding Don horses here for a long time—a breed which is distinguished by its strong constitution, massive size and durability. Don horses are good riding and harness horses, as well as good draft animals—which is especially valuable in the mountains that cover a significant portion of Kirghizia. This breed of horse is both sturdy and not at all finnicky eaters. And it is well suited to the republic's severe climate. Don horses can pasture all year round and need to be herded into cover only during inclement weather.

Lots of kumiss—a traditional and beloved drink of the Kirghiz—is received from these horses. It is prepared from nonpedigreed mare's milk, and besides its everyday use, it is employed as a medicine for treating several diseases of the digestive tract and tuberculosis.

Experts have bred a new horse, the New Kirghiz, by crossing Don horses with a local breed. This animal has turned out to be a truly universal animal, excellently adapted to mountains, and irreplaceable in farming and transportation. Neither the shepherd, lumberjack, geologist, mail carrier nor hunter could get along without it.

The Farm's "Child" at the Olympics

"We also breed pedigreed riding horses, or, as they are called in other countries, English horses," Chumakov says. "Our trainers prepare them for competitions in classical equestrian events."

Horses bred and raised at the Issyk-Kul Farm have thrilled Soviet and foreign viewers more than once. Saibottal Mursalimov, from Soviet Kirghizia, took fifth place at the 17th Olympic Games in Rome and at the 18th Games in Tokyo. He performed on Djigit, a "child" of the Issyk-Kul Farm.

Soviet rider Alexander Blinov, a graduate of the Kirghiz Equestrian School in Frunze, won a gold medal in the team competition and a silver in the individual competition at the Moscow Olympics last year. Blinov rode the colt Galzan, also bred and raised at the Issyk-Kul Farm.

A Thrill, Just Like the First

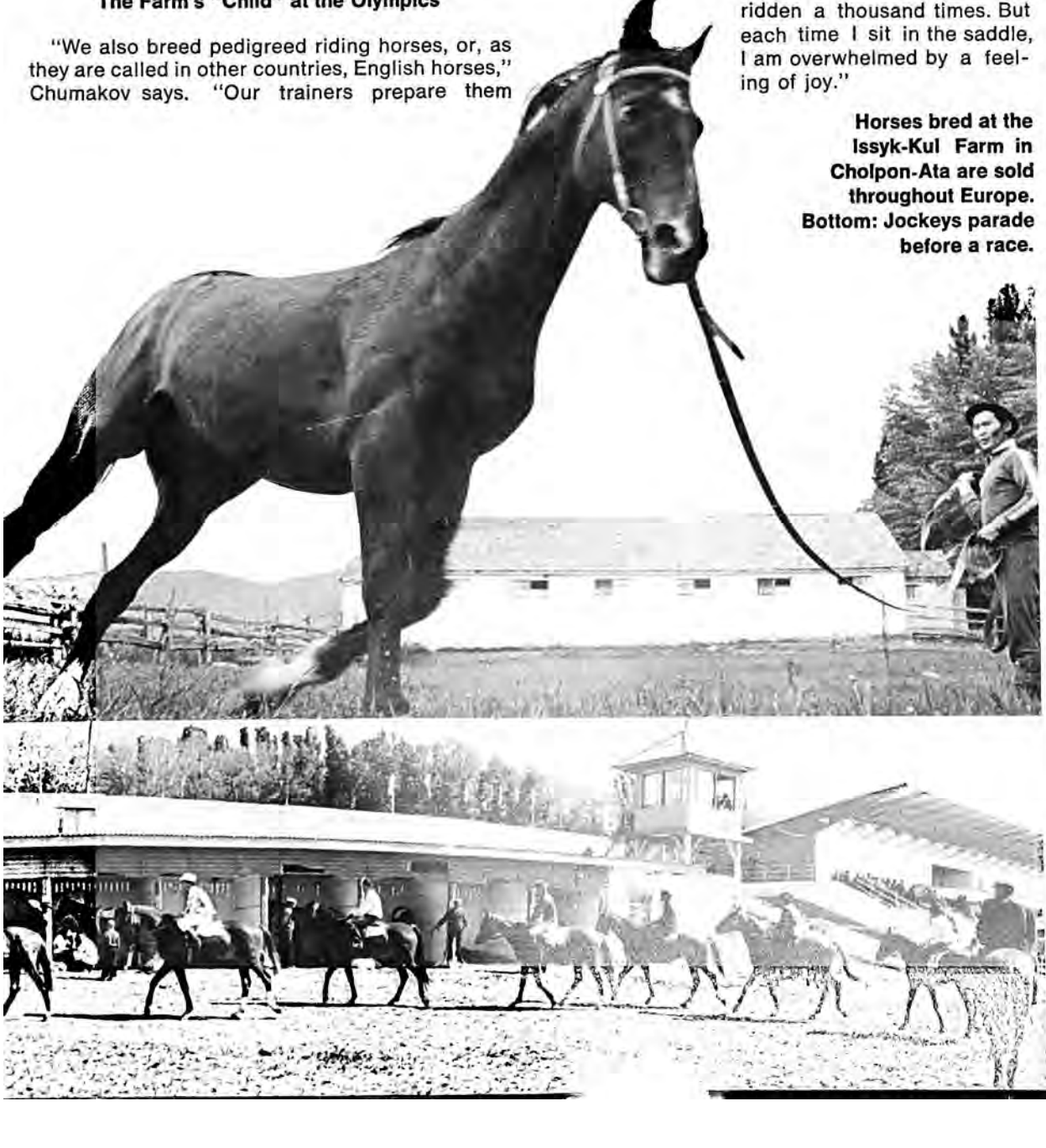
Horses bred for competition are quite capricious, therefore, it takes quite a bit of work, and lots of know-how and mastery to raise them, and even more to train them. Only people who are totally devoted to their work, like trainer Filipp Nikitenko, can do this. He is over 70 years old. He has been working with horses since he was a child and has not stopped yet.

You can constantly see him at the farm: on working days in the stable itself or during holidays and competitions at the race track, where he presents the victors with prizes and flowers. Young riders consider it a special honor to accept awards from him.

Nikitenko not only coaches young jockeys, he also continues to train horses for competition. He cannot nor does he want to quit his occupation—his life's work.

"I've been working with horses for so many years that I guess I should be used to it," Nikitenko says. "Nevertheless, every time one of my horses wins, it's a holiday for me, like the first time."

Horses demand a great deal of work and care, but they are endowed with the gift of being able to bring people great pleasure. Kiymash Rysaliyeva says: "I have probably ridden a thousand times. But each time I sit in the saddle, I am overwhelmed by a feeling of joy."



Horses bred at the Issyk-Kul Farm in Cholpon-Ata are sold throughout Europe. Bottom: Jockeys parade before a race.

By Arkadi

Sopubek Begaliev's parents o learned to read and write at the age 40. However, Begaliev, formerly farmer, has risen to become the Cho man of the State Planning Committ of the Council of Ministers of Kirghiz

Sopubek Begaliev and I talked first ab the problem of land irrigation, a m concern of the 50-year-old Chairm of the Kirghiz State Planning Com tee. Kirghiz folklore abounds in so and tales about water, and Begal who is a great connoisseur of them, spices conversation with proverbs:

"The Kirghiz say, 'The soil is the treas chest, and water is the gold.' This is astoundin correct. The early inhabitants of Kirghizia c for this 'gold,' though the land here is fa lously rich: Up to 60 billion cubic meters water flows from the Tien Shan Mountains e year. We only have to make this stubborn e ment work for people."

Kirghizia has an arid continental clima Sometimes there is no rain from March to Nov ber. In the old days anyone who got to the wa supply first was the master of the situati Tribes clashed over pastures and watering pla and drove livestock away from each other in venge. Social injustice prevailed within the trib The poor slaved for the rich who held all power in their hands. The poor grazed the ter's stock and laid down their lives to seize best pastures for them. Some of Sopubek Be liev's relatives were killed in those interneci clashes.

One river in Kirghizia is called Talas, wh is Kirghiz for "discord." The cruelest fight occurred in its fertile valleys.

First Investment Was in Agriculture

In the Chairman of the State Planning Comm tee's office there is a map—a diagram of irrigation systems in the republic. Begaliev lik to "travel" around it with guests—heads of mi tries, scientists, journalists, members of fore delegations—who frequently come to visit h

Begaliev recalled that in 1918 the first inve ment by the young Soviet state was for le irrigation in the Central Asian republics, wh it was a real life or death issue for the peasan The Civil War was still on and interventioni and landlords still held sway on large territori but the state had already allocated big sur Later, in the twenties, came land and wa reform, and as a result each peasant got t right to the free use of land and water. Begal stressed that with this, Soviet power earned t trust of the Kirghiz nomads and the alrea partly settled farmers, as well as the oth people.

The State Committee chairman showed timeworn sheets of paper dated several decad back. They included figures that today seem most laughable: to build a four-kilometer canal, give 12 hoes and spades to the peasants of or

IN CHARGE OF PLANNING

of the villages. This was how the land reclamation program in Kirghizia began.

Farm investments in the republic grew with each five-year plan. Funds were primarily allocated for irrigation.

Today over a million hectares of arable land is under irrigation in the republic. Watering stations and other facilities have been set up on three million hectares of pasture land. Approximately 30,000 main canals have been built. Some features of the irrigation system are unique engineering designs.

"Here," Begaliev said, indicating with a pointer a spot on the map where there are only snow-covered peaks, "sensors pick up data on atmospheric precipitation and report it to the control station. A computer then estimates how much of the water will be needed to replenish the reservoir and how much of it can be set aside for irrigation. And that isn't all. In the field, buried in the soil, another sensor determines how much water is needed for irrigation. An engineer oversees the entire canal system from a distance of 80 kilometers. We have many such science-fiction stories, but even the boldest of dreamers could not think up anything like this."

The irrigation scheme of the thirties determined the final transition of the nomads to a settled way of life. Today these people no longer depend on the whims of nature: Irrigation helped transform livestock breeding, a traditional farm industry of the republic. For example, Kirghizia has become one of the Soviet Union's major fine-fleeced wool producers (41,000 metric tons in 1980). Also thanks to irrigation, cotton, sugar beet and industrial crop-growing has also been mastered. Though droughts (six in the last 10 years) somewhat cut into production figures, the systematic development of agriculture has not been affected.

The Power-Generating Tien Shan

After Soviet power was established in Kirghizia, the first question on the agenda was what kind of economy the republic should have, what industries were to be given priority. Each union republic of the USSR, depending on its natural resources, economic conditions and national traditions, specializes in the branches of industry that would be of the most benefit to the republic and the country as a whole.

Therefore, the union republics, stressed Begaliev, are interested in economic cooperation rather than exhausting competition or the pumping of resources from one republic into another.

With the elimination of the national oppression and inequality of prerevolutionary times and the enormous boost given to this once backward outlying region, Kirghizia has built up a modern economy as part of the single economic complex of the country. The development of the republic's energy resources is the best example of this.

The hydroelectric power resources of mountainous Kirghizia are estimated at 135 billion kilowatt-hours. Twenty-three hydroelectric power stations will be built on the Naryn River alone: Four of them are already in operation. But energy development began here with small plants. At present, using the scientific and technical potential of the Soviet Union, Kirghizia is building modern hydroelectric power stations and water storage reservoirs.

Begaliev had just returned from a trip to the Kurpsai Hydroelectric Power Station project on the Naryn.

"It is not only giant power stations, however," he said, "the Kirghiz have come to benefit from the entire industrial process. The sons and daughters of yesterday's nomads now work as builders, engineers and managers of large businesses."

He recounted the life story of Mamasaly Sabirov, whom he knows well both as a builder and a deputy to the Supreme Soviet of Kirghizia.

Mamasaly did not get on very well at school, and his grades were not outstanding. He dropped out after the eighth grade and went to Moscow with a friend. They had heard that big and interesting projects were being started there. But in Moscow they learned that their long journey was in vain, for the most interesting project—a hydroelectric power station—was being launched in their native mountains of Tien Shan. The two friends came back and headed for the site of the future Toktogul Hydroelectric Power Station. Because there was no road, the boys made their way along trails to the surveyors camp.

Meanwhile, construction of the station had been discontinued for some time for lack of rock climbers. The surveyors told Mamasaly to finish his studies first. But the boy did not want to leave the construction site. When work on the project resumed, he mastered an installation worker's trade, finished evening school and then entered the part-time department of the Polytechnic Institute that had opened at the builders settlement. To top it all, he learned an entirely new trade, that of an assemblyman-rock climber. Today Mamasaly is in charge of a special group of workers who work on the alpine slopes. He has graduated from the institute and has the title of Master of Sport of the USSR in mountaineering. He married and has two children, a boy and a girl.

When the Toktogul Hydroelectric Power Station, the first of the Lower Naryn string of power plants, was put into operation, festivities marked the occasion. Bards flocked to the site to sing praises to the builders for their work. A song by Aman Orazbekov was judged the best:

Ages ago, there lived in these parts
a handsome boy and a beautiful girl
who fell in love with each other,
despite the will of a wicked stepmother.
They made up their minds to flee from
her wrath.
They did run away,
but she sent an evil and perfidious river,
the Naryn,
in their pursuit.
The rapid stream divided the lovers
and, brokenhearted,
*they turned into rocks.**
And now strong people have come here—
they are our sons.
They have reunited the lovers forever.
And the tamed Naryn now sings endlessly
of them.

*The station's dam is built between two very similar looking rocks, only one is slightly taller.

Today, in spite of the area's geographical conditions, even the most remote village has been supplied with electricity, and power-consuming industries are being developed. Part of the Toktogul's generated energy goes to the Integrated Power Grid of Central Asia and Kazakhstan. In addition, the Kirghiz Republic has drawn up a plan for using its coal deposits.

What's in the Future?

The Chairman of the Kirghiz State Planning Committee recalled the words of Leonid Brezhnev, who said that now that we have basically equalized the economic development of the republics, we can approach economic problems primarily from the viewpoint of the state as a whole, in order to boost the efficiency of the entire Soviet economy—of course, with the specific interests of the entire country and autonomous republics being taken into account.

Begaliev cited examples from the life of his republic. In the thirties the Soviet Union badly needed antimony. A metallurgical complex was built in Kirghizia on the basis of its known resources. The complex made it possible for the country not only to meet its needs, but also make it an exporter. In the future, too, Kirghizia will retain its lead in the production of antimony and mercury in the Soviet Union.

The republic is also developing other industries, especially those that demand large numbers of workers. The point is that in Kirghizia the population is growing rapidly. Under other circumstances this situation could inevitably lead to unemployment. Socialist planning, however, enables the republic to solve its specific problems.

Under a long-term plan, a territorial industrial complex comprising a considerable portion of the republic's area will be set up in Kirghizia. The complex will be an advanced form of organizing productive forces territorially. It will help speed up the growth in the resource-rich, but less industrialized, areas of the country. The complex will also make it possible to make fuller and better use of local natural wealth and to develop branch specialization.

The project's backbone will be formed by four hydroelectric power stations on the Sary-Dzhaz River, each with a capacity of 1.7 million kilowatts. And a reservoir will be built at an altitude of 2,800 meters above sea level. Diverting part of the flow of the alpine rivers to Lake Issyk-Kul will help stabilize the level of the lake. Lake Issyk-Kul is shallowing naturally, and this new project will help preserve it for future generations.

Large reserves of raw materials have been found in the area of the future project. They contain nonferrous metals, nonmetallic minerals—granite, marble, and so on—primary chemicals and subsoil fresh and thermal water.

"Our planning bodies will be able to cope with the implementation of any program," asserts Sopubek Begaliev confidently. ■

First secretary of the Kara-Kul Town Party Committee Roba Abdusamatova at the construction site of the Toktogul Hydroelectric Power Station. Below right: The party committee building.

By Kadyrkul Omurkulo

When Roba Abdusamatova was eigh years old, she wrote verses that wer published in her village newspaper Roba was so thrilled about the even she put the newspaper clippings unde her pillow that night, but she couldn fall asleep. She decided then to be come a poet and write poems. Thi dream stayed with her for years, bu she has never become a poet. Instead she is "one of those mighty authors," as Chinghiz Aitmatov says, "who i building a new life in Soviet Kirghizia.

Kara-Kul, Kirghizia, is a center of th power-generating industry, which i currently experiencing a populatio explosion.

Many people come here fro other parts of the country. One out c every 20 residents of the town is a student. An for over 10 years Kara-Kul has had a branch of polytechnic institute and vocational schools tha train specialists in civil and power engineering Among the students are young people who hav come here from other areas in Kirghizia and th neighboring republics—Uzbekistan, Tajikistan an Kazakhstan.

I met Sagynbek Muratoc, 33, a fitters' tea leader, who says that only 20 or so years ag Kara-Kul was a wilderness with only two mu houses there. Reeds grew all around, teemin with snakes and abounding in wild boars. Sagyn bek attended a seven-year school in a neighbo ing village seven and a half kilometers away Every day he had to walk 15 kilometers to schoo and back. In winter, when the ground was cov ered with deep snow, Sagynbek stayed home

Kara-Kul awakened to a new life with the con struction of the Toktogul Hydroelectric Powe Station. Sagynbek's father, who is 70, never stop

A BUSINESSLIKE WOMAN

The town of Kara-Kul, Kirghizia, sits in a valley surrounded by high mountain peaks.

First Secretary Roba Abdusamatova in her office.

marveling at the power station, its dam and the electric lights in the town. "Whatever we have here," the old-timer says, "is called black. For instance, 'Kara-Kul' means 'Black Lake,' and 'Kara-Su' means 'Black Water,' and, of course, there is the black, lifeless soil. And now the town is all alight. Zharyk-Kul (Lake of Light) is a more appropriate name for our town today."

Party Secretary

Roba Abdusamatova is the first secretary of the local town party committee. She has lived in Kara-Kul since 1977, when it first became a town, but it would be no exaggeration to say everybody in the area knows her. Roba says, "I'd like to have all the people here, young and old, for friends and comrades."

Her closest aides are those who work side by side with her. One of them is Lyudmila Stefanovich, second secretary of the party committee. It was mere coincidence that the two women arrived in Kara-Kul on the same day. At first Lyudmila did not like Kara-Kul and was homesick. She was unhappy and was planning to leave. Roba befriended Lyudmila and convinced her to stay. "And I'm not sorry I did," Lyudmila says. ▶

Keneshbek Aitkuluyev, head of the Industrial Department of the party committee, is also a close friend and comrade of Roba. He came to the construction site as a concrete layer. And 13 years ago he was one of the six construction workers to have the honor of dumping the first tons of concrete for the Toktogul Dam.

Roba is often visited by Afanasi Zenkevich, an 89-year-old pensioner and an amateur flower grower. His passion is flowers, and it is, perhaps, this love that gives him his strength and vigor. The old man's eyes light up whenever he talks of planting flowers and trees. Afanasi, the old crank, as he is fondly called by townsfolk, came to Kara-Kul 18 years ago to landscape the burgeoning town. And it is largely to his credit that Kara-Kul, once a caravan town in the rocky mountains, has become one of the greenest areas in the republic. He persuaded the town committee to build a botanical garden in Kara-Kul so that flowers and seedlings could be grown all year round. Most people have great respect for the old man and are grateful to him for what he has done for the town, but there are some who consider him a bothersome eccentric. Afanasi knows this, therefore, he goes to Roba with his problems. He is confident she will take his ideas seriously. And here is the result: Afanasi presented the town with 5,000 gladioli for May Day.

There are 1,100 Communists in the town party organization, and Roba must have their cooperation, support and solidarity. Otherwise there is little she can do for all her efficiency as a leader.

Her Life

Roba Abdusamatova was born in a village to a family of peasants. Her grandfather was a shepherd, and her father tilled the land. Until the age of 15, she studied in her native mountain village. She then went to Frunze, capital of Kirghizia, and entered a boarding school for the children of cattle breeders and peasants. Roba graduated with honors and took the entrance exams for the History Department of Moscow University. Five years later she graduated from there, and she has been working ever since. She married and is now divorced.

Roba, who is 40, has accomplished so much and at so young an age! She has held high positions in the party for over 13 years and is the recipient of two orders. The decree awarding her the second order was published in the newspaper while photo journalist Sergei Subbotin and I were on assignment in Kara-Kul.

Her Problems

The first secretary of the Kara-Kul town party committee has to deal with many problems, especially those related to the construction of the Toktogul Hydroelectric Power Station.

The Toktogul is the biggest power station in Central Asia. It is already operating at full capac-

Roba, an accomplished horsewoman, has been riding since she was five years old. Below: The first secretary is a welcome guest in any Kara-Kul home.

ity and produces about 10 million killowatt-hours of electricity a day. Power from the Toktogul is used not only in Kirghizia but also in the neighboring republics of Uzbekistan and Kazakhstan. With the opening of this station, the power grid of Central Asia has been completed and will soon be connected with the country's unified power system. Thanks to its string of power dams, Kirghizia today holds one of the leading places in the Soviet Union in per capita energy production.

The day-to-day business of the town may look insignificant beside the magnitude of the construction work on the power station. But this may seem so only to an outsider. Roba thinks differently and devotes an equal share of her energy and time to seemingly prosaic everyday matters. She meets with people who come to talk about the opening of a café in the city, about the construction of sports fields or summer camps for children. There is a lot of work to do. "The problem is how to find time for everything," says Roba.

At Home

Roba Abdusamatova is a busy woman, but her portrait would be incomplete if we didn't visit her at home and meet her family.

Roba has inherited a passion for growing flowers from her mother. Her garden is a riot of color: Roses bloom all along the fence and from the wicket gate to the porch. They blossom till late autumn, and Roba's mother likes to sit in the garden under an awning, drinking green tea amid the yellow, white and purple roses planted by her daughter.

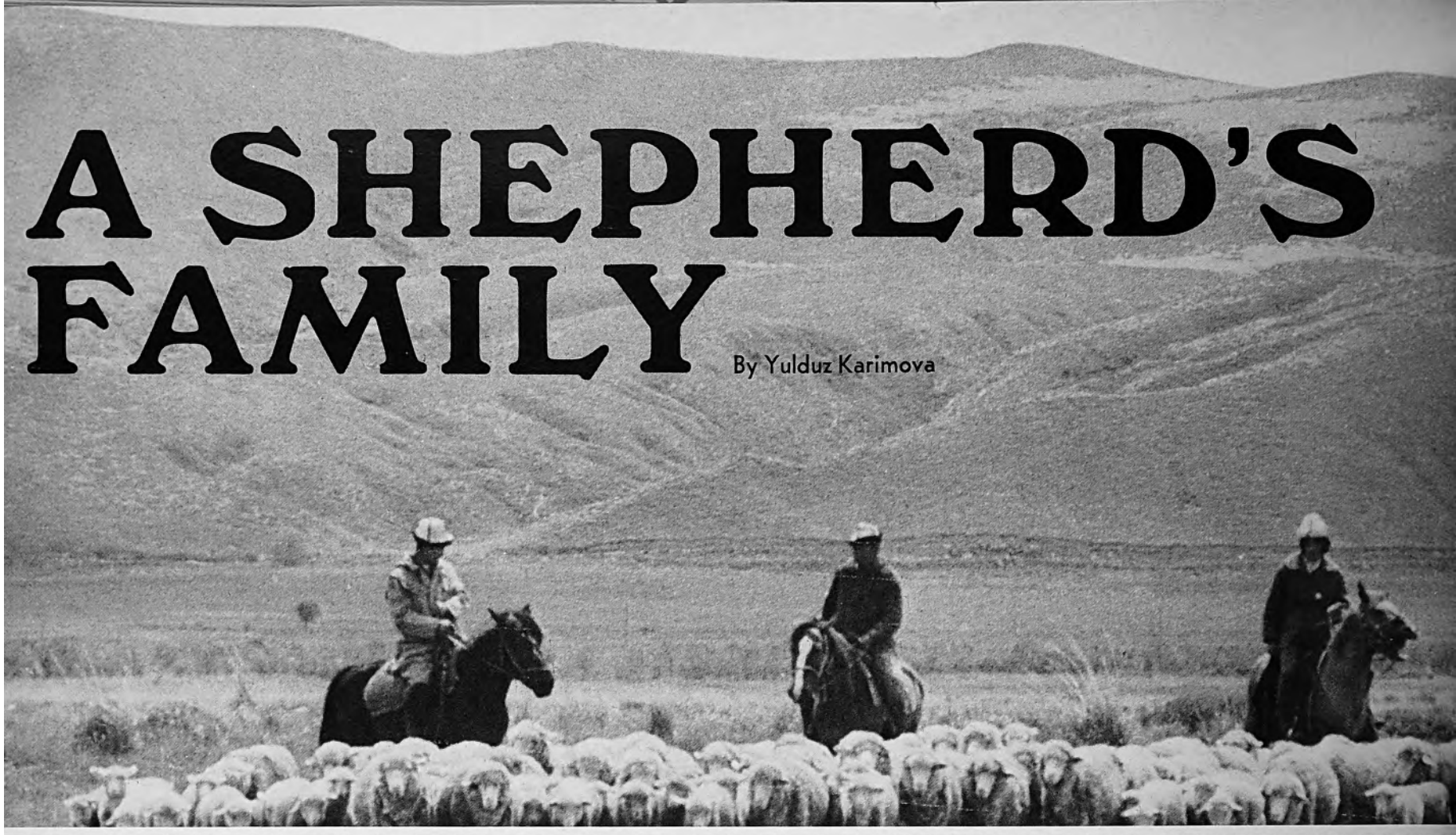
Roba's father was away when we visited her. He had gone to see his son and grandchildren some 300 kilometers away. Although 83 years old, he travels there alone by bus or by hitchhiking.

Roba is fond of horses and is a good rider, just like her father. She hunts wolf and wild boar. At the age of five she learned to ride a horse and at 12 entered horse races in her village. Roba seldom cooks. "I have no time for it," she says. But when she entertains guests, she prepares everything herself. She likes to sing, especially together with her daughter Aigul, who is 11. "My daughter is my greatest joy and hope. Maybe she will become a poet?" ■

Large shade trees line the streets of Kara-Kul. It's not too hot here even in summer.

A SHEPHERD'S FAMILY

By Yulduz Karimova



One of the principal branches of agriculture in Kirghizia is sheep breeding. That is why a shepherd is so greatly honored and highly respected here.

The Tynayev family of hereditary shepherds is well known throughout Kirghizia. There was even a prize instituted in the republic named for Mambet Tynayev, the head of the family, who died in 1975. The award is presented to the best shepherds of Kirghizia.

Many members of Mambet Tynayev's family still work at the Experimental Sheep-Breeding Station in Orgochory, Issyk-Kul Region, where Mambet himself had worked for many years.

"For what is this family of shepherds known best?" I asked Kozhoké Mambetaliyev, the director of the station.

"We've got quite a few good shepherds, but the Tynayevs are always in the lead of every new undertaking," he told me.

The First Years

The late 1920s and early 1930s were truly tough years—the Civil War had ended not long before, and the fight against the *basmachi* (counterrevolutionary gangs supported from abroad) had just ended. Kirghizia was beginning to emerge from its age-old backwardness, and the state and collective farms were appearing.

Mambet Tynayev was one of the first people to begin building a new life in Kirghizia. Mambet came from a well-to-do family (for those days). He met Zuura, whose father was very poor, and the couple decided to marry. Mambet's relatives were dead set against the union. Mambet, however, went against their will and, consequently, was thrown out of the house and disowned.

The young Tynayevs had no place to live. Their only wealth was their newborn son, Dzhamaké. "We must forge a new life with our own labor," decided Mambet. He and Zuura went to the local state farm and applied for work.

In those days many people were just as poor as the young Tynayevs. Everyone lived in structures that were no more than huts, and the state farm where they worked was small and poor. The only income it could rely on came from sheep breeding, a branch of agriculture long since developed in the region. So everyone pinned their hopes on sheep.

The Tynayev family gets together several times a year to honor their father's memory. Left: A family reunion.

Recognition

Since ancient times a coarse-wooled, fat-tailed sheep has been raised in Kirghizia. Each animal yielded up to a kilogram of wool. To develop a new species, experts recommended crossing local sheep with other breeds from around the country, for example, with the white sheep from Stavropol, which was known for its long and fine fleece.

The recommendation of the experts was one thing; putting it into practice was quite another, especially since there were no qualified specialists with a higher or at least a secondary education in the rural areas then. Animal husbandry experts and veterinarians were few and far between, and no medicines were available to treat the sheep in case of epidemics. There was no agricultural machinery. Grass was mowed by hand, at best by horse-drawn mowers. No one had as much as heard of sheep yards—warm, enclosed premises for wintering sheep—at the time. And the shepherds continued to graze their flocks as their ancestors had done for centuries—in the open all year round. The nomadic life caused innumerable problems for the sheep breeders. Heavy snowfalls, violent storms and ice covering the ground caused a calamity the breeders call *dzhut* (the mass death of flocks due to starvation).

Under these conditions Mambet and Zuura together with the other shepherds set out to breed a new species of sheep, later called the Kirghiz fine-fleeced. Mambet and Zuura Tynayev were rightly given credit for their help in originating the breed with the experts who developed it. Their new breed adapted well to the local conditions and to being driven off to distant pastures. It also yielded much more wool and meat than did the coarse-wooled sheep. Each animal gave up to three kilograms of fine or semifine wool annually. Subsequently, these indices have been further improved along with the quality of the wool.

Over the years the flocks of Kirghiz fine-fleeced sheep continued to increase as did the farm's income. And the everyday life of the farmers improved. Good yurta were built for the inhabitants of the villages. General stores, which had been nonexistent in Kirghizia, sprang up and greatly expanded their inventories. ▶

The work of Mambet and Zuura Tynayev received wider recognition. In 1947 Mambet was presented with a Certificate of Honor by the Supreme Soviet of the Kirghiz SSR. In 1950 Zuura was elected deputy to the republic's Supreme Soviet. As deputy, she was involved in matters connected with improving the everyday life of the sheep breeders and their families. One of her special concerns was setting up schools for the shepherds' children where they could study and board at full state expense while their parents wandered with their flocks from one distant pasture to another. She was also responsible for the construction of houses with all amenities for the sheep breeders and many, many other matters. In short, she had much work to do.

In the meantime, the Tynayev family grew. Mambet and Zuura brought up 10 children—four girls and six boys. Zuura was awarded the honorary title of Mother-Heroine. All the children have received a secondary education, some graduated from vocational schools and five from higher educational establishments.

At present two sons—Sovet and Dzhapar—are directors of local state farms, another is a party functionary, two daughters work as salesclerks, another is a teacher. The remaining three sons —Dzhamaké, Dzhakshylyk and Toktogul—and daughter Almagul, following in their parents' footsteps, are shepherds.

The Art of Shepherding

"Almost half of the shepherds at the Orgochory Station were taught by Mambet Tynayev," remarked Mambetaliyev. "The Tynayevs keep none of their secrets to themselves, and that's to their credit. Twenty years ago only a few shepherds could achieve the same results as the Tynayevs, now many are able to. Consequently, the station's income increases, and everyone profits."

Experts say that shepherding is an art covering a wide range of activities. The shepherd has to care for each sheep as if it were a child. All shepherds do that. "Why are Mambet Tynayev's sons who are shepherds considered the best?" I asked the director of the station.

"First and foremost its their attitude toward their work," Mambetaliyev answered. "The Tynayevs do not like to pass the work associated with their flock onto their assistants; they try to do everything themselves. That's a trait they inherited from their parents."

Incidentally, in their flock,which numbers about 600 head, the Tynayevs can tell every single sheep apart. They know each animal's habits and nature, for example, its wool or its place in the fold. Without as much as counting the flock, they can tell if a sheep has strayed away and gotten lost in the mountains. They very quickly begin the search for it. Their unique visual memory, an almost intuitive ability which far from every shepherd possesses, was likewise inherited from Mambet.

The details that make up a shepherd's work never escape the Tynayevs' attention. For example, fodder can be given in a large amount once a day or in small amounts several times a day. In the first instance, the animals will trample much of the food before they can eat it. If the sheep are given small amounts several times a day—they eat it all. So, that is exactly what the Tynayevs do.

Also often these shepherds don't drive their flock into the sheep yard for the night but stay with it in the pasture to give the sheep a longer time to graze. When the ewes are lambing, the Tynayevs take the lambs with their hands (no machines can help in this job), changing the lambs places by the ewe, so the weakest can nurse a bit more, the strongest a bit less.

Enough Wool to Clothe a City

As a result of the work of the three members of the Tynayev family, Dzhamaké, Dzhakshylyk and Toktogul, who work at the Orgochory Experimental Sheep-Breeding Station, the state received over 50 tons of wool during the past five-year-plan period (1976-1980) alone. If all of the wool were made into men's suits, the entire male population of Frunze could be clothed.

The eldest of Mambet's sons—Dzhamaké—has been elected deputy to the Kirghiz Supreme Soviet for the second time. There he is a member of the Standing Committee on Agriculture. Considered an expert on agriculture, Dzhamaké's opinions are given special attention.

***Kirghiz Mother*, a sculpture symbolizing Kirghiz family traditions, stands near a highway in the republic.**

Dzhamaké was awarded a USSR State Prize, which is presented each year to the best workers for high achievements in labor. His son Tashtanbek is 26 years old and a senior shepherd at the same station as his father. There was a time when Tashtanbek wanted to be a driver, and he did drive a car for a while, but he eventually turned to his father's occupation.

Mambet's second son, Sovet, graduated from the Agricultural Institute in Frunze and returned to his native village as an expert in animal husbandry. Today he is the director of the neighboring sheep-breeding state farm.

"Sovet's a very thrifty man," say the workers on his farm. "He is quite knowledgeable. There are no inconsequential matters for him. He always stays calm and unruffled. If he sets a goal for himself, he never gives up till he reaches it. He understands our needs and wants. That's why people like to work with him."

Sovet has six children. "My eldest daughter wants to be a bookkeeper," he told me. "The second one wants to be a doctor. The others are still in school. I would love my eldest son, 12-year-old Akubek, to choose shepherding. But first Akubek has to finish secondary school and then the Issyk-Kul Vocational Agricultural Schc Only then will he be able to understand all t problems of sheep breeding. A shepherd can work without an education today. By the ti Akubek is entrusted with a flock, I'll probably retired. So I'll graze it with him, helping, teachi and instructing him—in short, I'll make a r shepherd out of him."

A Shepherd's Son Is a Candidate of Science

Forty-two-year-old Dzhapar Tynayev, Candid of Science (Agriculture), is the director of a see growing farm and, just like his brother Sovet, h inherited his father's even temper.

"As a boy I dreamed of becoming a shepher Dzhapar said. "I even quit school. But my fath insisted that I continue my education. My teac ers, too, did all they could to persuade me t finish. Now I'm forever grateful to them for th

"After I graduated from the Agricultural Ins tute in Frunze, I returned home with a degree agronomy and took a job locally. I was appoint senior agronomist and worked there for seve years. I acquired a good deal of practical expe ence, but I began to feel that I didn't ha enough theoretical knowledge. So I enter graduate school. Since 1977 I have been dire ing the experimental seed-growing farm," he tc me.

Dzhapar married Sabira, a young biolo teacher, who comes from the same area. Th now have three sons.

"We're a very close family," said Dzhap "We do everything together. We share the hous work and go to the movies or theaters and ta trips by car. I'm convinced this is how it shou be. When things are running smoothly at hom everything seems to go well at work, too. A you're always in a pleasant mood, and life good. I've learned all this from my parents. their whole long life I never heard them say cross word to each other. They always treat each other with love and respect.

"They never scolded us children either Dzhapar continued. "Nevertheless, they we very strict and expected us to do all of o chores. There were 10 of us in the family, but v never quarreled and always helped each othe and we continue to do so to this day."

Mambet and Zuura adopted little Toktogul, th son of Mambet's brother whose wife took sic The boy grew up as one of the family.

The Tynayevs are not only a large loving far ily, but are very hospitable. According to Kirgh custom, they never let their guests leave witho offering them a cup of tea. But the best dish th is given to a respected guest at any family festi ity is the traditional Kirghiz *beshbarmak* (fine chopped cooked mutton mixed with homemac noodles). This dish is served and eaten accor ing to an age-old Kirghiz ceremony. At the en of a meal the guests are offered chunks cooked liver with fat. Then they are given piece of meat on bones and cups of hot broth. Just a in days of old, the bones and meat are distribute among the guests, according to each one's ag position or the respect he or she enjoys.

Mambet's sons and daughters get together sev eral times a year to honor their father's memor and discuss family affairs. Revering ancestors i a Kirghiz tradition. A large drawing of Mambe occupies a prominent place in his house. Unde various photographs of him, and in a special bo and folder lie all of his certificates of honor, dep uty's cards, as well as the orders and medal which he and Zuura were awarded over the course of their many years of activities. Engravec on the reverse side of one of the medals are the words: "Labor in the USSR is a matter o honor." ■

Kirghiz shepherds take great pride in their sheep.

As you fly to Osh, a sea of never-ending ridges of high and rocky snowcapped mountains spans the horizon in all directions. No signs of life are seen for miles. Then, seemingly from out of nowhere, the buildings of a large town come into view.

OSH
A TOWN IN THE MOUNTAINS

By Vera Kondratenko

Osh is a typical Oriental town. Many of its residents still don the traditional national clothes. The men, especially the older ones, wear quilted gowns, so popular in Central Asia, and the traditional Skullcaps or embroidered Kirghiz felt hats, while the women wear bright silk dresses.

A large and noisy market, where you can buy anything your heart desires, gives the town an exotic touch. There is a great abundance of fruit —melons piled high on the ground, grapes, pears, peaches, pomegranates, figs and raisins.

It was a real pleasure for me to walk around the picturesque market and wander through the narrow, winding streets of the old neighborhoods with their adobe houses, watching the unhurried —at first glance—rhythm of the sunny town.

Osh is one of the oldest towns in Central Asia. According to Soviet archeologists, the Saks clan of the "Ush" herdsmen inhabited Osh and the territory south of it in ancient times. The name of the town is connected with the word "Ush." However, it is mentioned in the chronicles for the first time in the ninth century. According to ancient Arabian travelers and geographers, Osh was considered the third largest town in the Ferghana Valley, the center of the Sāmānid Dynasty, as early as the tenth century.

Everyone who comes to Osh is attracted by Takht-i-Suleyman (Solomon's Throne), the unusual four-peaked hill in the middle of town. Old adobe houses, modern buildings and wide avenues come right up to its base. Some say a giant playfully flung Takht-i-Suleyman into the center of town, where it has stood for ages. From the top of the hill a wonderful view unfolds—cotton fields, orchards, villages in the suburbs and the mountain ridges surrounding the Ferghana Valley.

Today Osh is the largest town in southwestern Kirghizia. It is an economic, cultural and administrative center, with a population of about 175,000 Kirghiz, Uzbeks, Turkmens, Russians, Ukrainians, and so on—representatives of 83 nationalities.

Osh residents work in the town's enterprises (there are about 20), which include branches of industry, like machine building, that did not exist in the region in the past.

Osh Silk

The town's silk mill annually puts out more than 10 million square meters of 11 different kinds of textiles with various patterns. The bulk of the designs is renewed every year. Textiles made in Osh are exported to Great Britain, Italy, Holland and Switzerland. ▶

View from Takht-i-Suleyman (Solomon's Throne), a hill in the center of Osh. Below right: Kindergarteners from the Thaelmann Collective Farm.

Tokon Kachkynbayev, the 43-year-old director of the silk mill, was somewhat put out by not being able to show me the mill as he would have liked to: A tour of the plant included stepping over trenches and skirting building sites and huge crates with newly arrived equipment.

These temporary inconveniences were signs of the reconstruction being done at the mill. After the work is completed, however, the mill will substantially increase its output, and working conditions will be improved.

The bright Oriental color characteristic of Osh in general is found at the silk mill too. At a *chaikhana* (teahouse) nestled in a grove of large shade trees, I saw a group of workers sitting cross-legged on a carpet and sipping bowls of tea. Some of the workers like spending their lunch hour in quiet, unhurried conversation or simply resting after their shift.

What Does the Mill Offer Its Workers?

The concern of the mill's trade union committee and management for the welfare of its workers is not limited to the plant itself but extends into the community as well.

"Last year we built a 90-unit apartment house," said Askar Sharipov, the chairman of the mill's trade union committee. "We build houses like that every year. The apartments are distributed among the families of our workers free of charge. Large families, for example, those with 8, 12 or even 15 children, are not viewed as extraordinary in Osh.

"In some areas of the town we have razed the old one-story buildings and put up new, larger ones," said Sharipov. "We are building an entire satellite town for our millworkers. Besides comfortable houses, it will have a park, a recreation zone, a stadium, a swimming pool, children's playgrounds and a *chaikhana*."

Visiting a Kirghiz Family

Abdisand Mirzamatov and his wife Pazlyat invited me to their home. The Mirzamatovs have three daughters, who attend school.

The thick felt carpets on the floor and on the walls gave the apartment its distinct national color. The rugs were crafted in the traditional Kirghiz style by Pazlyat. Like most Kirghiz women, she had learned the art as a child. In keeping with Kirghiz tradition, Abdisand and Pazlyat offered me tea and refreshments set on a low, wide table.

"I'm a molder at the Osh Ferroconcrete Structures and Parts Production Plant," said Abdisand. "My work is interesting, and I consider it very important. The construction of our entire town depends on workers like me. The ferroconcrete structures that we produce are used to build schools, hospitals, child-care centers and apartment houses. My wife is a sorter at the Osh Meat-Packing Plant.

"We were born in the countryside, but I was brought up in a children's home in the city. My father was killed in the Second World War. My mother died soon after I was born, so the government took care of me. I got a secondary education and a job when I left the children's home.

"Later I married, and I now have children of my own. My girls have what the war robbed me of—a happy childhood."

Problems and Solutions

Mukhid Jienbekov, the Chairman of the Executive Committee of the Soviet of People's Deputies, that is, the mayor of Osh, told me about the problems facing the town that he has to cope with.

"One of our most pressing problems is our labor shortage. We need workers in all areas—in the different fields of industry and in construction," Jienbekov said.

"What are you doing to solve this problem?" I asked.

"Above all," he said, "we are trying to interest the younger generation, recent high school graduates, in taking jobs in town. As part of the school curriculum, students are introduced to the production processes at various enterprises in town. They do their practical training there, too. Our task is to inform the students of job opportunities, for instance, where there is the greatest need for workers or where their skills would be most useful.

"We are looking for labor reserves everywhere: We try to encourage people to come here and take jobs. We are also building child-care centers (Osh already has 57) to make it easier for women to work. A substantial part of the town's budget is spent on that project."

The average annual budget of Osh is some 15 million rubles. Of that sum more than 11 million is spent on health-care services and education, 3 million goes to finance the municipal economy and town improvements and the remaining 1 million is spent on different needs of the town.

According to Jienbekov, the major portion of the town's budget, about 95 per cent, comes out of the profits of the industrial enterprises. A mere two per cent is made up of taxes paid by the population, and a very small portion comes from the receipts of cultural and entertainment establishments.

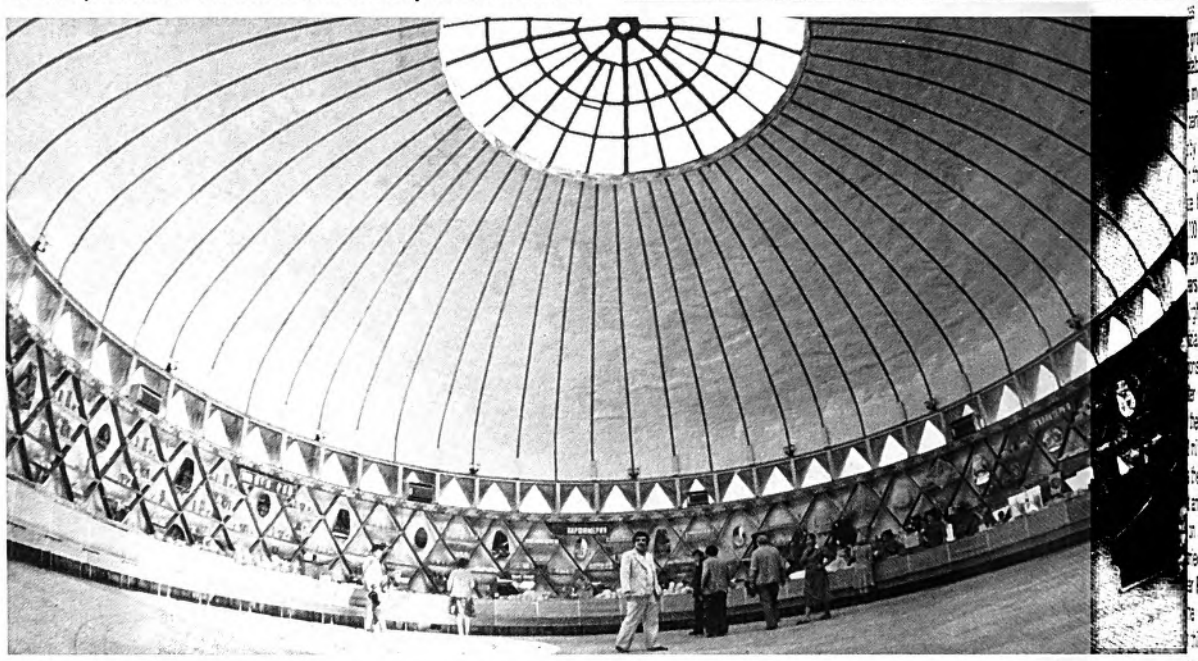
"Another concern is the development of everyday services," said the mayor. "Providing people with cafeterias, restaurants, hairdressers, dressmaker and tailor shops and different types of repair services would facilitate household chores and give women more free time. That is very important for us because many of the women in town not only have jobs but are very active in public life.

"A few decades ago," he continued, "a woman spent her whole life behind a two- or three-meter-high clay wall. She never was seated at the dinner table with the men of the family nor was she allowed to go out alone. She was given in marriage to a man whom, in most cases, she had never seen before, and her parents received *kalym* (bride money). In other words, a woman was bought and sold like property. In the old days practically all women were illiterate. Now the woman specialist with a higher education does not surprise anyone; as for secondary education, everyone has it.

"Today women take part in deciding production, municipal and state problems on an equal footing with men. Take, for instance, Anara Kadyrkulova, a worker at one of the industrial enterprises in town," the mayor told me. "She has been elected deputy to the Supreme Soviet of the USSR. In our Regional Soviet 20 of the 32 deputies are women. There are women school principals, factory managers, heads of child-care centers and chairwomen of factory trade union committees.

"Despite emancipation, our wives, sisters and daughters have not lost their modesty, femininity or charm, keeping the attractive image of the Oriental woman of whom the ancient bards composed legends." ■

The exterior and interior (below) of a souvenir shop in Osh.



Town residents—old and young alike—enjoy a sunny day.

irrigation of cotton, rice and other crops grown by the Central Asian republics and Kazakhstan.

Mountains Where Birds Can't Fly

Because of the terrain of our mountainous republic, many electric power transmission lines are unique engineering structures. Powerful pylons, sometimes up to 3,000 meters high, along the steep slopes span mountain torrents. This "electric river" has brought light to all of the out-of-the-way places in the mountainous region and has enabled more than 95 per cent of the republic's population to receive television transmission. This is remarkable since it has taken place in mountains with peaks so high that birds can't fly there, in a region where some 60 years ago the oil lamp was considered a luxury.

The geographic and climatic conditions of our mountainous republic and the diversity of its natural zones largely determine its agriculture. The republic grows grain, cotton, sugar beets, tobacco, vegetables, fruits and grapes. Grain production has more than tripled since the prerevolutionary period, production of raw cotton has increased by more than seven times and potatoes 14 times. In the past five years alone, the collective and state farms received about 15,000 tractors and 12,000 trucks. Today all basic operations in farming and livestock breeding are mechanized. Sixty years ago a wooden plow was the only tool of the Kirghiz farmer.

Kirghizia is one of the major livestock breeding regions of the country. The republic places third after the Russian Federation and Kazakhstan in the production of wool. There are more than 10 million head of sheep and goats, which enables the republic to produce large quantities of meat and wool. Measures to put animal husbandry on an industrial basis are being successfully carried out in the republic. During the Tenth Five-Year Plan period (1976-1980), Kirghizia provided the state with more than 200,000 metric tons of this golden fleece, which is enough to produce over 250 million meters of pure woolen fabric. More than 600,000 metric tons of mutton was also sold to the state. Increasing the head of sheep to 12 million is a realistic task for the republic in coming years.

Raising the living standards of the Soviet people—the topmost goal of the Communist Party of the Soviet Union's social and economic program—is being successfully carried out in Kirghizia. Let us take, for instance, one of the farms in the republic—the Lenin Collective Farm in Alamedin District. The collective farm's assets increased by five million rubles during the past five years. The farm is growing at a rate of a million rubles a year and now has its own youth center, high school, kindergartens, nurseries, stadium, gyms, hospital, and shopping and public services facilities. The peasants' life has changed noticeably. Electricity, gas, running water, television sets, private motorcycles and cars are now commonplace here.

A Land of Complete Literacy

Soviet Kirghizia, a region in which there were few literate people before the Revolution, has become a land of complete literacy. In the republic today there are more than one million students (nearly one-third of the entire population), more than 8,000 research workers, including 2,700 doctors and people with candidate of science degrees. Kirghizia has surpassed many countries not only in Asia but also in Western Europe in its rate of training specialists and its literacy levels.

The results of research conducted by the Kirghiz Academy of Sciences, one of the largest scientific establishments in the USSR, find broad application and open new opportunities in the study and all-round use of the republic's rich natural resources.

Important practical results have been obtained during the republic's attempts to solve the problems of automating production processes and irrigation systems, designing mining machinery, prospecting for and producing minerals and developing medical preparations to combat infectious diseases in animals. A new method of producing naturally alloyed iron powder developed by research workers at the republic's Academy of Sciences has a great future. In addition, Kirghizia enjoys priority in the development of radio relay communications lines in the Soviet Union.

Kirghiz scientists do a great deal of theoretical and practical work in collaboration with their foreign colleagues. For example, Kirghiz and American scientists are working together to solve problems of automation and control of irrigation systems and to study seismicity in areas where large reservoirs and electric power plants are being built.

Maternal and Child Health Care

Today there are no areas of production or social life where women do not reveal their talents and ability to work with inspiration. But not so long ago—in prerevolutionary Kirghizia—the Kirghiz woman had no rights whatsoever and was doomed to a miserable existence.

The complete emancipation of women in Central Asia is one of the most significant accomplishments of Soviet power. The constitutions of all the Central Asian union republics and the Constitution of the USSR have articles that endorse equal rights for women and men and set forth special measures to protect the work and health of women.

Mothers and children enjoy special care. An extended network of maternity homes and medical facilities, women's and children's clinics, kindergartens and nurseries has been set up in towns and *ails* (settlements). Over 100,000 mothers of large families in the republic receive monthly allowances. After the Twenty-sixth Congress of the CPSU, the party and the government adopted a resolution providing for increased state aid to large families in order to improve the position of working mothers and create favorable conditions for young families.

These provisions are particularly important for the republic since the birth rate in Kirghizia is one of the highest in the country: There are 12,600 mothers with 10 or more children in the republic. They have received the honorary title of Mother-Heroine.

Women account for 48 per cent of the labor force. They work in various industries, agriculture, education, science, the arts and health services. In some branches, such as medicine and secondary education, there are more women than men.

Kirghiz women take an active part in scientific research. More than 3,000 women, or 42 per cent of the scientists, work at research institutes; 34 are doctors; and 726 hold candidate of science degrees.

Women in the republic also take an active part in managing the affairs of the state. Suffice it to say that over 13,000 women were elected deputies to the local Soviets—more than half of all the deputies. Women are also widely represented in the Supreme Soviet of the Kirghiz SSR, the highest body of authority in the republic. Out of its 340 deputies, 119 are women. Women hold positions as ministers and academicians as well.

Manas

The prerevolutionary cultural heritage of the Kirghiz people mainly consisted of oral folk art. *Manas,* an epic 16 times longer than the *Iliad* and the *Odyssey* combined, and about 20 shorter epics are prominent. While preserving its originality, Kirghiz culture, which now flourishes, has become an integral part of Soviet culture. The Russian language, the principal language among the peoples of our country, has played a favorable part in that. It showed us, the Kirghiz, the way to knowledge, science, technology and world culture, and united and consolidated the Kirghiz people with all the fraternal peoples of our homeland. The best works by Kirghiz in literature and the arts are translated into Russian and then into many languages of the world. The books by Chinghiz Aitmatov have been translated into the languages of nearly all the peoples of the Soviet Union in addition to 80 foreign languages.

Kirghiz Singer on the American Stage

Traditionally our republic participates in many international functions. In the last few years alone, the Kirghiz SSR took an active part at exhibitions in France, Sweden and Denmark. The republic's enterprises displayed their products at international fairs and exhibitions. Workers in science and the arts represented Kirghizia at foreign forums and symposiums, festivals and artistic performances. A well-known Kirghiz singer, People's Artist of the USSR Bulat Minzhilkiyev, performed to warm audiences along with other Soviet artists in American theaters.

A significant event in the republic's cultural life occurred at the end of 1980—the final, the sixth, volume of the Kirghiz Soviet Encyclopedia was published. It is the first publication of its type in the Kirghiz language and contains more than 30,000 entries.

Over the years of Soviet power the republic has put out more than 25,000 books with a total printing of nearly 200 million copies, including more than 14,000 in the Kirghiz language with editions of over 122 million. It must be mentioned that the first Kirghiz-language newspaper, *Erkin-too* (*Free Mountains*), was published in 1924 and marked the beginning of the Kirghiz written language. The first schools were opened at that time with instructions given in the Kirghiz language. At present, there are more than 900 of these schools in the republic. Over 800 works by great writers of the world have been translated into Kirghiz. The Kirghiz people now read in their native language works by Shakespeare, Hugo, Cervantes, Goethe, Heine, Faulkner and Hemingway.

There was no ballet, opera, symphony or graphic arts in Kirghizia before the Revolution. Now these arts have been established and are on a high level. Many works by Kirghiz composers, artists and film makers are well known abroad.

Idea Which No Longer Exists

The Twenty-sixth CPSU Congress worked out an extensive program for the economic and social development of the country and all union republics as well as the further consolidation of their fraternal relations. The plans of the Eleventh Five-Year Plan period (1981-1985) provide for the further growth of the economy and culture of Soviet Kirghizia as well as other union republics. Industrial output will increase by nearly a quarter compared with the Tenth Five-Year Plan period. Large industrial and agricultural enterprises will be put into operation. Energy and nonferrous metallurgy will develop at a high pace. Intensification is the main trend for the current five-year period. About six billion rubles will be allocated for the development of the national economy. We have no doubt that all the tasks will be fulfilled. The republic's party organization and all working people of Soviet Kirghizia are striving for this, regarding it as their principal goal.

The USSR is a united multinational state formed as a result of the free self-determination of nations and voluntary unification of Soviet socialist republics enjoying equal rights. Leonid Brezhnev correctly indicated that it was thanks to the Leninist nationalities' policy and intensive work of all the Soviet people that there are no backward ethnic outlying regions today—a concept which was characteristic of old Russia.

The history and development of Soviet Kirghizia, an equal among equal Soviet republics, are convincing evidence of that. ■

Kirghiz writer Chinghiz Aitmatov's books have been published in over 80 languages of the peoples of the world in multimillion editions. The 53-year-old author is one of the most widely read and esteemed prose writers in the world today.

HOW A HUMAN BEING CAN BE HUMAN

By Azamat Shalimov

In 1963, at the age of 35, Chinghiz Aitmatov was presented with a Lenin Prize—the highest prize of the Soviet Union for works of science, art and literature—making him the youngest writer to receive this award. For the past 18 years interest in him has not waned, and readers eagerly await his new books.

Chinghiz Aitmatov was born in the distant mountain *ail* (settlement) of Sheker in the Talas Valley of Kirghizia, where, as the legend goes, lived Manas, the hero of the epic of the same name which was created by the Kirghiz people long ago. Aitmatov was brought up by his grandmother Ayimkan, who was a veritable fountain of tales, old songs and true and fantastic stories. He would listen to her for hours while she invented ever new stories for him.

During World War II Aitmatov, only 14 years old, became secretary of the Village Soviet, and the young boy had to shoulder the responsibilities of an adult. "If in my boyhood I got to know the poetic and bright side of life," says the writer, "during the war years I learned its grim, sorrowful and heroic aspects."

At first nothing seemed to augur a literary career for the young man. After the war Aitmatov studied at an agricultural school and then at an agricultural institute. He graduated from both with honors and was considered a promising specialist in veterinary medicine. But to everybody's surprise, he changed his plans, went to Moscow and entered the Maxim Gorky Literary Institute, from which he graduated at the age of 30.

Aitmatov began to write at a comparatively late age, but it took him only seven years to become a world-renowned author. The once obscure peasants from the mountain *ail* of Sheker on the bank of the Kurkureu River, where the events of Aitmatov's early stories took place, became as famous as Mikhail Sholokhov's Don Cossacks. Readers on many continents discovered Kirghizia for the first time. Many people were surprised to learn that the nationality that had produced such a phenomenal writer had neither its own alphabet nor written language until the late twenties, i.e. some 50 years ago; that the first newspaper in its own tongue didn't appear until 1924; and that before the Revolution scholars had forecast the cultural extinction of the Kirghiz. This was not mere exaggeration if life in prerevolutionary Kirghizia is recalled. The Kirghiz were almost completely illiterate, with only one person in 500 being able to read. People died of starvation and disease.

After the victory of the Socialist Revolution, a new history began for the ancient Kirghiz land. In only one generation a people who had been deprived of all rights in the past has traversed a path equaling that of many centuries. Schools, technical schools and institutes have been opened and national specialists—Kirghiz teachers, doctors, scientists, writers and artists—have been trained in the republic.

When Kirghizia celebrated its fiftieth anniversary in 1974, Chinghiz Aitmatov said in a profoundly moving speech:

> The fifty years of the Soviet period are the brightest years of the flourishing development of the national culture in all the age-long existence of the Kirghiz people.
>
> Thanks to the socialist mutual assistance of the Soviet peoples, we are now on a new runway of culture. Taking stock of past experience, we are to be daring in our work, creating new precious cultural works.

And at that time, too, the writer suited his inspiring speech to his actions, and new creative works appeared: *The White Steamship, Early Cranes* and "A Piebald Dog Running by the Edge of the Sea."

The White Steamship won the greatest popularity and recognition. Some critics believed this novelette was the pinnacle of the author's work. Aitmatov replied that a writer's best work is that which is still ripening in his mind. *The White Steamship* was the result of many long years of meditation and quest for Aitmatov. Though small in size, the novelette is multifaceted in thought. What is it about? What questions does it raise? It's "about a seven-year-old boy," answers Aitmatov, "but it is not a tale for children or a story about children for adults. I wrote it for myself and for those who will find it interesting: [It's] about conscience, about the fact that the embryo of conscience appears in people in their childhood, and the integrity and value of the personality depend on its surviving and developing, and on the conditions created for it."

Not one of Aitmatov's works is unpopular, but the response that *The White Steamship* received exceeded all expectations. People from all parts of the country and from abroad, too, wrote to the author. Soon after the story was published, the Kirghizfilm Studio adapted it into a film, considered the best Soviet film of 1976.

Aitmatov's prose is close to the cinema in spirit. This explains why almost everything he has written has been made into a film. The revival of the Kirghiz cinema, called in its time "the Kirghiz miracle," is associated with his name. Aitmatov considers close ties with the cinema "an esthetic requirement." The author proves this not only in his creative work, but in his everyday life as well. For 20 years he has headed the Union of Cinema Workers, first created in Kirghizia.

The author has recently completed a new novel, *A Day That Longer than an Age Does Last,* which focuses on the life of a worker at a railroad junction and is about the strength and greatness of a person's spirit.

Whomever Aitmatov might portray in his works —a seven-year-old boy, teenagers during the grim war years, fishers or the legendary Manas— the writer's main credo has always been to tell about people, about the age-old problems that continually plague them and how a human being can be human. ■

A boulevard in Osh. Above: A sample of the myriad patterns produced by the Osh Silk Mill.

A Theater

THAT IS THE ONE AND ONLY

By Ariadna Nikolenko
Photographs by Boris Babanov

Natalya Sats, the founder and head producer of the Children's Musical Theater in Moscow, has devoted more than 60 years of her life to the development of the theater art for children.

The Children's Musical Theater is the first and the only theater of its kind in the world today. Its forerunner—the Children's Drama Theater—was also the only one in the world when it began. The Drama Theater opened in November 1918 in Moscow singed by the fire of the Revolution and suffering from cold and hunger. The chairman of the theater's administrative board was Anatoli Lunacharsky, the first People's Commissar of Education.

An audience previously unseen in theaters, the children of factory workers who lived on the outskirts of the city, flocked to see the Drama Theater's shows. These children who had only known sorrow and privation till then came and watched the plays with bated breath. The youngsters came in search of truth, and they took it away with them and preserved it—often throughout their lives.

Discussions on the need for a children's theater had been going on even before the Revolution. But there was an abyss between words and deeds since children were not the kind of audience that would bring in the profits that theaters needed to survive. Only after the socialist state was established, did a theater for children come into existence in Moscow. And other cities throughout the country followed suit.

Another theater, the Children's Musical Theater, was opened in Moscow in 1965. Its unprecedented success silenced the skeptics, who maintained that children would not be able to appreciate musical shows. The new theater gave children what they had always been eager for—dancing, strong impressions and a spirit of festivity. In 1979, the International Year of the Child, the theater moved into new quarters. The building was constructed with taste and love for the small theatergoers that the most suitable word to describe it would be unique.

The Architecture

A new park has been laid out in front of the "storybook" theater. Sculptural compositions and fountains stand out against its green background.

There are five doors into the theater. The three in the central section are the main entrances leading into the large hall. These doors are decorated with whitestone reliefs and balconies that bear large bronze medallions depicting the themes of Pushkin's tales that have been adapted for operas such as *The Fisherman and the Goldfish* and *The Golden Cockerel.*

A metal Buratino, the Russian "brother" of the Italian Pinocchio, over one of the portals invites people into the theater. The portal on the extreme right leads into the small concert hall. It is topped with the sculpted heroes of Sergei Prokofiev's symphonic tale *Peter and the Wolf,* which was written by the great composer especially for children.

The minute the young spectators step into the theater they are made to feel welcome, that everyone there loves them and is happy they have come. Actors dressed in costumes of storybook characters wave to the children from the upper balcony. The imposing sculptures of legendary figures such as Boyan and Orpheus make children receptive to serious music.

In one room birds chirp in large and elegantly sculptured cages. Here the children hear a talk about nature being the original source of music. Talks on music are held in a small hall where the brightness of the famous Palekh lacquer miniatures harmonizes with the solemn austerity of a grand piano.

Fathers and mothers, if they wish to leave their children alone during the show, can listen to a lecture on how to cultivate a sense of the beautiful in their child. If a youngster in the hall grows restless for some reason, he or she is taken care of by aides who are especially present for this purpose.

The blue and white hall is brightly lit by huge chandeliers and seats 1,200 spectators. On the blue curtain is the legendary Sadko charming the sea king with his singing. When the curtain rises, the young audience is swept up in the action on stage, while the parents marvel at the theater's talent for teaching the youngsters to understand and love beauty, poetry and nobleness.

The Repertory, Actors and Spectators

Since the Children's Musical Theater was the first and only theater of its kind, it had no previous experience to draw on when it was being set up. How should music for children be written, and how was it to be sung? Should it be simplified and adapted? How could music and drama be combined so that they would penetrate a child's soul? The theater is looking for answers to these questions all the time. With the scrupulousness of researchers, theater workers are registering the reaction of the audience by polling the children and asking teachers and parents to write about their impressions and ideas.

The theater makes special demands on playwrights and composers: A production should have vivid imagery and fantasy. It should be emotionally charged and express lofty principles.

Children won't stand for any falseness, therefore, unlike an adult theater, there can be no discord between the sound and the visual image. To the young singers right out of the conservatory who have been studying to sing *Eugene Onegin* or *Carmen*, it seems an easy task to turn into a sweet little bunny or the big bad wolf at the beginning. They soon learn, however, that they are required to master movement, an agility verging on acrobatics, flawless diction and, above all, be in love with the theater.

The range of transformations in the children's theater is far greater than in an adult theater because, actually, it is three theaters in one: an entertaining theater for small children, a theater for uncompromising adolescents and a romantic and elevated theater for youth.

The productions are age-oriented: The youngest age group attends the opera *Little Red Riding Hood* with music by Milhail Raukhverger and *Snowflake* by Eduard Kalmanovsky; the medium age group sees the opera *Master Rockle* by the German composer Joachim Werzlau based on stories Karl Marx told his children and the oratorio *Levsha* by Anatoli Alexandrov after a story by the Russian writer Nikolai Leskov; and, finally,

The hall in which music specialists give talks to children is decorated with picturesque panels made by famous Palekh craftspeople.

Besides possessing excellent diction, actors of the Children's Musical Theater must be extremely plastic and, of course, have a special love for the theater.

Sightseers gather in the theater's lobby. Right: A bronze medallion depicting a scene from Alexander Pushkin's "The Tale of the Golden Cockerel" adorns the outside of the theater.

high school students view the poetic *Madam Butterfly* by Puccini. The theater's repertory consists of operas, cantatas, ballets, symphonic poems and concerts. Its future productions include the opera *Mowgli* by the Daghestan composer Shirvani Chalayev, the ballet *The Bluebird* by composers Ilya Sats and Mikhail Raukhverger and *The Magic Flute* by Mozart.

Prominent Soviet composers like Dmitri Kabalevsky and Tikhon Khrennikov, the Czech composer Jiri Pauer and Brazilian composer Jose Siqueira write for the theater.

The theater is outfitted with the latest equipment with which it is possible to change the size, the level and the relief of the three platforms that make up the stage. This makes the productions especially spectacular and ingenious. And although the theater always plays to a packed hall, it exists on generous state subsidies, which are necessary for the high pay of the qualified actors and actresses, the expensive productions and low price of the tickets.

The Director

Today, more than 60 years stand between Natalya Sats, head producer of the theater, People's Artist of the USSR and winner of state prizes, vice president of the International Association for Children's and Youth Theaters, and the rosy-cheeked young woman who worked in the Children's Art Department of the Moscow City Soviet. Her energy, determination and persistence upset the conservative thinking, inertia and indifference of those who did not understand that children needed an art form addressed especially to them, that they needed a theater of their own.

The word "first" invariably accompanies Natalya Sats's name because it is a word that stands side by side with those who forge ahead, who work hard, struggle and experience the joys of achievement.

She organized free concerts for children when the question of To be or not to be? still faced the young Soviet republic. In the gilded splendor of the Bolshoi Theater, concerts by the best artists were given once a week for the ragged and emaciated children of the workers.

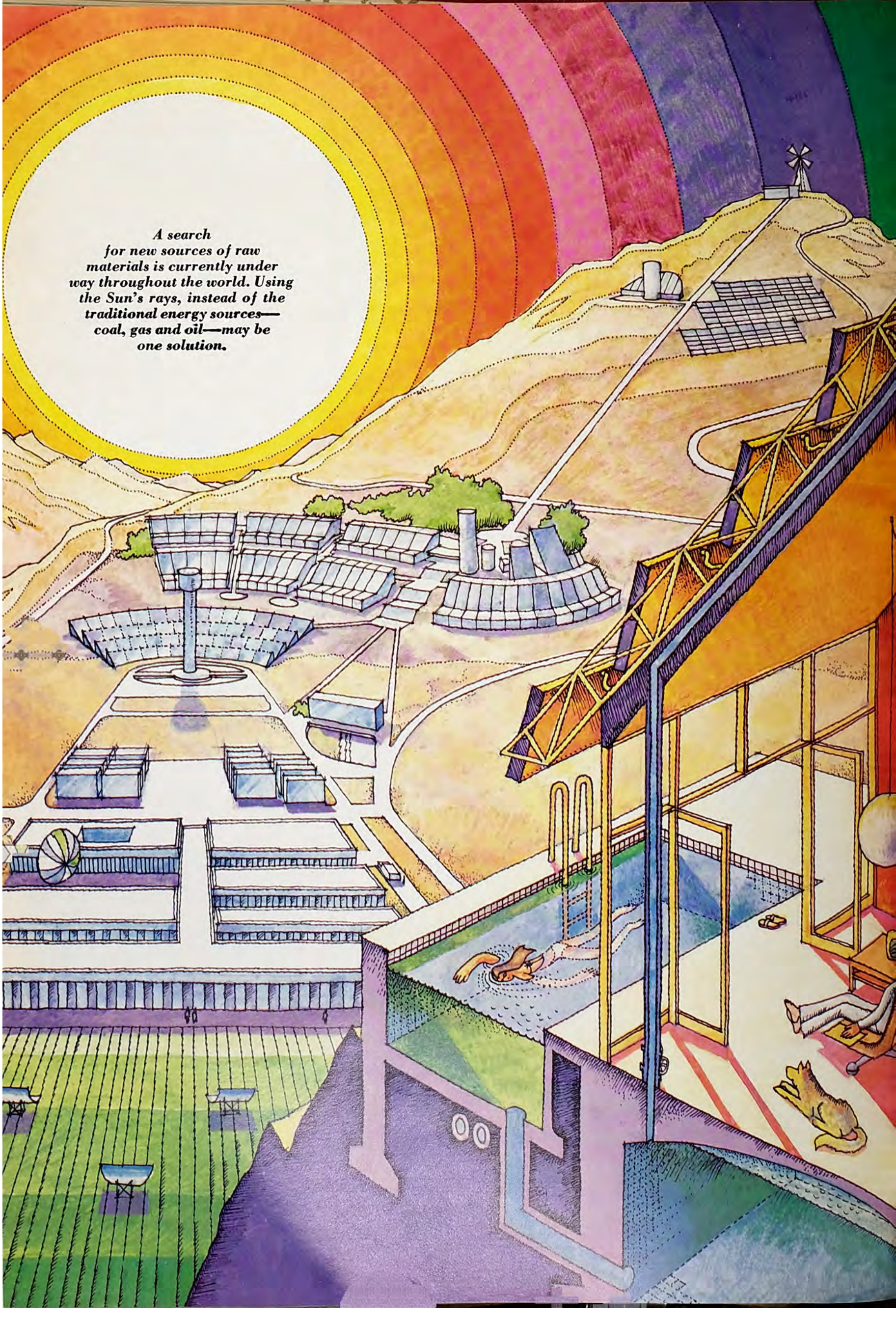
She was the first woman to become an opera director. The famous conductor Otto Klemperer invited her to stage Verdi's *Falstaff* at the Berlin Theater. In Buenos Aires she staged Mozart's *The Marriage of Figaro* and all four of Wagner's *The Ring of the Nibelung*.

She created and became the leader of a children's theater, a theater that never existed anywhere before. She created and became the head producer of the Children's Musical Theater.

During the International Festival of Theaters in Berlin in 1966, the press called Natalya Sats the "mother of the children's theater."

At the first production of the Children's Musical Theater, Sats addressed the children from the stage. She asked, "Do you know what an opera is?" Practically everyone in the hall answered No. Today the young audience would have unanimously answered Yes.

Natalya Sats is 78 years old, but she continues to work as energetically and enthusiastically as before. She never tires of saying that "the world will be what we bring up our children to be—kind or cruel, beautiful or warped. I believe that artists whose lot it has been to work in the field of art which is dedicated to children are the happiest of all." ■


A search for new sources of raw materials is currently under way throughout the world. Using the Sun's rays, instead of the traditional energy sources—coal, gas and oil—may be one solution.

WHAT'S NEW ABOUT SOLAR CITIES?

By Victor Rudenko
Drawing by Andrei Nekrasov

ALONG with Moscow, Tbilisi and Yerevan, Ashkhabad, capital of Turkmenia, is a center for solar energy research. A test site for solar energy equipment has long been in operation there. I visited the site five years ago. However, finding a practical use for the Sun's rays seemed much too remote at the time. Many problems needed to be solved before efficient heliostats could come into being. Desalinization installations that turn salt water into drinking water looked liked ordinary hothouses, and it was strange to me that prominent Soviet physicists were taking part in their development.

Five years ago I saw buildings in Ashkhabad with solar-powered ventilating and heating systems. The appearance of the city indicated that the architects had taken into account the scorching hot Sun of the desert in their designs. These structures "adorned" by pipes and cooling towers of thermoelectric power plants, however, were only the first elements of helioarchitecture in the city. Hardly any specialist could predict at the time when the Sun would become a serious rival to traditional energy sources—coal, oil and gas.

These past five years, however, have been a long enough period for quantity to turn into quality, and the idea that had hung in the air found its practical expression. The construction of the heliopolis has just begun in the foothills of Kopet-Dag. A visit to the offices of the Moscow Institute of Architecture will give us an idea of its future appearance.

Cradle or Heliocomplex

The institute is housed in two buildings in the center of Moscow. Both structures are good representations of the history of architecture. One building was constructed in the eighteenth century by the famous architect Mikhail Kazakov, an outstanding example of Russian classicism. The other—a functional yet at the same time exquisite structure—is a monument to Russian constructivism of the first third of the twentieth century.

I am standing in front of a model of the future architectural ensemble to which so far there is no equal in world architecture. Professor Alexei Sakharov of the institute maintains that the search for new ideas in organizing space is one, although not the main, feature of the project.

Sakharov is deputy head of the project which involves a number of students and teachers from the institute. The work is directed by its rector, Yuri Sokolov, and is entitled "Architecture of Buildings and Complexes with Autonomous Energy Sources."

Why did the project captivate the hearts of not only young people but also of the whole institute, which has the best Soviet architects on its staff? Sakharov says that it is impossible to answer this question without touching on a global problem facing humankind.

"We tend to believe," the architect says, "that oil, gas and coal play a great part in the development of modern civilization. A search for new sources of raw materials, chiefly energy sources, is currently under way throughout the world. Vast areas in the north, east and southeast of the Soviet Union are being developed, and the problems resulting from the development are being encountered."

For example, there has emerged a need to build a great number of small temporary settlements for the trailblazers. An important question arises: How do we supply them with energy? It is too expensive to build thermal power plants. Normally these settlements are provided with boiler installations that burn oil and small electric generators with internal combustion engines.

Experience has shown, however, that neither arrangement is cost-efficient or reliable. For example, great difficulties emerge with fuel deliveries. The regions being developed are characterized by extreme conditions: sharp weather changes, hurricane-force winds, severe cold factors which complicate the transportation of fuel even on good roads. At the same time, the areas that are most promising from the viewpoint of mineral resources are either on the tundra, where the Sun does not set in summer months, or in the desert, where the Sun's rays are particularly hot. Strong winds usually blow in both places.

The idea was born and developed to use these energy sources, with the help of solar collectors that absorb the Sun's rays, and, in permanent settlements, electric power plants and wind-driven electric generators. Standard designs have already been prepared for settlements with autonomous energy for Tyumen oilworkers.

Old Ideas That Have Not Been Forgotten

Because of the inertia of thought that developed in the twentieth century, wind and solar energy have been described as nontraditional energy sources. However, it was with the help of sailing ships that man explored the planet, i.e., Columbus reached America and Don Quixote fought against the windmills.

It is interesting to note that even during the oil boom of the 1920s and 1930s, when liquid fuel was becoming the blood of industry and it seemed that it would forever hold the dominant position among its rivals, there were bold designs in the Soviet Union of solar-powered electric power plants. Also the first houses with solar heating and autonomous energy supply systems were built, and wind-driven installations of a million kilowatts were designed.

Today interest in these projects is unusually high. Designs which we regarded with surprise and which impressed us by their originality (but we did not take seriously) may now have broad application not only for remote, small settlements but also for urban construction. Paradoxically, we owe the new discovery of the energy sources to the search for traditional fuel resources.

"However," Sakharov says, "only a large-scale, all-round construction, subordinated to a single system of solar and wind energy supply may test the architectural merits of the new construction project and elaborate new principles of esthetics." The heliopolis—a solar complex—will be just that.

Testing Ground for Research

"At first the complex will be an independent settlement situated six kilometers from Ashkhabad. It will later be incorporated into the city, becoming a new housing development," says Vsevolod Kulish, a professor at the Moscow Institute of Architecture. "Its energy supply system, however, will remain self-contained."

Unique in its architectural design, the complex will consist of three main sectors. An energy section will have a solar-powered electric plant with a capacity of 100 kilowatts, a hydroaccumulator of the same capacity and a wind installation. A residential and recreational area will have housing for 300 inhabitants and consist of a community center with a movie theater, a swimming pool, a cafeteria, shops and even a public bathhouse—all powered by the Sun. An industrial district will have a solar furnace with heliostats, numerous stands and installations, which will be on a virtual "solar plant."

"The complex will be a research center, where new ways of using solar energy will be investigated," says Kulish.

Houses will have indoor gardens. Their appearance, despite the solar collectors on the rooftops, will keep to Central Asian architectural tradition.

"By the way," Kulish adds, "the study of typical houses in Central Asia showed that the Sun has played a great role in their heating since time immemorial. Over the centuries structures were built that allowed for the minimum heat loss in winter."

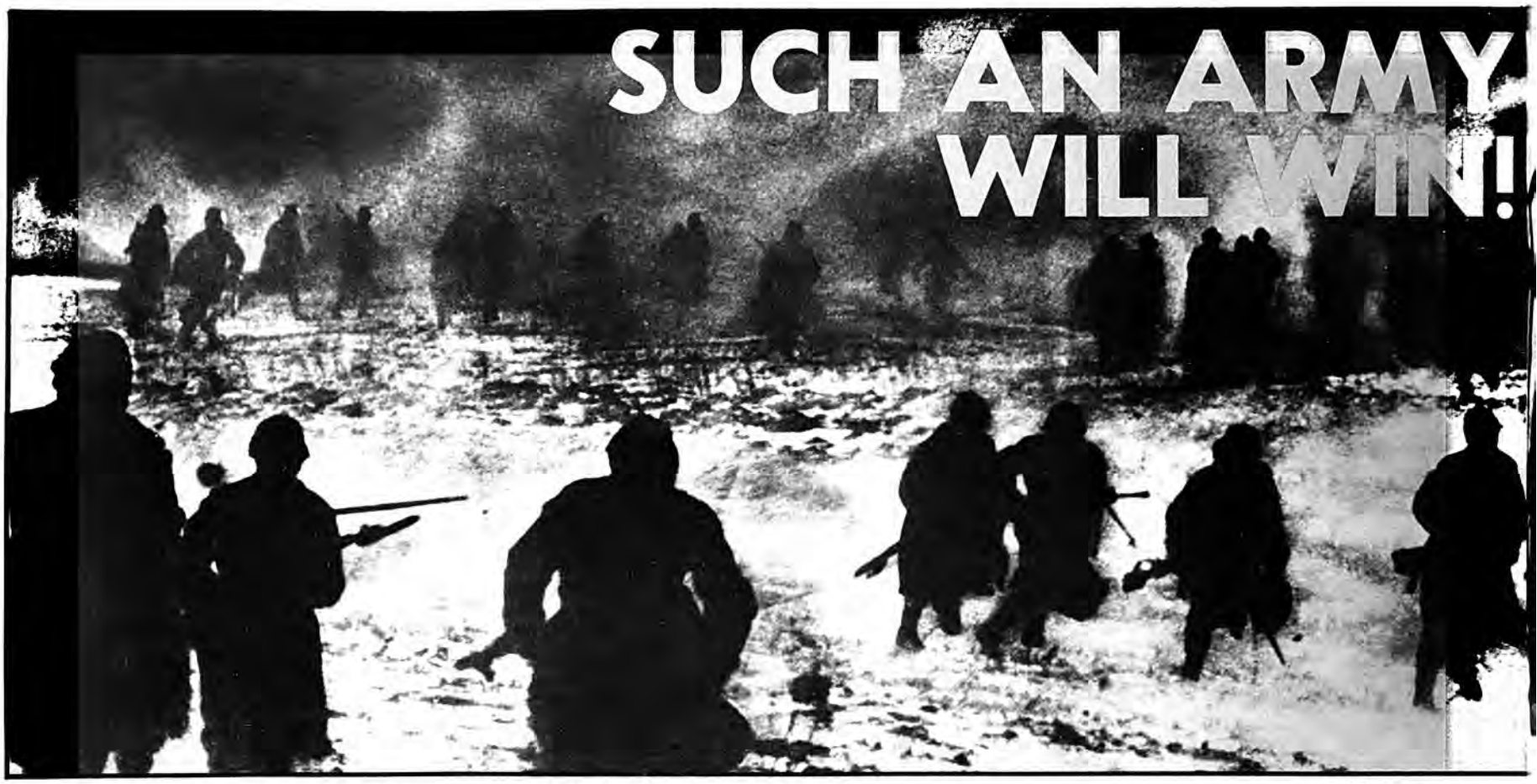
The Future Starts Today

"Experimental one-family homes, boarding-houses along the Black Sea coast in the Caucasus, settlements for Tyumen oilworkers, the heliocomplex of the near future, and probably, large settlements in the sunny southern republics of the Soviet Union are the present stage of the development of helioarchitecture," says Alexei Sakharov. "Virtual cities with thousands of inhabitants provided with autonomous energy supply systems will soon make their appearance. It is fascinating to imagine the new changes introduced by this process not only in the history of architecture but also in the history of humankind."

Mineral fuels largely determine the appearance of our cities and the quality of the atmosphere above them. The residents have fenced themselves off from nature with factory smokestacks. Today we have learned more or less to combat chemical pollution of the environment. The danger we're aware of has already ceased to be a danger.

Now we have let solar energy out of the bottle. It has accumulated in the Earth's crust for billions of years by burning oil and coal. Sometimes we do not realize what the jinn have in store. Heat pollution already affects the climate over vast regions of the Earth. In the future it will probably be worthwhile to give up our dependence on combustible materials and extract the energy from the Sun instead. The construction of solar settlements is the practical realization of these ideas.

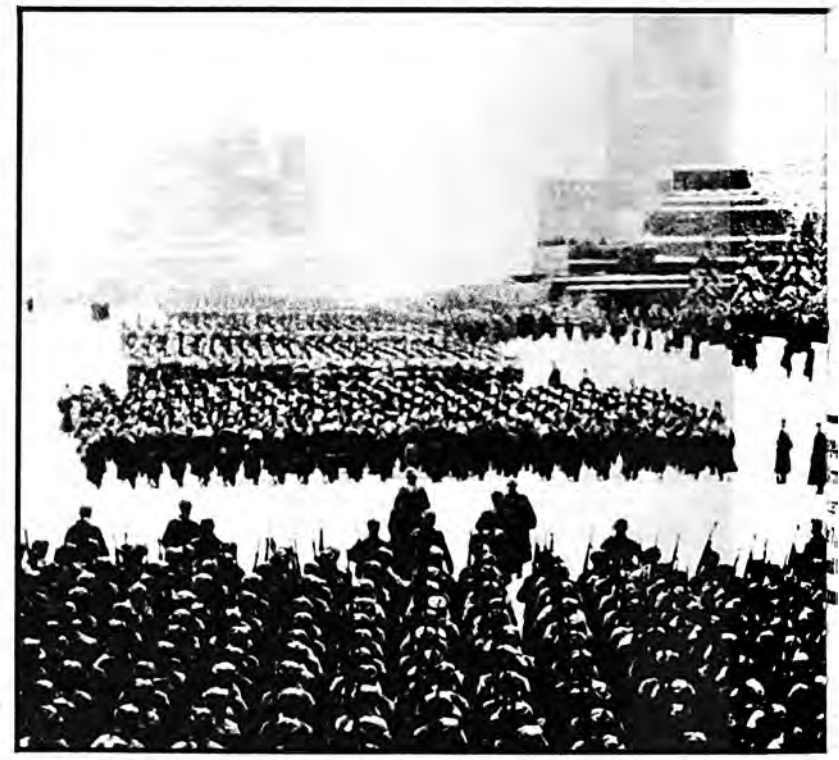
"While the heliocomplex and settlements built on a similar principle are a matter of today or the near future, an ecologically pure city for several million inhabitants so far exists only in the imagination of the architects," says Sakharov. "There are many students, however, who, interested in settlements with autonomous energy supply systems, are now thinking about that, too. The inhabitants of the future ecopolises, which are sure to be built in the future, will remember with gratitude those who were wise enough to think and dream not of space wars with the help of laser swords but of the ways to return the environment to people." ■



At the beginning of December 1941, Hitler's army was still making desperate attempts to break through to Moscow, but it was clear that it had spent itself. The resistance of the Soviet troops was mounting, the fascists feeling their powerful onslaught on the approaches to Kalinin, Yakhroma, Naro-Fominsk, Tula and south of Kashira (towns in the vicinity of Moscow). The attack gradually developed into a counteroffensive over the course of which Soviet troops liberated more than 11,000 populated areas and towns. The Wehrmacht lost more than 168,000 men in one month of the Soviet counteroffensive. During that period Soviet troops destroyed 11 tank, 4 motorized and 23 infantry divisions of the enemy. The fascist invaders left behind thousands of guns, machine guns and motor vehicles and hundreds of tanks and airplanes in the fields around Moscow.

The routing of Hitler's troops on the approaches to Moscow became a powerful incentive for the antifascist struggle. In a message to Joseph Stalin, then U.S. President Franklin D. Roosevelt noted the general enthusiasm in the United States that was aroused by the success of the Soviet Army.

This winter the Soviet people will celebrate the fortieth anniversary of the routing of the Hitlerites near Moscow. Presented here are reprints of two articles written during those grim times. Both have been translated for SOVIET LIFE by Yevgeni Petrovski.



A COALITION OF FREEDOM

By Ilya Ehrenbourg

PLUTARCH claims that Caesar turned one million people, subjugated by him, into slaves. He has been eclipsed by Hitler. Never in history has there been such a greedy and cruel slaveholder: He has turned 100 million poor souls into slaves.

Whom does he want to fool by speaking about a "coalition of European nations" against Russia—Dr. Goebbels? Those young storm troopers, who, from the days of their infancy, have been taught not to think? The Martians? There are no nations in the countries seized by Hitler. Hitler has done away with nations. There are slaves of different categories—the Dutch milk cows for Hitler, the Norwegians dry cod for Hitler and the Hungarians, Italians, Finns and Romanians die for Hitler.

Hitler claims that a "coalition of states" is advancing against Russia. Has he asked the Finns whether they wish to die for a "Great Germany"? Has he inquired whether the Slovaks want to shoot at their Russian brothers? No, he has given orders, and his mercenaries do not dare raise objection.

I know Italy well. I know its people. They are peaceloving, kindhearted and merry. The Italians never invited the Germans to come to them: They

Facing page, left: The Red Army on parade in Red Square, Moscow, November 7, 1941. The troops went to the front directly from the parade.

An anti-aircraft balloon over Pushkin Square, Moscow, autumn, 1941. Left: Defense installations in a suburb of Moscow.

remember the age-old oppression. As for the Italians' affection for Russia, it is told at every step. They recall that, during the earthquake in Messina, Russian sailors came to their rescue. They speak of the heroism of the Soviet fliers who rescued the members of the Italian expedition to the North Pole. During Mussolini's time, when Gorky went to Naples, students, fishers and stevedores rushed over to welcome the great writer. Who will believe that the Italians set out voluntarily to attack the Soviet Union?

I've seen Pushkin streets, Gogol streets, Tolstoy streets and Gorky streets in Slovakia. The Slovaks sing our songs. There are renditions of Russian music at concerts, ranging from Moussorgsky to Shostakovich. The students are engrossed in the works of Blok, Sholokhov and Tolstoy. The Slovak classic, *Kukucin,* was greatly influenced by Russian literature. The Germans and Magyars crushed Slovak culture. The pioneers of national culture, the "awakeners," carried the light of Russian thought to all the far-flung homes. I was at the Congress of Slovak Writers five years ago. Leftists and rightists, Catholics and Protestants were present, and they all spoke with the deepest of affection about our country. At what nightmarish moment of insomnia did the absurd thought come to Hitler to declare that Slovakia was warring against Russia?

The cannibal hasn't enough human flesh: He dispatches not only Germans but also foreigners to be slaughtered. His "coalition" consists of ill-fated Rumanians or Slovaks, who are being driven under fire by Prussian corporals.

There is a coalition, not of slaves, but of free nations. It is a coalition against Hitler.

London's courage was the first victory of human dignity over the barbarity of fascism. The vast and beautiful city was subjected to hellish bombardment. Britain at that time was the only one who remained in the fighting ranks: The French fascists had betrayed their country. And Britain did not surrender. The historian will later tell what the long wintery nights were like for London. Houses and museums were being destroyed. The vandals tried to demolish the wonderful British Parliament building. Residential areas were in flames. But the Britons calmly answered No.

In one case, where a delayed-action bomb fell in London, a worker picked it up and carried it over to the air defense headquarters. His son ran ahead of him, shouting to the people to keep away. What self-control this was! What a symbol of dignity and valor this was! Not only did the Channel protect Britain against the cannibals. The country was shielded by the will for resistance by the phrase repeated in the Isles from the days of infancy: "The British will never be slaves."

Two fronts? No, dozens of fronts. Fearless Frenchmen are already fighting under the command of General de Gaulle. This is only reconnaissance: It is only the advanced detachment. Soon the entire French people, under the strains of the immortal "Marseillaise," will charge the invaders. And what about the Norwegians? What about the Czechs? What about the Poles? What about the Serbians? The enslaved nations are waiting for the first defeat of Hitler's army. That hour is near. The fraternal front of the three great powers makes up the force that will crush "Hitleria," hated by the whole world. Behind us stands the perseverance of the British, behind us stands the power of America, behind us stands the unparalleled intrepidity of the Soviet people.

July 20, 1941

An air-raid shelter at the Mayakovskaya Metro Station, Moscow, 1941. Right: Civilians who had been brutally killed by Hitler's troops as they retreated were found by the Red Army when it liberated Moscow Region.

Right: The men off to the fronts, wives, sisters and children took their places at the factories. A movement to overfulfill daily production quotas began throughout the country, and the troops received more aircraft, tanks and ammunition.

DECEMBER NOTES

By Konstantin Simonov

OUT in a cold, snow-blanketed field, several kilometers from Khimki*, stands a German tank. Built in Bremen, it crawled a long way and stopped there forever. Perhaps scrap iron ought to be made use of, in general, but, in this case, it is a good thing the tank remains standing there. It came the closest to Moscow, the closest of all! Maybe, when the war ends, a wooden or stone fence will be put around it, and it will remain an object for sightseers, reminding everyone how close the Germans had come to Moscow in 1941, a memorable year for Russia.

The time will come when, on historical maps, Moscow Region will be marked with a black, zigzagging line, showing the places reached by the German Army from the south, west and north, by the 5th of December of last year. The borders will be restored, and the expanses of free Russian lands will stretch for many hundreds of kilometers to the west of Moscow, but the jagged black line will be a reminder of the invasion, of the mortal danger which was overcome by the superhuman tension of the will, the mind, the heart—of all the sterling qualities of the Russian people.

*The town of Khimki was located 18 kilometers northwest of Moscow—Ed.

Heavy front-line roads, patiently and sturdily built, log to log, plank to plank, run westward through the forests. It was on these roads that the reserve divisions of the Moscow front—men to whom Moscow entrusted its fate at the grimmest moment—disembarked from the vans at the last railroad station and entered into battle a year ago. Here these men fought, died or returned wounded with faces darkened by fatigue or sometimes paled from the loss of blood. Here they hit the enemy and drove it back.

As you drive along these roads, the names of villages flash by, of both those which survived and those which became nonexistent long ago and are now overgrown with burdock and wormwood—villages which were formerly the war front and are now the rear.

Oh, long-suffering Russian lands, you will be healing your wounds for a long time! Your sons—carpenters, stovemakers, concrete layers, all of them masters of their work—will be busy a long time restoring all that has been destroyed. And yet, in spite of it all, in spite of the fact that the land recovered from the Germans is almost empty and its bareness is, indeed, a sad sight, it is especially dear to our heart. Especially inconceivable is the thought that this land, won back at such a dear price, may again fall into the hands of the Germans. This will never happen!

At last we're out on the battlefield. The sno has diminished today, and, from this observatio post, you see not only the explosions of our shel and those of the Germans, but the vast, bloodsh horizon opens up before your eyes.

High up in the frosty sky, fighters trace whi lines, resembling cirri. Hazy, snowy weather h been prevailing these last few days. In those ra hours when it clears up, like at present, o planes and those of the Germans instantly appe over the battlefield. Our assault aircraft have ju flown very low over our heads, while above the fighters swiftly trade the blue heaven.

Then comes the response. A swarm of Germ Junkers first gets around to our rear and a proaches from there, from the east, the advance positions. The planes begin to dive, one after a other. The ack-ack is deafening: It drowns out other sounds of combat. A wall of shell and trac bullet fire flares up overhead. Yes, Messieurs Ge mans, this is to tell you that the time is not Ju and not July of last year, when you hedge-hopp over these roads of the Western Front and mowe down refugees with your fire from an altitude 15 meters, and not the first days of the war wh you boasted in your papers that you are virtual crushing the Red infantry with your wheel There is a wall of antiaircraft fire over the battl field, and if your planes, nonetheless, bre through, dive and dump their bombs, the previo impunity is nonexistent now. Here alone, in a area the whole of which can be scanned from single hill, only here alone, in the course of thre days of fighting, our ack-ack men have brough 13 German aircraft to the ground.

In Leo Tolstoy's story, "The Raid," an office says that a brave man is one who acts as he i supposed to. In other words, Tolstoy explain a brave man is one who fears only what he i supposed to be afraid of and not what should n be feared. These are wise words, which are a

Soviet troops launch a counteroffensive near Moscow, 1941.

ways applicable to our soldiers. In the early months of the war, we had just as many brave men, who despised death, as we have today. I have seen commanders, who, in order to encourage their men, stood up in full height during air raids, while others around them hugged the ground. I have seen men advance singly, with upraised grenades, to challenge oncoming tanks. All this happened to us at the beginning. But bravery, that calm bravery, which Tolstoy talks about, emerged as a mass phenomenon only in the trials of war. To act like you're supposed to in war means, at the first available opportunity, to dig a foxhole for yourself because you know that the Germans are going to drop bombs, and, if you've dug a foxhole, then you can remain calmly in it during air raids and do what you're supposed to do with no fear of German bombs.

Bravery is closely connected with the skill of waging war. The skill of digging a foxhole in such a way that a tank can run over you without leaving a single scratch on your body, the skill of an armor-piercing gunner who is confident of setting a tank afire from a distance of 200 or 100 meters, the skill of a commander who, behind the forward positions, has built antitank nests, with armor-piercing gunners and artillerymen in ambush. All this, put together, creates that mass bravery, which has been engendered in our army, the bravery of experienced soldiers, who know the capability of enemy weapons and the might of their own.

Everyone knows how terrifying was the avalanche of German weaponry which swooped down on us. It continues to be formidable, and, it would be naive, naturally, to think that the fright of a man assailed by a tank can ever disappear. But deep in the soul of this man, as mortal danger closes in on him, there are always two feelings toward it: either to take to his heels and escape from this death, or else kill it yourself. These two feelings are constantly fighting each other in a soldier's soul. With a combination of these two feelings, each month of war sees the second one —that of killing the death yourself—become ever more prevalent. This is mass bravery, the bravery of an army steeled in battle.

We show up at General Mukhin's observation post at the time when he has just been told that 24 German tanks are approaching the neighboring village recently taken by our men. One tank is crippled, but the rest are moving ahead. After listening to this report, the commander calmly gives the order to open fire on the tanks with all available artillery pieces, and gives a few more additional orders about artillery support. That is all he says,and he immediately goes over to the next question. Were it not for a small hill in front of the observation post, it would be possible to see the nearing German tanks with the naked eye.

The division commander's calmness is not the ostentatious calm of a man who simply wants to inject courage into the hearts of his subordinates. It is the inner calm of a man who is confident that the imminent danger will be curbed.

* * * * *

The division has breached the German fortified area these days.

Like everywhere else in Russia, on the evening of November 22 divisional headquarters wrote in the Soviet Information Bureau War Bulletin about the offensive of our troops on the approaches to Stalingrad. The typists and military clerks at headquarters worked all night, and the next morning the text of the bulletin was read to the battalions and companies.

The division also prepared for an offensive. The men here dreamed of pushing the Germans back, and they were readying for this. Though there was no exact order on the day the offensive was to begin, everyone had the feeling that something big, something historic, was in the air. This always happened before an offensive was launched. The men felt that something great was expected of them. The tidings about Stalingrad had been an inspiration for them. They were now gripped with impatience.

A man who is ready for an offensive knows that when the menacing artillery cannonade ends in an hour or so, and he will go ahead, anything might happen. When we speak about the high morale of soldiers, it doesn't mean that they try to forget about the impending mortal danger. No, they remember it, but they advance, just the same. If it were possible for a man to choose between sitting it out calmly on the defensive or moving forward on the offensive, they would always choose the offensive.

Herein lies the secret of the Russian soldier's soul, the secret to educating an army. When our soldier sees a map of his country, a sizable part of which today has been seized, never, under no circumstances, in the gravest days, in the days of retreat, can he reconcile himself to the fact that this is the way it will stay. When he retreats, he says that it is only for the time being; when he is defending, he knows that it is only for the time being; when he goes on the offensive and recovers a village from the Germans, he says to himself: right now, one village; the next time, another. He is ready to sacrifice his life for that next village to be regained. An army, which has preserved, nurtured and strengthened within itself such an unconquerable spirit in days of unprecedented trials, such an army will win!

When the news about Stalingrad was read in the trenches, the men said that they, too, should go on the offensive as soon as possible, and that now was the proper time. "When shall we start? The hour has come," they said. These were words of really great importance. The men said, "We'll fight like our buddies in Stalingrad." Poking their fingers at an old map of the European part of Russia, hanging in the dugout, they added, "We're closest of all here to the border."

December 5, 1942

"JUDITH" RESTORED

By Tamara Fomichyova
Art Critic

THE *Judith*, which belongs to the Hermitage State Museum in Leningrad, is one of the few works that is undisputedly attributed to Giorgione (1478?-1511).

Over the centuries since the picture was painted, it has undergone considerable restoration. As a result, it received many coatings of paint, and the yellowish lacquer that covered its entire surface spoiled the original color. Therefore, at the end of the 1960s a decision was made to clean the painting. But before the restorers set to work, the painting was thoroughly studied. Examinations showed that the edges of the painting had suffered the most. An explanation for this can be found in the history of the canvas.

At the very beginning of the eighteenth century the *Judith*, at that time believed to have been painted by Raphael, was part of the famous Crozat Collection in Paris, where the picture was enlarged. Strips of canvas were added to its right and its left sides. A second tree was painted in on the right, and the landscape on the left was expanded. Evidently the painting was enlarged to correspond to the dimensions of another picture, as was the custom in the eighteenth century.

The "enlarged" *Judith* was engraved by Toinette Larcher, giving rise to the idea, current for a long time, that the painting had been scaled down at the Hermitage. It is quite easy to refute this allegation, however. In the archives of the Hermitage experts found a report of the curator of painting dated 1837. The report noted that the *Judith* had additions to it that were not painted by Raphael. There is also an engraving a theme characteristic of the Renaissance, received Giorgione's intimate interpretation.

Not long ago Italian researcher Terisio Pignatti proved that the artist had rendered the head of Holofernes to his own likeness. Giorgione's features are well known thanks to his self-portraits in Brunswick and Hollar's engraving made for Vasari's edition. The same face is recognizable in Giorgione's *The Lovers* (the original of this painting is lost, but it is known from the engraving made by D. Cunego in the eighteenth century).

Little is known about the painter's life. Only some general information has been gathered: He was an accomplished musician and a great admirer of feminine beauty. However, it is not known what role the woman whom he wished to compare with Judith played in his life.

Giorgione, connected with the progressive cultural circles of Venetian society, played a decisive role in establishing and developing secular themes in Venetian art. His role and significance in the art of the early sixteenth century were similar to that of Caravaggio's in the early seventeenth century. It is no accident that Caravaggio, following in Giorgione's footsteps, made the head of the dead giant in *David with the Head of Goliath* resemble himself.

Giorgione never signed and never dated his works; therefore, to this day specialists dispute the years they were painted. Varying opinions as to when the *Judith* was painted exist as well. The work's similarity to the *Madonna and Child with Saints Francis and Liberale* shows that

The later additions to the painting were removed at the Hermitage during the first half of the nineteenth century.

In the sixties the restorers began by removing the thick layer of dirty lacquer that had given the painting its so-called "golden overtone," about which art critics had written so much. The painting's colors became more intense and their contrast sharper. The outline of the figure became more clear-cut, and the painting's perspective became deeper.

The restorers discovered details that had been hidden by the later coatings of paint. In the left background they discovered a bluish valley, which previously had been taken for a bay. Also on the left they found a fence covered by a plant appearing very much like ivy.

The restoration process also revealed changes made by the artist. Initially, Giorgione had wanted Judith to have a more elaborate hairdo, and he altered the position of the fingers of her left hand. Restorers discovered Giorgione's fingerprints, which were especially distinct on Judith's clothing.

Another finding was a square hole on the right-hand side of the painting. The narrow width of the picture had long given rise to speculation regarding its purpose. In the nineteenth century, when the painting had not yet been transferred from wood to canvas, traces of hinges were apparent on its left edge. Therefore, catalogues in the Hermitage recorded that the *Judith* could have been part of a diptych or triptych. When a small square hole for a key was found during the latest restoration, the assumption that the painting had been a door, maybe to a bookcase, was confirmed. In Venetian houses of the fifteenth and sixteenth centuries closets were often placed inside the walls. Thus, we see that the painting was intended for secular and not religious use.

The narrow width of the picture decided the composition: a full-length Judith standing with a foot on Holofernes' head. The glorification of people's exploits,

Judith, *circa 1505.*

[illegible] Judith and the Madonna have practically the same type of face. But it is thought that the *Judith* was painted after 1504 since the color of her clothing is far richer and more sophisticated than the Madonna's, who is clad in local dress with its, as yet, Gothic folds.

Giorgione's works have not been fully studied yet and attract the close attention of researchers.

In recent years the assumption, current in England, has arisen that the Hermitage's *Judith* comes from the collection of King Charles I. This thought is based on the inventory of the King's collection where a "small *Judith*" is listed, but scholars have ascertained that the painting referred to in the inventory is a copy made by Ligozzi and not the original painting.

The Hermitage also owns another Giorgione work, the *Madonna and Child in a Landscape.* This painting was attributed to the artist only at the beginning of this century, and it is now accepted by all the students of his art.

The *Madonna and Child in a Landscape* can be included in the painter's early works along with *The Adoration of the Shepherds* and *The Holy Family* in the National Gallery of Art in Washington, D.C., and the *Epiphany* in the National Gallery in London. All of these paintings have common stylistic features seen in the interpretation of the landscape with a tower, in the manner of depicting the foreground with its small stones and also in the Gothic elements in the broken foids of the Madonna's cloak, a crossover from the graphic art of the German painters. Another feature is the infant Jesus depicted with light smooth hair and plump body.

Giorgione's early paintings on religious themes are rounded out by his more mature work, the *Madonna and Child with Saints Francis and Liberale*, the artist's last work of a religious nature. After this painting Giorgione turned almost exclusively to allegorical, ancient and secular subjects. ■

TRADITIONS

THROUGH centuries of use the portable dwellings of the Kirghiz nomads, called yurta, have become so practical and cozy that they can still be seen in the mountain pastures. Assembling the yurt's latticed wooden walls, poles that support the roof, heavy felt fabric that envelops the exterior and the *chiy* (reed) mats that cover the floor looks quite simple at first glance, but the task requires great skill.

Things cultural

OPERA

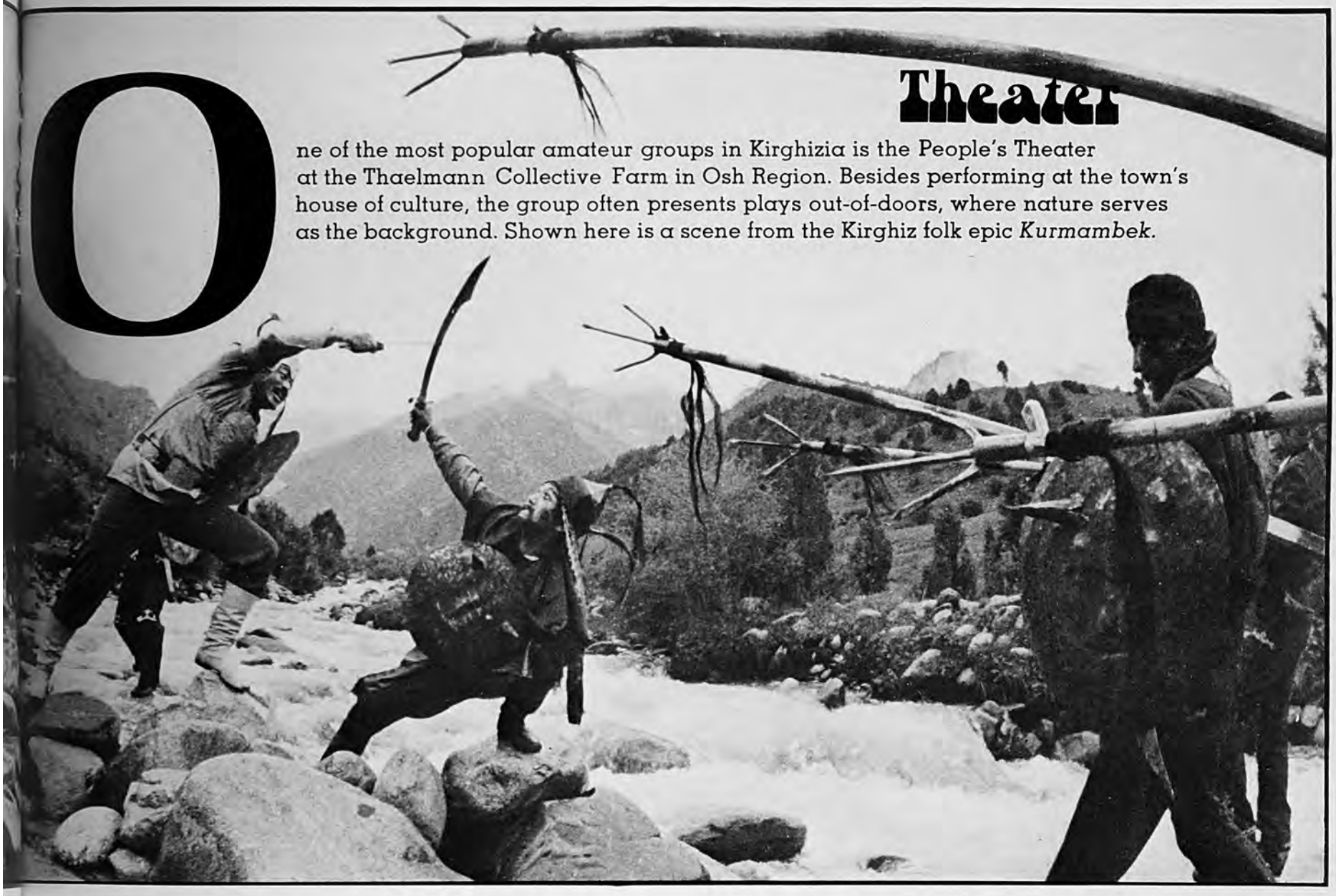
BULAT [illegible] operatic bass of Kir[illegible] opera fans in the Sovie[illegible] s well as many [illegible] kiyev never had [illegible] going to be when he [illegible] is gift for singing w[illegible] duating from the Ta[illegible] Uzbekistan, he joined [illegible] Ballet Theater in 1964. M[illegible] ut in Gounod's *Faust*.

Dance

THE amateur song and dance group from Kirghiz-Ata village is popular not only with local residents but throughout the republic. The group has won prizes at amateur competitions and appeared on television.

Theater

One of the most popular amateur groups in Kirghizia is the People's Theater at the Thaelmann Collective Farm in Osh Region. Besides performing at the town's house of culture, the group often presents plays out-of-doors, where nature serves as the background. Shown here is a scene from the Kirghiz folk epic *Kurmambek*.

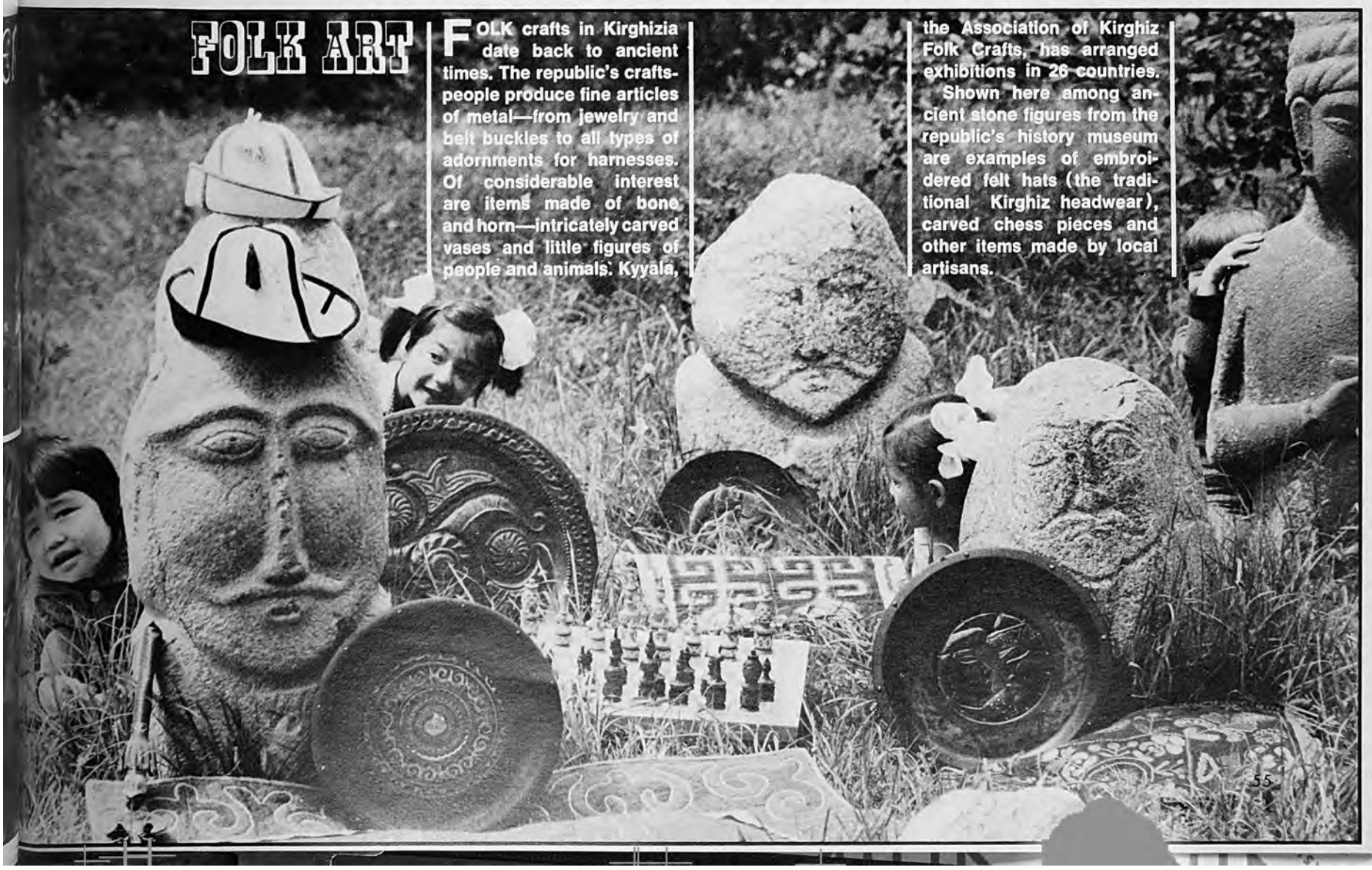


IN KIRGHIZ STYLE

FOLK ART

FOLK crafts in Kirghizia date back to ancient times. The republic's craftspeople produce fine articles of metal—from jewelry and belt buckles to all types of adornments for harnesses. Of considerable interest are items made of bone and horn—intricately carved vases and little figures of people and animals. Kyyala, the Association of Kirghiz Folk Crafts, has arranged exhibitions in 26 countries.

Shown here among ancient stone figures from the republic's history museum are examples of embroidered felt hats (the traditional Kirghiz headwear), carved chess pieces and other items made by local artisans.



YOUNG AMBASSADORS FROM UTA

By Vladimir Lakeyev
Photographs by Vitali Arutyunov

Val Lindsay, artistic director of Young Ambassadors, Inc.: "We have so many good friends here!"

Neither in Kiev, Riga, Leningrad nor Moscow was it easy to get a ticket for a concert of the Young Ambassadors, Inc., an amateur student group from Brigham Young University in Provo, Utah. That was to be expected: The Young Ambassadors have been to the USSR before and have many Soviet fans.

This time the group, under the artistic direction of Val Lindsay, had prepared an engaging variety show, which included popular folk and contemporary songs and dances with moving lyrics and comic routines. Thousands of people attended live performances at concert halls, while several million became acquainted with the group through Soviet television.

The professionalism, friendliness and sincerity of the Young Ambassadors brought a warm response from all the people who attended their performances in the international clubs of the Sputnik Bureau of International Youth Tourism. The Young Ambassadors had been invited to the Soviet Union by Sputnik.

Soviet audiences especially appreciated the Indian dance brilliantly performed by Leroy Chavez. The faces in the hall lit up with kind, encouraging smiles when the American performers spoke in Russian. The group's inspired rendition of the popular Soviet song, "May There Always Be Sunshine!", in Russian and in English was also very warmly received.

"We always perform that song with special feeling," said Lindsay. "After all, it's not just a song for Soviet children, but a song calling for the preservation of peace on Earth. It clearly resounds with concern for the fate of all humankind."

A particularly vivid moment during the Young Ambassadors' concert was a short speech given on behalf of all the members of the group: "We want to tell you about our dream. We see a peaceful world where all people understand each other. This dream will come true if people remember the thing that is most precious to them—love, for their families, for all people."

The students from Utah explain the name of their group in this way: They want to be ambassadors of friendship and good will, to convey their warm feelings to people in other countries through music. That is why they try to meet with Soviet young people as often as possible. Just this year alone the group is slated to give over 20 concerts in Yugoslavia, Rumania and the Soviet Union.

During the recent tour the young men and women from Brigham Young University had many chances to talk with their Soviet audiences. For example, they visited the Moskva Sewing Factory, and in the evening students and young factory workers met with them in the Sputnik International Club. There was much to talk about: how young Soviet and American students work and study, how they spend their leisure time, what plans they have for the future, what issues concern them most of all. The lively, warm conversations in the club went on until midnight.

Every day of the visit brought concerts, applause, flowers, smiles and handshakes. Not only was the Young Ambassadors' concert filmed for Soviet National Television, it received good reviews in the press. "To tell the truth, we're a little tired," the young people said after their last performance in Moscow, "but we'd love to go on and on!"

The group sang its last song on the bus ride to Sheremetjevo Airport. They dedicated it to their Sputnik guide, Tanya Pigareva, a Muscovite.

Sputnik wanted the young American visitors to see as much of the Soviet cities as they could. In Moscow the students visited the Kremlin, the V. I. Lenin Museum, the sports museum at Luzhniki, the Novodevichy Monastery, the Tretyakov Art Gallery and the famous Moscow Metro, among many other tourist attractions.

Professor Douglas F. Tobler, visiting the USSR with his students for the first time, said: "As a historian it was very interesting for me to see the

"WE WANT TO TELL YOU ABOUT OUR DREAM. WE SEE A PEACEFUL WORLD WHERE ALL PEOPLE UNDERSTAND EACH OTHER. THIS DREAM WILL COME TRUE IF PEOPLE REMEMBER THE THING THAT IS MOST PRECIOUS TO THEM—LOVE, FOR THEIR FAMILIES, FOR ALL PEOPLE."

Exchanging autographs, badges, bear hugs, flowers and smiles was the order of the day for the visiting Americans. Above: Tanya Pigareva, a guide from Sputnik, and her young son won the hearts of the students from Utah.

Winter Palace in Leningrad. The events that took place there left their mark on Russian history. I was also very impressed by the USSR Exhibition of Economic Achievements. In the Cosmos Pavilion we saw an exhibition on the joint Soyuz-Apollo space flight. I'd like to see the cooperation among the scientists of our countries to use outer space for peaceful purposes continue."

"I think the Soviet people made the strongest impression on me during my stay," said Professor Tobler's wife, Carol. "The people in different cities, young and old, were friendly, cordial and hospitable. I learned that your country is beautiful, the cities are clean, there are many marvelous buildings and lots of trees everywhere to brighten things up!"

"Before this trip I had heard a lot from Americans who had visited the Soviet Union about how warmly Soviet people welcome foreign tourists. Now I'm convinced of it," Val Lindsay said in conclusion. "It's very good that the students of the Young Ambassadors, Inc., could personally meet and make friends with young Soviet men and women. You can only have a true idea of another country by seeing it yourself. Everyone in the group hopes to come back to the USSR in the near future. We have so many good friends here!"

All quotes are retranslated from the Russian.

By Sergei Nenashev
Photographs by Valeri Lozovsky

AMERICAN RELICS IN LENINGRAD

Tamara Voronova is the curator of the Rare Book and Manuscript Department at the Saltykov-Shchedrin Library in Leningrad. Above: A letter signed by George Washington is part of the library's collection.

TAMARA VORONOVA, curator of the Rare Book and Manuscript Department of the Saltykov-Shchedrin Library in Leningrad, and I confidently made our way through the labyrinth of towering shelves. Like miraculous cells, they hold the knowledge of past ages: diaries, letters and manuscripts of great writers, composers, scientists and state leaders.

Our goal was a row of glass display cases containing sheets covered with the web of time and beads of faded ink. One bore the date March 13, 1789. The letter, addressed to F. Hopkinson, Esq., was signed neatly "G. Washington."

The library's rare book collection boasts of more than a hundred handwritten documents of outstanding American leaders and includes letters written by the first 11 Presidents of the United States. The letters were obtained by the library in 1836 from the collection of Count Peter Sukhtelen. Sukhtelen was Dutch by birth, a subject to the Russian throne, a diplomat and an ardent collector. After his death his collection of autographs was so highly valued that only the Imperial Public Library (as the Saltykov-Shchedrin Library was called at the time) could afford to purchase it.

The documents in the library's manuscript collection are originals. There is only one photocopy on file: The original of George Washington's letter dated January 30, 1798, addressed to W. Bashrod, was presented to the American Government as a gift on the occasion of the establishment of diplomatic relations between the USSR and the U.S. in 1933.

The collection also includes letters written by writers. For instance, there is a letter sent by James Fenimore Cooper to a Russian diplomat. Cooper, the author of the exciting novels about American Indians that are very popular with children in our country, lived in Paris in the middle of the nineteenth century and was virtually unknown at the time. In the letter he expresses his gratitude for the fact that his "introduction into European society was first owing to the attent of Russians." He adds, "On all occasions di find the Russians well disposed to us American

The library's collection of autographs is one the largest in the world. It has about 70,000 ite

An ancient mahogany box ornamented with imperial double-headed eagle monogram conta a document of particular importance: the edic Emperor Alexander I founding the Imperial Pul Library. It was signed in 1812, but because of war against Napoleon, the library's reading roo were only opened two years later.

Today the Saltykov-Shchedrin Library, alo with the Library of Congress in Washington, D the Bibliothéque Nationale in Paris, the Brit Library in London and the Lenin Library in M cow, is among the world's leading libraries.

The Clothes of Gods

My search for American relics took me to Leningrad Museum of Anthropology and Ethno raphy. The museum was founded by Peter Great in 1714 and was the first public museum Russia. At present it is part of the Leningrad Di sion of the Institute of Ethnography of the US Academy of Sciences, a major center of ethn graphic research in the country.

The Rare Book and Manuscript Department of the Saltykov-Shchedrin Library contains diaries, letters and manuscripts of the world's great writers, composers, scientists and state leaders. Left: A mask in the American collection (below) at the Leningrad Museum of Anthropology and Ethnography.

At the museum I heard the following story. The valley of California was left behind. The small group of people entered the mountains in a single file. Everything was going well. Ilya Voznesensky, who had been leading the Russian ethnographic expedition in America for more than a year, knew how to maintain amicable relations with the natives. In a few days the precious cargo would be loaded onto a ship and sent to the Academy of Sciences in Petersburg.

And then something unexpected happened. A leather strap on one of the bags snapped. Seeing what was inside, the Indians who had been hired as porters threw the bags onto the ground and went down on their knees in absolute horror, covering their faces with their hands.

Cloaks made of raven and condor feathers lay on the ground. Kuksu and Moloth, the gods of the Californian Indians, would appear in them during sacred rites.

The Indians did not dare to touch them. Despite all coaxing, they refused to walk any further. All of Voznesensky's diplomatic talent was required, as well as considerable amounts of white beads —the local currency—to help the precious exhibits reach Russia.

Voznesensky's collection, found in Northern California and Alaska in 1840, still provides ethnographers of various countries with a wealth of information. It is one of the best collections in the museum.

"Exhibits from America began to reach Russia in the eighteenth century," says Dr. Rostislav Kinzhalov, chief of the American section of the institute. "Voznesensky's collection is unique because it was gathered by a scientist and not an ordinary explorer. He systematized and described all his finds carefully. He also found the natives almost in their natural state, unaffected by the intrusion of the white man."

Standing by one of the museum's displays, I saw a young girl tugging at the sleeve of her companion. "Come on, faster," she whispered. "Let's get out of here or I might have nightmares!" Grotesque forms with devil-like teeth and bulging eyes stared out at the visitors from under the glass—a terrifying sight indeed! The "monsters" are Tlingit masks that were intended to scare enemies.

Some of the masks brought by Voznesensky weigh three kilograms and are quite thick—4.5 to 6 centimeters. They thus provided a guarantee against even firearms. By the second half of the nineteenth century the masks had lost their bellicose significance and had become part of Tlingit ritual attire.

The museum's exhibits devoted to the Tlingits include several cloaks from Captain James Cook's collection. After the famous explorer and navigator was killed in the Hawaiian Islands, his ships continued their voyage, finally reaching Kamchatka in 1779. The Indian artifacts were given to the chief of the port by Cook's expedition as a token of gratitude for his assistance and hospitality.

Thanks to the contacts of the Leningrad Institute of Ethnography with foreign scientific institutions, the American section of the museum continues to expand. Among its most recent acquisitions is festive Eskimo clothing sent by Dr. Larsen in Copenhagen. Household articles used by Indians living along the Pacific coast were presented by Dr. Thomas J. Vaughan, executive director of the Oregon History Society.

Apart from the Oregon History Society, the institute regularly corresponds with the universities of Chicago and of Pennsylvania, Yosemite National Park and the Museum of Natural History in Santa Barbara, California.

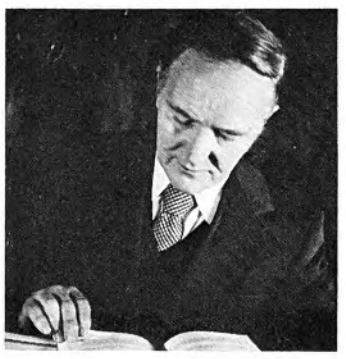
A collection of reports delivered at the first and second Soviet-American symposiums on the interaction of ancient cultures of the world is currently being prepared for publication.

A Gift from an American President

A former royal palace stands on the Palace Embankment in Leningrad, overlooking the broad Neva River. It is internationally known today as the Hermitage State Museum, and only the Louvre in France is comparable.

It would take more than a lifetime to see all the exhibits, even if only a minute were spent at each. But the impressions gained by a visit to this temple of art would remain forever.

We shall begin our excursion around the museum in the largest of the Hermitage's six departments—the Numismatics Department, containing one million (one-third) of the museum's exhibits. Vsevolod Potin, the head of the department and a corresponding member of the American Numismatics Society, showed me a large album bound in



Vsevolod Potin, head of the Numismatics Department at the Hermitage Museum, is a corresponding member of the American Numismatics Society.

black leather with golden ornaments. The inscription on the title page reads:

American Bank Note Company
New York, Un. States of America. 1860.

"This is a beautiful collection of bank notes that were used in the United States in the 1860s," Potin commented, leafing through the heavy pages. "All the notes are authentic and in good condition. This is the only collection of its size in the USSR."

In the album I saw small (no bigger than postage stamps), one-, three- and five-dollar bills and a bank note from the Bank Note Company in New York—as large as a page and worth 25,000 dollars, quite a sizable sum in those days. There was also a green bank note from the Fulton Bank with a picture of a river boat. Next to the boat was the portrait of its designer, the owner of the bank.

The album was presented to Czar Alexander II in 1860, a difficult presidential election year, and Abraham Lincoln was concerned about maintaining good relations with Russia.

The Numismatics Department also has a collection of coins from the U.S., Canada and Central America. Some are unique. The department corresponds with many private collectors and societies in the U.S. ■

The crew of the N-209 poses prior to take-off (from left to right): N. Galkovsky, N. Kastanayev, Commander Levanevsky, G. Pobezhimov, N. Godovikov and V. Levchenko. Far right: The Soviet flier at a press conference before the flight.

The first fliers to be named Heroes of the Soviet Union. Far right: This rare photograph of some of the Soviet and American pilots (Levanevsky is second from left) who participated in the *Chelyuskin* rescue operation was taken in Fairbanks, Alaska, in 1936.

THE MYSTERY OF THE POLAR TRAGEDY: WILL IT EVER BE SOLVED?

By Yuri Salnikov

The Soviet N-209 with Sigizmund Levanevsky in command takes off from an airfield outside Moscow for its flight from the USSR across the North Pole to the U.S. Right: This 1937 photograph of Levanevsky has never been published before.

SIGIZMUND A. LEVANEVSKY, a famous Soviet flier, took off from Moscow on August 12 on a nonstop flight to the United States across the North Pole. The flight was to be the culmination of the Soviet Government's large and long program for the conquest of the Arctic, reported *Soviet Russia Today** in 1937.

The magazine did not exaggerate by calling Levanevsky famous. He was, indeed. Here are a few touches to his striking biography.

Sigizmund Levanevsky was born in 1902. He lived to experience all that had fallen to the lot of his generation: a hungry childhood, the whirlpool of the October Revolution that swept across Russia and the still more powerful and destructive hurricane of the Civil War. At 17 Levanevsky commanded a front-line battalion. He was severely wounded twice and nearly died from typhus. When he recovered from his illness, he enrolled at a flight school and, after graduating, signed on as an instructor at a school for naval pilots in Sevastopol, the Crimea. He also did a great deal of flying, which eventually got him involved in arctic aviation.

Levanevsky made several outstanding flight In 1933 he ferried a flying boat from Sevastop to Khabarovsk and on to Anadyr, where he pick up American pilot Jimmie Mattern, who had cras landed while attempting a round-the-world flig and brought him to Nome, Alaska. Incidental Mattern joined in the search for Levanevsk plane in 1937.

It was from Alaska, too, that Levanevsky, pil ing an American plane, took off in 1934 to resc the famous expedition on board the *Chelyuskin*.

Levanevsky's long-wished-for dream came tr in 1935 when he received permission from t Soviet Government to fly to the U.S. via the No Pole. Because of engine trouble, however, he w forced to give up the mission almost halfw through and return home.

A year later he flew from Los Angeles

*The magazine *Soviet Russia Today*, the official organ of the Friends of the Soviet Union, appeared in 1932 with the title *New World Review*. The magazine was published in New York City.

**The *Chelyuskin* Relief Commission sent Levanevs to Alaska because there was a short cut from there the Chukchi Peninsula. In addition, two American plan were purchased in the U.S. for use in the rescue.

Alaska along the Pacific coast, from there to the Chukchi Peninsula and then back to Moscow. Levanevsky's crew was awarded high government decorations for that passage.

Still, the North Pole attracted Levanevsky. Finally, he received permission to make another attempt.

After the triumphant flights by Valeri Chkalov and Mikhail Gromov (the latter broke the world-distance record), Levanevsky was to make the first commercial flight. He was to carry all kinds of cargo and mail on board. His mission was to be somewhat of a rehearsal for the forthcoming inauguration of a passenger-freight service between the USSR and the U.S.

The members of the crew were Sigizmund Levanevsky, commander; Nikolai Kastanayev, co-pilot; Victor Levchenko, navigator; Nikolai Galkovsky, radio operator; Gregory Pobezhimov and Nikolai Godovikov, mechanics. Four of the men had been to the Arctic before. The newcomers were Kastanayev and Galkovsky.

Articles about the forthcoming flight appeared in all Soviet newspapers on the morning of August 12, 1937. The event was seen as a profoundly peaceful gesture and a sign of the determination of Soviet fliers to extend the potentialities open to humankind and technology and to negotiate great, yet unexplored, expanses for the benefit of all people on Earth.

The four-engined N-209 aircraft, which was being readied for the transcontinental flight, had excellent performance standards for its day: It could attain a speed of up to 280 kilometers per hour, a lifting capacity of 12 metric tons and an altitude of 6,000 meters. It had a range of 7,000 kilometers. Because the aircraft's range was not exceptionally long, the plan was for the N-209 to fly across the Pole, stop at Fairbanks, Alaska, then fly on to New York.

The plane took off at 1815 hours so it would reach Alaska in daylight the next day. The people of Fairbanks were to assemble at the airfield to give the crew a warm welcome. Many of the local inhabitants knew Levanevsky personally and were anxious to welcome him on American soil. The Governor of Alaska ordered a supply of fuel to be laid aside for the Soviet plane.

The big, red-winged plane took off from Moscow in grand style, circled over the airfield and headed toward the North Pole. Not one of those who saw it off had any reason to suspect that it would not be seen again.

The Search Begins

As I studied the documents concerning the flight in the archives, I found a good deal of evidence that showed the scale of preparations made for the flight, and the search operations for it in the USSR and in the U.S. after it disappeared.

The Soviet Embassy in Washington sent a letter to the Arctic on August 19, 1937. It read:

> Dear Comrades Levanevsky, Kastanayev, Levchenko, Galkovsky, Pobezhimov and Godovikov:
>
> This letter will be dropped to you by polar explorer Sir Hubert Wilkins; for whose expedition in search of your plane, we have acquired the flying boat Consolidated.
>
> In the meantime, Mattern is looking for you from the American side, along the 148th meridian with a Lockheed Electra. . . .
>
> Ever since we lost track of you, you have been heard (or believed to have been heard), but so indistinctly that none of the Soviet or American stations can yet make it out. We are sending you some radio equipment and storage batteries, which Wilkins will drop.
>
> We wish you, dear comrades and friends, good cheer and the best of health, and we do not doubt even for a moment that we will soon be welcoming you on American or—which is even more probable—on our own Soviet soil.
>
> The warmest comradely greetings to you from Konstantin Umansky, Chargé d'Affaires of the USSR in the United States.

The letter, however, never reached those for whom it was written.

The N-209 was to have reached the Pole, turned toward Alaska and flown to Fairbanks along the 148th meridian. From the N-209's radio messages reporting its progress to the government commission, the following is known: The flight had encountered adverse weather conditions, as forecasters had predicted. And before it reached Franz Josef Land, the plane had flown into a cyclone, and there was another one, a larger one, for it to fly through in the vicinity of the Pole. The first radio messages that were received sounded optimistic, but then one that came from the North Pole read:

> **1340.** We are flying over the Pole. It has been a hard job to reach it. Overcast all the way from the Barents Sea. Our altitude is 6,000 meters; the temperature, minus 35 degrees centigrade. The windshield of the cockpit is covered with hoarfrost. There is a strong head wind. Report weather on the other side of the Pole. Everything is OK.

Almost an hour later there was another message which is believed to have been the N-209's last. It read:

> **1432.** Far right engine failed because of oil-line malfunction. Altitude 4,600 meters. Overcast. Keep waiting.

It was established only quite recently that Soviet radio stations had not picked up the full text of the radio message, which had included the following figures: 48 3400 92.

The text was picked up in Fairbanks and relayed to Moscow for Mikhail Belyakov, a well-known Soviet meteorologist, to check. The figures were interpreted as 48 meant proposing to land in . . . , 92 meant Levanevsky and 3400 was the incomprehensible figure in the radio message.

A typed copy of the message sent from Fairbanks on a U.S. Army Signal Corps form was shown to me by Artak Vartanyan, who was working for the Amtorg Trading Corporation in the United States at the time. He is presently the deputy director of the Institute of Oriental Studies. Vartanyan found a map of meteorological codes in his files, which he keeps in perfect condition. After we closely examined it (the crew of the N-209 had an exact copy of the map at their disposal), we found that square 34 comprised the Prince Patrick, Banks and Melville islands. The N-209 could well have reached that particular area. But what did the two zeros mean? There could be no mistake about the text of the radio message received because the same one had been picked up in Seattle. One suggestion is that 00 denoted the time of the landing. If this is so, then everything would fit in—the distance and the time it took to fly into that area.

Vartanyan recalled that the search for the missing aircraft began in the U.S. on the following day. Three planes were rented to fly all along the northern coast of Alaska. One had famous Canadian flier Joe Crosson, its pilot, and Mikhail Belyakov, who had come from Moscow, aboard. The second one was piloted by Robbins and Clyde Armistead, the latter had worked as a mechanic with Levanevsky at the time of the *Chelyuskin* rescue operation. The third plane was piloted by M. Stuart, who had Soviet radio engineer Savva Smirnov with him. All three planes had rather short flying ranges and returned to Fairbanks after inconclusive searches. The radio stations of the U.S. Army and the Canadian signal corps and all the stations of the Chief Administration of the Northern Sea Route kept listening to the N-209's radio transmissions. The Governor of Alaska sent news about the search for Levanevsky's plane to all the populated localities. Looking through the archives, I came across an item in *The Christian Science Monitor* of August 23, 1937, which quoted an Associated Press dispatch from Seattle as saying that the radio station at Anchorage had intercepted a report from the plane at 1444 G.M.T. (Greenwich Mean Time) on August 14. It read:

> No bearing . . . having trouble with . . . wave band. . . .

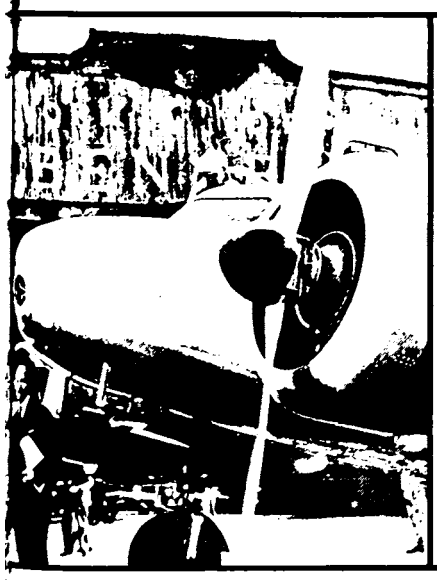
It appears that the crew, or some of them at least, were alive after crash landing since an emergency radio transmittor was sending messages for awhile.

Americans Help

Since the presumed site of the disaster was in the North American Arctic, the Soviet Embassy in the United States acquired a Consolidated flying boat with the assistance of then president of the Explorers Club of New York Milhjálmur Stefánsson. Well-known polar explorer Sir Hubert Wilkins was chosen to head a search team. Wilkins invited experienced pilots Air Commodore Herbert Hollok-Kenyon and Silas Alward Cheesman, radio operator Raymond E. Booth and mechanic Gerald D. Brown to join him. On August 22 their plane took off from New York on its way to Alaska.

A party under Mikhail Shevelev flew to the Arctic from Moscow on August 26. Another air squadron equipped for searching in polar night conditions set off with Boris Chukhnovsky in command a month later.

Wilkins, having made five long flights into the area presumed to be the site of the disaster and covering more than 10,000 miles, had to fly out of the Arctic in mid-September because the water was beginning to freeze, and there was no place for him to land. Wilkins and his crew said they wanted to resume searching, but they would have ▶



Americans played a large part in the search for the missing N-209. Here the flying boat Consolidated is being readied for takeoff at a New York airport. Right: Soviet fliers were always ready to help their American counterparts whenever it was possible. In 1933 Levanevsky rescued American flying ace Jimmie Mattern, after he crash-landed in northern Siberia.

to have a new plane, one that could be airborne for long periods in winter polar night conditions. The Soviet Government provided the money to buy a Lockheed Electra in which Wilkins' crew made several long flights from December 1937 to March 1938, but, unfortunately, all were to no avail.

The flights of Soviet crews from Rudolf Island to the presumed disaster site did not produce any results either. I am not going to list all of the rescue work done by Soviet airmen since that heroic effort is worthy of special consideration. What is of interest at this point, however, is the participation of American and Canadian specialists—pilots, radio operators and mechanics.

Vilhjálmur Stefánsson's book *Unsolved Mysteries of the Arctic* (1939) contains a chapter about the search for the Soviet airmen. It has this description of Canadian flier Robert Randall's attempts:

> . . . Randall was not to ask direct questions; for, as said, the Eskimos, like most primitive people, have it as part of their ethics that they should tell the questioner only things that will please him. Randall was simply to gossip as to the happenings of the summer, what steamers had been around, what Eskimos had power launches in the neighborhood, what familiarity they had with airplanes, when they had last seen a plane, and so on.
>
> Through this method Randall got only negative results, except in Barter Island. There he was told that on August 13 the people had been busy handling domestic reindeer in a corral. In their excitement they did not at first notice what they later took to be the noise of a power boat. Stopping to listen, they decided that there must be an airplane passing over, hidden by clouds, for many of these people own power boats and they all have seen and heard airplanes, most of them frequently, so that they can differentiate. The noise of the plane had begun seaward and had faded inland. If true, this would mean that Levanevsky had entered Alaska a little farther east than the meridian of Fairbanks, a slight deviation easily accounted for by the thick weather.
>
> Randall secured no further information on his way to [Point] Barrow. A few days later he returned, flying a little inland and searching along the foot of the mountains from the Barter Island vicinity eastward. He saw nothing.

But that was, in fact, one more assumption as to where the Levanevsky plane had to be looked for! Forecasts compiled by meteorologists Edward M. Vernon, living in California, and Mikhail V. Belyakov were highly valued by pilots during their search flights. Radio operators Glasgow, Fallous and Sergeant Stanley R. Morgan of the U.S. Army Signal Corps, who worked at Point Barrow, could recall the particulars of the search. Finally, Clyde Armistead and Bill Lavery, still alive, had worked with Levanevsky and Mavriki Slepnev and were awarded Orders of Lenin for their part in the *Chelyuskin* rescue operation. In 1937 they made flights searching for the Levanevsky plane.

Stefánsson also writes in his book that because of the cooperation in the Levanevsky case

> . . . which was carried on chiefly between the Soviet, United States and Dominion [Canadian] governments, there came a speed-up in general cooperation between these weather bureaus—the United States and Canada are certainly receiving now (1938) far more weather news from the Soviet Union than they would have obtained so soon in normal course. The United States Weather Bureau has stated through its chief, Dr. Willis R. Gregg, that by the early part of 1938 there was already a substantial improvement in the accuracy of weather forecasting for the entire United States which had resulted directly from the Levanevsky search.
>
> . . . By failing in his own expedition he promoted both international good relations and the purposes of science. . . .

The flights into the area of the Pole of relative inaccessibility, where no plane had flown before, observations of temperature, the movement of the ice and air mass produced unique data which benefited science. At the time of the searches for Levanevsky's plane, an international weather watch came into being and has since developed into a global system at the service of all humankind. ■

QUERIES FROM READERS

QUESTION: Can Soviet citizens live anywhere in the USSR they want? (James T. Pinkerton, Michigan)

ANSWER: They certainly can. In the USSR it is up to the individual to decide where to reside. A person usually has his or her own reason for choosing one place to live over another, for example, the most favorable climate, an especially interesting job opportunity or better wages or salaries, which are higher in the northern and eastern parts of the country. Young men and women who move from rural areas into the cities often do so to study or to meet new people. There are as many reasons why a person moves as there are people.

On the other hand, there are many people in the country who prefer to live in the same town or village all their lives. However, one thing is certain: Whether people move to different areas or stay in one place, it is up to them.

People who want to move have a wide choice. The USSR is a vast country, and highly skilled workers are needed everywhere—from the fertile fields in the Ukraine to the fishing villages in the Far East. Workers are also needed to develop the taiga's riches and to irrigate the hot steppes of Central Asia.

Office or industrial workers relocating to other areas are supposed to give the management of their job one month's notice. During that period the management will try to fill their job. However, if the management does not mind, they can leave immediately, without the usual notice.

QUESTION: Please include an article about the Soviet National Volleyball Team. (P. Nazario Edif, Guayanilla, Puerto Rico)

ANSWER: The Soviet National Volleyball Team has not lost a single match for the last four years or so. The senior coach of the team, Vyacheslav Platonov, Honored Coach of the Soviet Union, says that Soviet volleyball has every chance to be the best in the world since the team has excellent players and the sport is taken very seriously in the country.

Platonov thinks that the main reasons for the team's success are its new training system, game plans and team of players who trust each other and expect a lot from one another. A new structure of competition within the country, which makes it possible to increase the number of "psychologically difficult" matches, has a lot to do with the sport's success, too.

Platonov thinks that prospective members of the national team should be trained in the local clubs: The team's coaches can develop an athlete physically, but his moral conditioning takes place at the club level.

At present the Soviet National Volleyball Team is preparing for the 1982 World Tournament in Argentina. By the 1984 Olympics the coaches intend to lower the average age of the team. This will be done in two stages. By the World Championships they are planning to add one or two younger players to the team, and by the 1984 Olympics two or three more. They do not plan to change the team completely: The experience of veteran players is invaluable, and they are needed to maintain the team's traditions.

QUESTION: I would appreciate any information on Misha, such as his selection as the Olympic mascot, his creator and any other related topics. (Lance M. Baker, Copperas Cove, Texas)

ANSWER: Misha was the mascot for the 22nd Olympic Games, held in Moscow in 1980. Before he was chosen as the mascot, however, he had to go through two competitions. The first stage of the selection process took place when thousands of viewers of the popular Soviet TV show "The World of Animals" chose the bear as their favorite animal. An artistic competition followed, and a jury of experts selected the best out of thousands of drawings of cute bear cubs.

Moscow artist Victor Chizhikov was the winner. His drawing of a high-spirited, charming bear cub wearing an Olympic five-ring belt is now known not only to every Soviet citizen but to many people all over the world.

Despite his young age, Misha has already gone into outer space. A funny teddy bear, made by Kamchatka craftspeople, accompanied Soviet cosmonauts Vladimir Kovalyonok and Alexander Ivanchenkov on their space flight. Misha's flight papers were in perfect order: The Olympic Organizing Committee issued him a special passport and a business trip certificate. At the Baikonur Cosmodrome the cub was sanitized, after which he received his space flight clearance.

It was the first time in history that an Olympic mascot traveled into outer space. Misha remained on board the Salyut 6 orbiting station for 100 days and returned to Earth with the cosmonauts at the end of the mission.

QUESTION: Articles about handiwork are of great interest. Can you tell about Russian folk crafts? (Mrs. Jim Donais, Newport, Washington)

ANSWER: Items made by Russian craftspeople are famous throughout the world. They attract the attention of experts and collectors at international exhibitions, are exported to many countries and are popular with foreign tourists visiting the Soviet Union.

It is not by chance that Russian souvenir shops sell brightly colored matryoshkas of various sizes, melodious balalaikas, carved wooden spoons and, above all, famous samovars made in Tula, a little town located 200 kilometers from Moscow. Many of the craft items have lost their original utilitarian functions and have become symbols of Russian national culture. This is not surprising since each of them represents the long history of Russia and its traditional way of life. The Russian masters have long been famous for their artistic and esthetic qualities.

Russians have always valued crafts: lace, tapestry, woodcarving, painting, enamel work, pottery, bone carving, metalwork and jewelry. The traditional secrets of these crafts are preserved by continually being passed from generation to generation.

TRACK AND FIELD MEET IN LENINGRAD

By Gennadi Rodionov
Photographs by Yuri Somov

The competition may have been keen, but the atmosphere at the meet was most friendly.

THE annual USSR-USA Track and Field Meet, which was held at Lenin Stadium in Leningrad last summer, saw keen competition in 36 events (21 for men and 15 for women).

The series of these meets between the two countries dates back to July 1958, with the Soviet Union emerging victorious in 13 meets, and the Americans in 3. The meet in 1971 ended in a tie.

Leonid Khomenkov, vice president of the International Amateur Athletic Federation (IAAF) and president of the Soviet Athletics Association, recalls the following:

"I headed the Soviet track and field team at the Melbourne Olympics in 1956. That's when the agreement with the leadership of the American delegation to hold meets between our athletic teams was reached. Nowhere else in the world are there meets with such a long history."

But let us get back to the Leningrad story. The American guests took an early lead, with excellent performances given by Jeff Phillips in the 100-meter dash (10.21 seconds), and Greg Foster in the 110-meter hurdles (13.30 seconds). The Americans also won the discus and shot-put events.

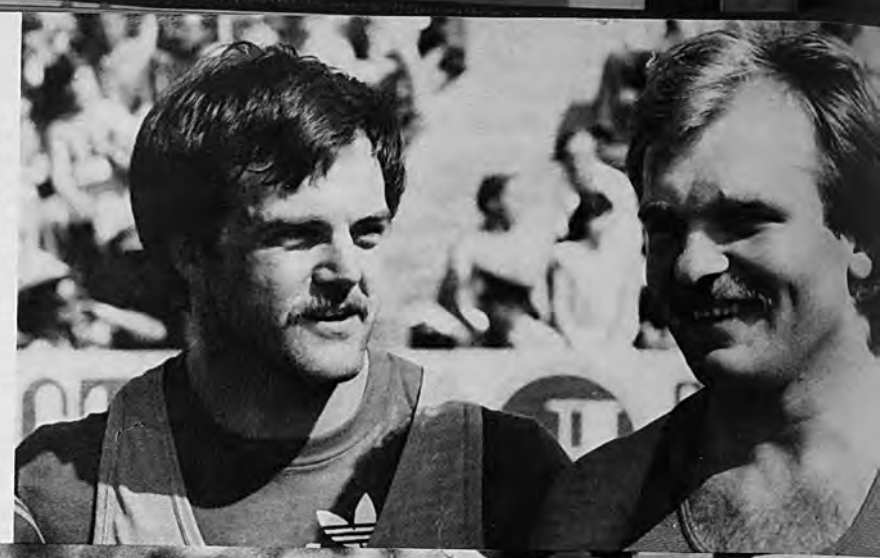
But as time wore on, the gap between the competitors gradually began to close. Nina Isayeva heaved the shot for a distance of 19.06 meters; Galina Savinkova sent the discus flying for 69.70 meters; while Tatyana Anisimova chalked up a double victory, clocking 22.94 seconds and 12.79 seconds in the 200-meter dash and 100-meter hurdles, respectively.

The competition between the athletes may have been keen, but the atmosphere at the meet was most friendly. The spectators applauded both teams with equal exuberance.

"Just listen to the cheers for Louise Ritter," Anatoli Yefimenko, head of the Soviet sports delegation, said to me. With a clearance of 1.94 meters the American athlete had just won the high-jump event. "I regard the warm applause as one of the main results of these meets," Yefimenko continued. "It promotes a spirit of respect for sports achievements. Besides, the cheers and ▶

TRACK AND FIELD MEET IN LENINGRAD

Soviet athlete Yuri Sedykh (right) won the hammer-throw event and a SOVIET LIFE prize. American David McKenzie placed third but managed to set a new U.S. record. Below: American Louise Ritter received a SOVIET LIFE prize for her performance in the high jump.



Tatyana Anisimova (left), another prize winner, won the 100-meter hurdles and the 200-meter dash. Facing page: The 20-kilometer walk was won by Soviet athletes Pyotr Pochenchuk and Anatoli Solomin.

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Joseph Goodspeed (left), head manager of the American team, and Anatoli Yefimenko, head of the Soviet delegation, wait for the final results to be tallied. Below: The women athletes from the U.S. cheer on their teammates.

applause encourage the contestants to do their best."

Indeed, the Leningrad fans, with their vocal support, contributed to David McKenzie's excellent showing of 72.30 meters in the hammer throw, setting a new U.S. record.

The first day of the meet ended with the Soviet hosts leading by only four points (97-93). The events on the following day continued to be keenly contested. The Soviet team, however, steadily pulled away to win the meet 204 to 178.

All winning athletes were later presented with medals and certificates of the USSR Sports Committee. Best Athlete of the Meet prizes, instituted by SOVIET LIFE magazine, went to Louise Ritter in the high jump, Jeff Phillips in the 100- and 200-meter dashes, Tatyana Anisimova in the 200-meter dash and the 100-meter hurdles and Yuri Sedykh in the hammer throw. The SOVIET LIFE prize will, henceforth, be a regular feature of the meet.

The sponsors did all they could to make this year's meet a resounding success. I asked Joseph Goodspeed, head manager of the American team, about his impressions. He replied, "The reception here in Leningrad has been with open arms." ■

IT'S A FOLK FESTIVAL, A PAGEANT, A TRADITION

Celebrating Yuletide up North

Oleg Larin transports you to the restored village of Malaya Karelinskaya to ring in the new year. You can almost hear the church bells chime and smell the moth balls as old clothes are pulled from chests for the gala procession of singers, dancers and mummers from nearby towns.

NAMED IN MEMORY OF AN AMERICAN-BORN MINER

Ivan Pinter Street

In the early twenties John Pinter, a miner from Illinois, and 34 fellow coal workers moved to Soviet Russia. Pinter was the only one who stayed, reports Boris Alexeyev. He settled down in Donetsk, raised a family and became something of a hero among miners. He was awarded medals, even a car, for his exemplary work. Ivan died in 1978 at the age of 85. Friends recently requested that a new street in Donetsk be named after this hard-working man who was loved by all.

24 PAINTINGS BY REMBRANDT

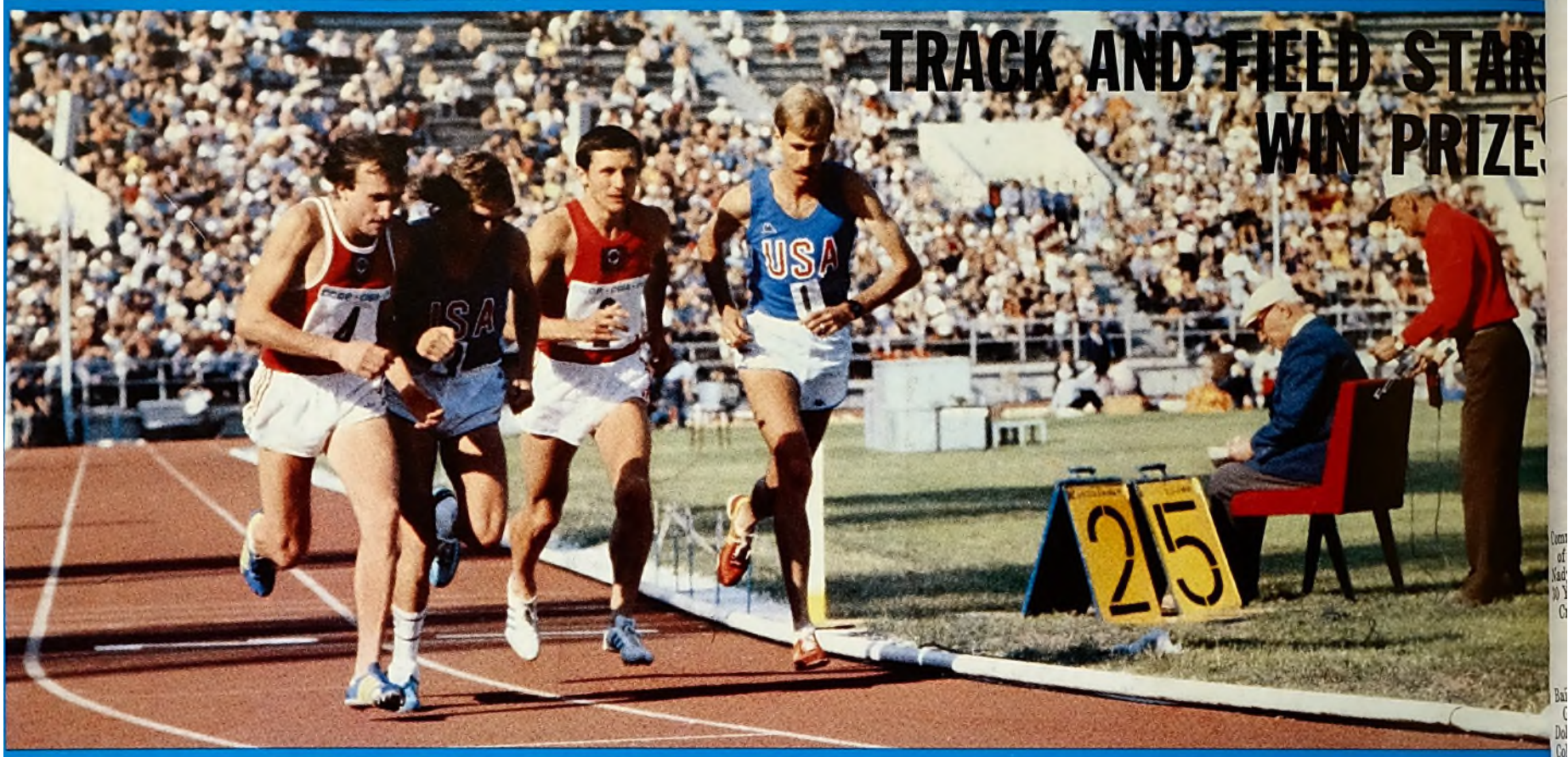
From the Hermitage

In our continuing series on this world-famous museum in Leningrad, art historian Yuri Kuznetsov analyzes two works by the Dutch master, *The Adoration of the Magi* and *Danaë.* The reader will be amazed to learn how much is revealed to restorers and scholars by X-rays.

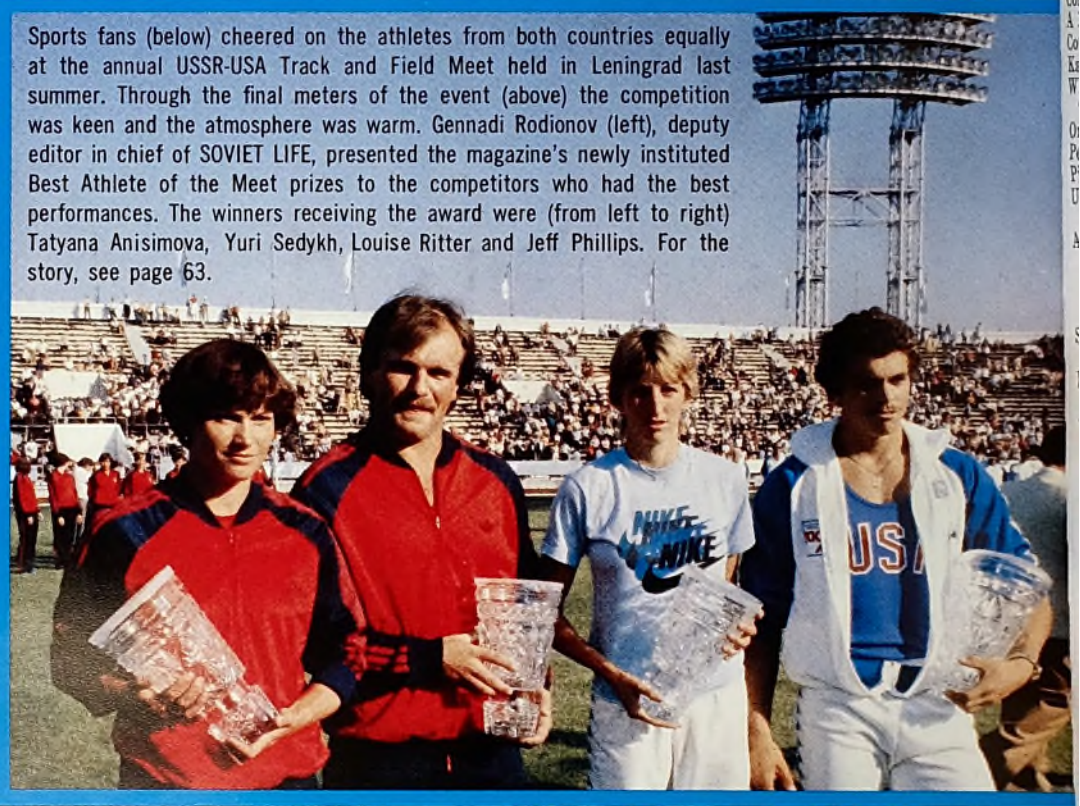
COMING SOON

A Series on the 60th Anniversary Of the Formation of the USSR

TRACK AND FIELD STAR
WIN PRIZE



Sports fans (below) cheered on the athletes from both countries equally at the annual USSR-USA Track and Field Meet held in Leningrad last summer. Through the final meters of the event (above) the competition was keen and the atmosphere was warm. Gennadi Rodionov (left), deputy editor in chief of SOVIET LIFE, presented the magazine's newly instituted Best Athlete of the Meet prizes to the competitors who had the best performances. The winners receiving the award were (from left to right) Tatyana Anisimova, Yuri Sedykh, Louise Ritter and Jeff Phillips. For the story, see page 63.



SOVIET LIFE

ILLUSTRATED MONTHLY

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