

SOCIAL SCIENCES

The Concept
of Developed Socialism

Topical Aspects
of African Development

History Periodisation
Criteria

On Reading Einstein

Structural Analysis
in the Humanities

Linguistics, Psychology,
Psycholinguistics

4

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QUESTIONNAIRE

Dear Reader,

The first issue of *Social Sciences* appeared in 1970.

Throughout the past decade the Editors have made every endeavour to take into account the many suggestions contained in your letters or made in response to our previous Questionnaire (*Social Sciences*, No. 3, 1976).

We would greatly appreciate your help in improving the journal by answering these questions.

1. *When did you become a reader? Are you a subscriber? Do you read the journal regularly or only separate issues? Do you get it from a library, or some other source?*

2. *What sections of the journal interest you most?*

- thematical selections of articles
- articles on specific subjects
- Developing Countries: New Researches
- Problems of War and Peace
- Discussions
- Dialogue
- Critical Studies and Comment
- Man and Nature
- The Youth and Society
- Views and Opinions
- Scientific Life
- Book Reviews
- Bibliography
- Glossary

3. *Would you prefer to have our glossaries published in pamphlet form? If so, would you like us to send you a copy?*

4. *What particular articles impressed you most?*

5. Which of the following interests you most?

- theoretical articles (point out the subject, please)
- economic analyses based on statistics (with tables)
- surveys of different regions
- others (specify, please)

6. What scientific problems should, in your opinion, be discussed, particularly in the thematic selections of articles?

7. What aspects of Soviet history and current developments would, in your opinion, command especial interest?

8. What is your opinion of the quality of translation, design and printing?

9. Did you read the collections put out by our Editorial Board (see p. 284)? What is your opinion of them? Any suggestions for future volumes? Would you advise thematic series on Latin America, Africa, Asia, developed socialism, history, economics, philosophy, other social sciences?

Any other comments and suggestions will be welcomed.

Everyone answering the Questionnaire will receive a full catalogue of our thematic collections for 1978-1980 in English.

Please address the Questionnaire with your answers to:

Social Sciences,
33/12 Arbat, Moscow 121002, USSR

Thank you in advance,

The Editors

To the Reader

This issue marks the 10th anniversary of our journal. The Editors have always heeded readers advice and suggestions and will continue to do so. That is the purpose of the questionnaire printed in this issue.

We open this issue with V. Medvedev's article on the essential characteristics of the concept of developed socialism—a topic suggested by readers.

Topical Aspects of African Development

Nearly twenty years have passed since the Year of Africa, when many countries of that continent won independence. An. Gromyko, Director of the Institute of African Studies, USSR Academy of Sciences, analyses the radical changes in Africa and how they influenced its social relations, politics, economics and culture. L. Goncharov deals with the export of capital from the imperialist to African countries. N. Kosukhin examines the evolution of the ideology of the revolutionary democrats and the reforms they have carried out in the socialist-oriented African countries. Soviet books on Africa, reviewed in this issue by Yu. Ilyin, I. Nikiforova and N. Okhotina, are indicative of the main trends in Soviet research in the social sciences.

Philosophy

M. Mchedlov analyses the theoretical content of the concept of civilisation, its methodological significance and functions, with special reference to the communist type of civilisation as a new social phenomenon. N. Avtonomova discusses the specificity of French structuralism and its place in the humanities.

The Methodology of History. Contemporary History

Academician E. Zhukov emphasises that the concept of historical epoch is closely connected with that of socio-economic formation and can therefore be used for a scientific periodisation of world history.

G. Astafyev examines the works of Soviet historians in which the historical, political and ideological roots of Maoism are revealed, and its present-day aggressive and warmongering role shown. The mass movements for peace, detente and disarmament, now a powerful factor in world politics, are the subject of O. Bykov's article.

Economics

Academician N. Fedorenko writes about the further improvement of the Soviet economic planning and management system in conditions of mature socialism.

Interdisciplinary Research

To mark the Einstein centenary, we publish an article by Corresponding Member of the USSR Academy of Sciences E. Feinberg on the works by the great physicist put out in Russian in the Soviet Union. R. Frumkina devotes her article to the specifics of psycholinguistics as a new branch of social science, and its treatment of language as a phenomenon of the psyche of the speaker. O. Yanitsky emphasises the importance of a comprehensive approach to the interaction between the towns, as social organisms, and nature.

The International Year of the Child

On the initiative of a number of progressive organisations, the United Nations proclaimed 1979 the International Year of the Child. A. Fedulova, Secretary of the Central Committee of the Young Communist League of the USSR, describes how Soviet society looks after its children and moulds a harmoniously developed generation.

This issue also carries reports of various international, regional, bilateral and all-Union scientific meetings and conferences; reviews of new books by Soviet social scientists; lists of thematic collections put out by our Editorial Board, etc.

Our issues for 1980 will, as usual, carry articles on the entire spectrum of the social sciences. The special and thematic sections will be devoted in:

Issue No. 1—Leninism and our time (in connection with the 110th anniversary of the birth of V. I. Lenin)

Issue No. 2—Physical culture and sports in contemporary society (for the XXII Olympics in Moscow)

Issue No. 3—the historical sciences in the USSR (for the Fifteenth International Congress of the Historical Sciences in Bucharest)

Issue No. 4—Soviet scientists on the problems of Siberia.

Soviet scientists like progressives in all countries of the world welcomed the signing of the SALT-2 Treaty in Vienna.

The next issues of our journal will carry special materials devoted to problems of peace and disarmament.

The Editors

The Marxist-Leninist Concept of Developed Socialism

VADIM MEDVEDEV

Marxism-Leninism reflects the objective regularities of social development and the vital interests of the working class and all working people. But if it is to be a reliable compass and instrument in the revolutionary refashioning of the world, Marxism-Leninism must constantly be enriched, developed and attuned to new situations, conditions and tasks. In this respect the second half of the 1960s and the 1970s have been exceedingly fruitful years. The decisions of the 23rd, 24th and 25th Party congresses and Central Committee plenums, the documents issued on the 50th and 60th anniversaries of the Great October Socialist Revolution, the 150th anniversary of the birth of Marx and the Lenin Centenary, the 50th anniversary of the proclamation of the Soviet Union, the new Soviet Constitution, the documents of the international Communist and workers' movement, the works of Leonid Brezhnev and other Party leaders contain profound conclusions concerning the present stage of social development. In their totality, they represent a new chapter in the theory of scientific communism, one that furnishes answers to all the urgent questions of our time.

The problems involved in perfecting the new system are central to the theoretical activities of the CPSU and other fraternal Parties of the socialist community. The integral theory on developed socialism evolved in these years is an outstanding achievement of creative Marxism. "The concept of an advanced socialist society, elaborated by the collective efforts of the CPSU and the fraternal Communist and Workers' Parties," the CC CPSU

says in its Resolution on the 60th Anniversary of the Great October Socialist Revolution, "is a great creative contribution to the treasure-house of Marxist-Leninist thought. On the basis of the theory and practice of advanced socialism the CPSU has charted a clear and realistic course for the immediate years ahead and over a longer historical period, and has specified the ways of fulfilling our programmatic objectives."

The concept of developed socialism is premised on the Marxist-Leninist teaching on the rise of the Communist socio-economic formation; it is based on the Lenin's propositions and methodology and generalisation of the vast experience of historical development.

It will be recalled that Marx, Engels and Lenin singled out three basic stages of society's development following the triumph of the socialist revolution: the transition period from capitalism to socialism, the first phase of communist society, and its highest phase. It is along these lines that Lenin examined the future of the state in Chapter 5 of his famous work, *The State and Revolution*, written on the eve of the October Revolution. Taking as his premise Marx's remarks, he writes in his preparatory materials:

"And so:

"1. 'long birth pangs'

"2. 'first phase of communist society'

"3. 'highest phase of communist society'".¹

One should note, in this context, the use of the concepts "socialism" and "communism" in Marxist literature at different times. In its day-to-day political struggle the working class for a long time used the term "socialism" to denote the future society, (without concretising the stages of its development) and the working-class political movement fighting for such a society. This also found expression in the names of political parties associated with that movement.

In April 1917, explaining the need to change the Party's name to "Communist", Lenin advanced this argument: "From capitalism mankind can pass directly only to socialism, i.e., to the social ownership of the means of production and the distribution of products according to the amount of work performed by each individual. Our Party looks farther ahead: socialism must inevitably evolve gradually into communism, upon the banner of which is inscribed the motto, 'From each according to his ability, to each according to his needs'".²

Subsequently, notably after the October Revolution, Lenin consistently, in every discussion on the country's future, clearly distinguished between the transition period to the new, communist society and two phases of its development, stressing that there was no blurring the borderline between them. In 1920, he wrote in his

"Left-Wing" Communism an Infantile Disorder: "We in Russia (in the third year since the overthrow of the bourgeoisie) are making the first steps in the transition from capitalism to socialism or the lower stage of communism."³

Attributing absolutely the same meaning to the formulas "transition period from capitalism to socialism" and "transition from capitalism to communism", Lenin believed it right and proper to use the term "communism" both for the communist formation as a whole and for its highest stage. "Communism," he maintained, "is the highest stage in the development of socialism, when people work because they realise the necessity of working for the common good."⁴

Time and again Lenin warned against premature concretisation of the specific forms and stages of the future socialism. In March 1918, speaking in the discussion of the Party Programme at the 7th Party Congress he said: "The bricks of which socialism will be composed have not yet been made. We cannot say anything further, and we should be as cautious and accurate as possible. In that and only in that will lie our Programme's power of attraction. But if we advance the slightest claim to something that we cannot give, the power of our Programme will be weakened."⁵

And though Lenin used such concepts as "advanced socialist society", "full socialism", "what socialism will be like when its completed forms are arrived at", "conclusively victorious and consolidated socialism",⁶ he saw socialism in its most general form, as consistent implementation of its fundamental principles. The picture that follows from Lenin's pronouncements on developed socialism is of a qualitatively stable society gradually and steadily growing over into communism.

And it was on the basis of these propositions by Lenin that the concept of developed socialism began to take shape in the 1960s. By that time our Party, which laid the foundations of socialism in the 1930s, had made tremendous headway in organising the country's life and work along socialist lines. Deep-going socialist transformations were carried out also in other countries.

The need arose to generalise this historical experience which, at the same time, shed light on the perspectives of socialist society, gave us a clear orientation for political, socio-economic and cultural development and for ideological work.

The question acquired an especial topicality in view of the spread of imprecise, often incorrect, views and theories about how the communist formation would come into being.

The Maoist leadership in China urged immediate and direct transition to communism, bypassing the socialist stage. This was meant to provide the Beijing leaders with a Marxist cover for their ambitious, great-power hegemonistic propensities. They even tried

to buttress their policy with quotations from Marx and Lenin, choosing texts in which the founders of Marxism-Leninism discussed the transition from capitalism to communism as a two-stage formation.

Attempts at a direct transition to communism in China—the “great leap”, “people’s communes”, etc.—failed dismally. For realities showed up the fallacy and voluntarist character of these Maoist theories. And though the present Chinese leadership has factually abandoned some of the more odious aspects of Maoism, it has retained its basic ideas and is using them to justify its claim that the sharpening class struggle dictates maintaining the dictatorship of the proletariat right up to the final victory of communism.

In the Maoist scheme of things there is no room for socialism as a law-governed stage of social development.

On the other hand, some Soviet writers treated socialism as a complete, relatively independent socio-economic formation, or as an independent mode of production within the communist formation. This tended to relegate to an indefinite future the transition to communism and the tasks this entailed. As a result of comradely discussion, this view, which was likewise at odds with the Marxist-Leninist proposition of two phases of communist society, was abandoned.

The creative Marxist concept of mature socialism defines the historic place of our present development stage and gives us a clear periodisation of communist society and its evolution to its highest stage. It proceeds from the premise that socialism is not a brief, passing moment, not something shortlived, but a relatively long stage of development with its own quantitative and qualitative features. On the other hand, developed socialism is a society which directly tackles and solves the problems of communist construction, i.e., creation of the material and technical basis of communism, formation of communist social relations and of the communist personality.

The conclusion that the USSR has built a developed socialist society is a continuation (based on our achievements in the 1960s and 1970s) of the earlier conclusion that socialism’s victory was complete and final and that the next job was all-out building of communism. This was first formulated by Leonid Brezhnev in his report “Fifty Years of Great Achievements of Socialism” (1967) and confirmed by the 24th and 25th CPSU congresses. The Central Committee report to the latter congress emphasised that Soviet Communists “have always started from the premise that a developed socialist society has been built in our country and is gradually growing into a communist society”.⁷ The Congresses of the Communist and Workers’ Parties of Bulgaria, Czechoslovakia,

the GDR, Hungary, Poland and Rumania have likewise set their sights on building developed socialist society in their countries.

The theory of developed socialism has been comprehensively substantiated in the works by Leonid Brezhnev relating to the new USSR Constitution and the 60th Anniversary of the Great October Socialist Revolution and also in the works of other CPSU leaders. A weighty contribution to its elaboration was made by leaders of the fraternal parties. Speaking at the 11th Congress of the Hungarian Socialist Workers' Party, Leonid Brezhnev noted the vast importance of the collective formulation by the fraternal parties, on the basis of joint experience, of a programme for building developed socialism which is now being implemented in the majority of socialist countries with due account of the individual features of each of them.⁸

The concept of developed socialism includes its definition from the standpoint of the productive forces and interconnection with the scientific and technological revolution, production relations and social structure, political system, ideology and morality, and personality moulding. These definitions form an integral system of quantitative and qualitative characteristics based on certain common methodological criteria and principles.

The starting point, and most general criterion, of developed socialism is that the socialist system has its own basis, its own determinative impact on progress in all the chief areas of social life. Developed socialism "is a degree, a stage in the maturing of the new society reached when the repatterning of the totality of social relations on the collectivist principles intrinsically inherent in socialism is completed".⁹ In the words of Mikhail Suslov, developed socialism "is the fullest embodiment of the social and historical essence of the new social system, its fundamental superiority over capitalism".¹⁰

Socialism's own foundation primarily implies a corresponding material and technical basis. Its upbuilding is a long and complex process. In developing large-scale industry and accentuating its social character, capitalism only creates the material prerequisites for the social restructuring of society; it cannot provide socialism with a ready-made material and technical base. That requires devoted organisational and economic effort, using all the advantages of planned socialist production.

The volume of work this entails is, of course, not the same in all countries. It depends largely on the economic potential inherited from capitalism. Our own country had to make truly herculean efforts to wipe out its technical and economic backwardness. The task of building the economic and material base of developed socialism had to be accomplished after the foundations of the new system had been laid.

But thanks to the advantages of socialism and the dedicated labour of the Soviet people, this was accomplished in a historical minimal span. In countries where the transition to the new system will be made from highly developed capitalism, building the material and technical basis of socialism will be much easier, though even here it will take time.

We should bear in mind that the criteria of the material and technical basis of socialism cannot be fixed once and for all. They have to accord with the rising level of science and technology, the higher requirements of the population, and so on. What is necessary and adequate for developed socialism today can well prove inadequate tomorrow.

The present requirements, for instance, are inseparably linked, with wide use of the achievements of the scientific and technological revolution. (Of course, this applies to its initial-stage achievements which already stand out with sufficient clarity. As for its future achievements, they relate to the material and technical base of the highest phase of communism.)

This means that socialist countries must from the outset maintain their production (and also non-production) branches at a high technological level, constantly renewing equipment in line with new advances in science and technology. "In its economic policy, the CPSU is consistently guided by the understanding that the process of socialist reproduction must be conducted on a new, higher technical level, with assimilation of all the gains of Soviet and world science."¹¹ Countries that are only setting foot on the socialist path should from the very outset orient themselves on modern production techniques and step by step, with account of realistic possibilities and conditions, modernise their economies.

The building and development of socialism's material and technical base in close connection with the scientific and technological revolution puts social production on a qualitatively higher level—more intensive economic, organisational and technical contacts, differentiation and integration influencing the entire economy. The powerful development of the production of infrastructure is at one and the same time an indicator and factor of the singleness of the national economic organism. More importance attaches to the territorial organisation of production. And alongside material factors, the workforce, its employment and reproduction acquire a deeper and more clearly-expressed social character. Lastly, natural resources are increasingly drawn into the social process and there gradually takes shape a single reproductive ecological and economic system.

Developed socialism's powerful material and technical basis is largely responsible for the existence also of its "own basis" in economic relations. Direct social production, based as it is on

public, primarily the whole people's ownership of the means of production, is further developed. Public ownership becomes more mature: collective-farm property, in its essential features, constantly approaches the property of the whole people.

Public ownership instituted already at the early stages of the revolution gives production—and for that all areas of human activity—an entirely new meaning, purpose and direction. The aim is to facilitate the development of man, more fully satisfy his constantly rising and higher-standard requirements. In line with this principle, even in the dire years of economic dislocation caused by the imperialist and civil wars, bourgeois sabotage, the blockade, etc., the Soviet Government was the first in the world to give its people such vital material and social benefits as the eight-hour working day, paid holidays, free education and medical care. And in later years, too, the people's interests were the focal point of Soviet policy, and the growth of their requirements was, in effect, the chief production stimulator. In this we have a cogent expression of the operation of socialism's basic economic law, although satisfaction of requirements was at certain times very limited owing to inadequate material and technical facilities base. A considerable part of our economic resources went into building for the future, and this not to mention the colossal effort invested in defending the country and rehabilitating its economy.

The situation has changed substantially under developed socialism. The country can now afford more fully and comprehensively to satisfy the requirements of the working people and work out an optimal pattern of current and future requirements and of consumption and accumulation. The conditions are thus created for a more profound, consistent and multiform operation of the basic economic law of socialism. Accordingly the economic development plans of the Ninth and present Tenth Five-Year Plan periods are focused on higher living standards. The 25th Congress of the CPSU re-affirmed that the uninterrupted rise of the people's material and cultural standards was the supreme aim of the Party's economic strategy.

The turn to fuller satisfaction of the people's requirements at the stage of developed socialism necessitates assigning a greater role to intensive factors of economic growth. The 25th Congress of the CPSU pointed out that in coping with the economic and social tasks facing the country, "there is no other way than that of promoting the *rapid growth of labour productivity and achieving a steep rise of efficiency in all areas of social production*".¹²

Developed socialism's own economic foundation implies also a greater accent on planned and balanced social reproduction. More is required in terms of balanced development of individual industries and territorial economic units. "Today, when the

volume of output is measured in hundreds of thousands of millions of rubles and when the economic interrelations have become much more complex, the planning organs should take the necessary steps to concentrate the resources on the key problems of economic development, to overcome certain disproportions and to make the plans more balanced." ¹³ Society can no longer afford to run far ahead in some sectors while others lag behind for a long time. This, however, does not rule out but rather presupposes proper ordering of priorities.

The problem of combining balanced economic development with priority projects is especially important and especially complex, considering the evident dynamism of the Soviet economy. The Soviet Union's economic potential has practically doubled in the past decade and real per capita incomes are doubled approximately every 15 years. Behind these figures are deep-going qualitative changes in production and personal consumption, changes in the very way of life. And all such changes must be foreseen and timely incorporated in the plan so as to steadily, step by step, meet these needs while at the same time keeping the economy in balance.

Developed socialism offers optimal conditions for combining centralised management with independence for economic units, industries and regions within the framework of state ownership and centralised management. The degree of independence differs at different stages of socialist construction, different levels of the socialisation of production, specific conditions and factors. During the Civil War and foreign military intervention there was practically no economic independence. After that, under the New Economic Policy, when state-run trusts and factories were put on cost accounting, the independence factor acquired more importance. During the industrialisation drive, which required maximum concentration on crucial sectors of the economy, we again had to restrict independence and cost-accounting very often became more or less a formality.

Under developed socialism the growth of social production changes the nature of the primary economic unit. Today it is the production association. Besides we are forming inter-industry complexes at all levels, from local to national. This, enhances the importance of centralised economic management, which corresponds to the nature of the property of the whole people, and to the social character of socialist production. But we are retaining, and in some respects even increasing the relative independence in using the means of production and material and financial resources belonging to the whole people. Given competent management, which presupposes a correct understanding and

application of the democratic centralism principle, independence can act as an additional production stimulator.

The economy, and especially material production, is the foundation of mature socialist society. Economic progress determines, in the final analysis, the development and perfection of any social system. Under socialism, too, economic relations between men are part of the economic basis. But in relation to society as a whole, the economic system, including material production, is but a subsystem, albeit the chief one. While emphasising the decisive importance of the economic basis, Lenin warned against underestimating other aspects of socialist society. "While being based on economics, socialism cannot be reduced to economics alone," he wrote.¹⁴

Developed socialism has its corresponding social, spiritual, ideological and political systems.

The social system that has evolved in the Soviet Union through the coming together of labouring classes and social groups, has gradually eliminated the class and social distinctions. The result has been the formation of a durable, indestructible alliance of the working class, the collective-farm peasantry and intelligentsia, an alliance of everyone engaged in mental or manual labour. To this should be added, that the community of their interests, their socio-political outlook, ideology—a community in which working class influence prevails—is far stronger than their remaining differences. There have been deep-going changes also in relations between nationalities. The allround development and closer relationship of nations and nationalities have resulted in actual economic and cultural equality, closer unity and the emergence of a new social and international community, the Soviet people.

The spiritual-ideological system includes institutions of education, science, culture, propaganda and agitation, the mass media run by the state or public organisations. It performs exceptionally important functions in meeting the requirements of the members of socialist society and in resolving the historic task of assuring the allround development of the personality. Characteristic of developed socialism is assimilation of the scientific Marxist-Leninist world outlook, a high level of education and culture, political consciousness and high moral standards.

The political system of developed socialism includes the socialist state of the whole people, with all its legislative and executive organs, the various forms of direct and representative democracy, an extensive network of public organisations, and work collectives as the nuclei of society. The leading and guiding force of Soviet society and the nucleus of its political system is the Communist Party. While remaining, by its very nature, a

working-class party, it has become the vanguard of the whole people.

Under mature socialism, the disparity between different aspects of social life carried over from earlier stages, for instance, advanced political structure and backward economy, inadequate level of consciousness, etc., are gradually overcome. In fact, they have been brought so closely together (though possible contradictions should not be ruled out), that we can speak of a new qualitative state of society, of the completeness of socialism's social system.

At a certain stage of development, Marx wrote, society becomes an organic system. The preconditions for its development towards integrity, Marx remarks, consist in subordinating to itself all the elements of society or creating the elements it still lacks. In this way, in the course of historical development, the system becomes an integral whole.¹⁵ That is the decisive factor of developed socialism—the various elements and aspects of social life are integrated and brought into closer interaction.

Developed socialism makes for closer interaction between the economic, socio-political and spiritual-ideological factors, assigning the latter a bigger role in social progress. It is no accident, for instance, that social relations are regarded as a large and relatively independent area of public life, and that social policy constitutes a major part in the Communist Party policy. Social matters are increasingly becoming the object of conscious management and planning. The new Constitution of the USSR defines the social basis of the Soviet state in context with the political and economic systems of developed socialism. State development plans cover both economic and social affairs. The decisions of the 24th and 25th Congresses of the CPSU and other Party documents emphasise the growing importance of the spiritual factor—consciousness, education and cultural level, moral image, active involvement and participation in running social affairs.

Hence the need for a comprehensive approach to the management of society as a whole and its various branches. This permeates Party policy and practical activity in directing social processes.

There is no overestimating importance of such an approach. It enables us to foresee the immediate and long-range consequences of decisions in the given and kindred areas and avoid negative consequences which, naturally, would adversely react on the situation as a whole and hold back the pace of social progress. To take one example: excessive emphasis on administrative methods and failure to take into account the social and ideological aspects of management can breed bureaucratic tendencies. Ignoring or underestimating socio-political and ideological aspects of economic

management can lead to a technocratic approach. Failure to tie-up ideological and propaganda work with concrete socio-economic problems and the level of mass consciousness is fraught with the danger of turning propaganda into political bombast and parade drum-drill.

The most important element in considering interaction of the various spheres of social endeavour is the political approach to management. And in this context we cannot but recall Lenin's formula of the correlation of politics and economics. "Politics must take precedence over economics. To argue otherwise is to forget the ABC of Marxism", Lenin said in his polemic with Bukharin.¹⁶ And Lenin warned against underestimating the political approach and contrasting it to the economic approach. "...Without a correct political approach to the matter the given class will be unable to stay on top and, consequently, will be incapable of solving its production problem either."¹⁷

Lenin's proposition on the precedence of politics over economics and the need for a political approach, retains all its validity under developed socialism. Furthermore, a political approach is essential not only in economic management, but also in every other sphere of social life. Of course, this has nothing in common with the Maoist thesis: "politics is the commanding force", which in China was used to cover and justify extreme subjectivism. In the Marxist understanding, politics is the concentrated expression of economics and reflects the vital requirements and aims of social development.

Under socialism, management of the affairs of society, in whatever area, is essentially political. For as long as there are classes and, consequently, the problem of their interaction; as long as class struggle and class relations have not vanished from the international scene—in other words, as long as the causes that necessitate political leadership of society are still operative, the management of all social affairs is bound to be of a political character. That is precisely why we speak of economic, social, agrarian, etc., politics.

The programme for allround agricultural progress worked out by the July 1978 CPSU Central Committee Plenary Meeting is a clear example of the socio-political orientation of economic management. For the programme is a comprehensive one, designed to solve the country's food and raw-material problems and also advance socio-political and cultural progress in the rural areas.

The political character of management is assured primarily by the Communist Party and implemented under its leadership. All the fabrications of hostile ideologists notwithstanding, Party guidance of society, far from negating, presupposes maximum

activity by all state and public organisations and maximum involvement of the working people, plus promotion and extension of socialist democracy. Party leadership is the most reliable and essential guarantee against bureaucratic and technocratic tendencies that hamstring the democratic initiative of the masses. Party leadership is the earnest of true democracy and effective exercise of the people's rights and freedoms.

The organic integrity of developed socialism is, at the same time, the integrity of the first stage of the Communist formation. Hence, this unique feature of the system: it contains elements of social relations differing from each other in genesis and historical duration. This has to be taken into account in the practical work of building communism.

The essence of mature socialism is best expressed in the basic communist principles of the new society—the dominance of public property and relations of cooperation and mutual assistance; development geared to the material and spiritual requirements of the people; mass participation in the conscious guidance of the main social processes—in short, all the things that make socialism the first stage of the communist formation and direct its development towards its highest phase.

The continued development of socialism and its growing over into communism demands, above all, promoting and strengthening the communist features of socialism in all areas of public life.

Social relations under mature socialism are those of the first stage of communism. This entails, primarily, distribution according to the quality and quantity of one's work. This is expressive of the different relations of members of society to the means of production which are the property of the whole people, a fact that precludes converting labour power into a commodity.

Communist construction presupposes consistent implementation of distribution according to one's work, but in combination with expansion of social consumption funds. Differences in material position can be eliminated only through a steep rise in labour productivity. Solution lies not in evening-out distribution but in gradually raising skill standards of each member of society through consistent differentiation of payment according to work, with the help of social consumption funds and certain other measures.

Lastly, developed socialism employs some of the old economic forms whose origin is in no way connected with communism as a whole or its socialist stage. Reference is to commodity-money relations, which belong to several past modes of production. But commodity-money relations change, as do their place and role in the production system. Thus, in the transition to capitalism, though the general form of commodity-money relations, i.e.,

equivalent exchange, remained, the private-property laws of simple commodity production were no longer based on personal labour, but on capitalist appropriation of the unpaid remuneration of the hired labourer.

In socialist society, commodity-money relations acquire a new, socialist content. In particular, they serve as a link between producing units associated with each other through public property (notably that of the whole people) which rules out the appropriation of unpaid labour, competition and production anarchy.

But this does not mean that commodity-money relations have lost their specificity and have been transformed into their opposite, non-commodity and direct social relations, which would be tantamount to their disappearance altogether. For the time being they retain certain features inherited from the past. For to a large extent we are dealing with relations between organisationally (and often also economically) isolated producers exchanging their products through the market. In this capacity, commodity-money relations, though they do not determine the nature of socialist production, which is social in its basic essentials, are a necessary element of the socialist economic system.

At the present stage of communist construction it is important (within the framework outlined above) to make full use of commodity-money relations to make production more effective. And there are ample opportunities for that. But in the long range, with the growth of social labour, and when independence of economic units no longer plays a positive role, as expressed in partial appropriation of the results of production, commodity-money relations will become superfluous. Nor need anyone question the forecast of the founders of Marxism-Leninism that commodity production will inevitably wither away.

The theoretical model of socialism and its operating mechanism cannot be correctly envisaged without due account of the organic integrity of all its relationships, and, also, of their genealogical differences.

The concept of developed socialism created by the CPSU and other fraternal parties is a definite contribution to scientific communism. By having built a society of developed socialism and ensuring its allround perfection, the Soviet Union is confidently blazing the trail into the future.

NOTES

¹ V. I. Lenin, *Complete Works*, Moscow, Vol. 33, p. 185 (in Russian).

² V. I. Lenin, *Collected Works*, Moscow, Vol. 24, pp. 84-85.

³ *Ibid.*, Vol. 31, p. 44.

- ⁴ Ibid., Vol., 30, p. 202.
- ⁵ Ibid., Vol. 27, p. 148.
- ⁶ Ibid., Vol. 30, p. 331; Vol. 32, p. 372; Vol. 27, p. 147; Vol. 22, p. 144.
- ⁷ L. I. Brezhnev, *Report of the Central Committee and the Immediate Tasks of the Party in Home and Foreign Policy. 25th Congress of the CPSU*, Moscow, 1976, p. 96.
- ⁸ *Moscow News*, No. 12, 1975, p. 3.
- ⁹ L. I. Brezhnev, *A Historic Stage on the Road to Communism*, Moscow, 1977, p. 12.
- ¹⁰ M. A. Suslov, *Building Communism. Speeches and Articles*, Moscow, 1977, Vol. 2, p. 352 (in Russian).
- ¹¹ A. P. Kirilenko, *Selected Speeches and Articles*, Moscow, 1976, p. 415 (in Russian).
- ¹² L. I. Brezhnev, *Report of the Central Committee...*, p. 52.
- ¹³ A. N. Kosygin, "The Creative Force of the Great Ideas of the October Revolution", *Pravda*, November 5, 1978.
- ¹⁴ V. I. Lenin, *Collected Works*, Vol. 22, p. 325.
- ¹⁵ K. Marx, *Grundrisse der Kritik der politischen Okonomie (Rohentwurf), 1857-1858*, Berlin, 1953, p. 189.
- ¹⁶ V. I. Lenin, *Collected Works*, Vol. 32, p. 83.
- ¹⁷ Ibid., p. 84.

Topical Aspects of African Development

The Present Stage of the Anti-Imperialist Struggle in Africa

ANATOLY GROMYKO

Over the last decade Africa has undergone deep-going internal changes which affected its social relations, politics, economy and spiritual culture. Forty-nine independent states emerged from the ruins of colonial possessions.

The liberation movement in Africa has been developing according to the same general laws that operate in other parts of the world. Of course local conditions make the manifestations of these general laws highly peculiar, but their essence remains the same. Thus, against a background of comparatively immature social communities and a multiplicity of underdeveloped economic structures inherited from colonialism, states have emerged where scientific socialism is declared to be the official ideology.

As the class struggle intensifies, ideological demarcation in the independent African states deepens. Right-wing political forces often gravitate towards pro-imperialist positions, while the Left forces come closer to scientific socialism. The spread and entrenchment of the socialist world outlook in Africa undoubtedly mark the beginning of a new, higher stage in the development of the African revolution.

The present international situation is characterised by increasing orientation towards socialism. This positive process has become possible owing to the growing consciousness of the peoples in the developing countries, and to the support they receive from the socialist countries.

Now the socialist system exerts decisive influence on the world development as a whole. The radical change in the balance of

forces in the international arena in favour of the struggle for national independence has created auspicious conditions for the deepening of the revolutionary process in Africa.

The experience of the October Revolution of 1917 in Russia has shown that scientific socialism is the only theory which, when applied, makes it possible to carry out truly profound revolutionary changes aimed at bringing about a radical improvement of the conditions of all working people.

The Great October Socialist Revolution had a powerful impact on the unfolding of the national liberation struggle in the colonial and semi-colonial countries. The world knows of such historic documents of the Soviet Government, prepared by Lenin personally or with his direct participation, as the Decree on Peace and the Declaration of the Rights of the Peoples of Russia, the appeal "To All Working Moslems of Russia and the East". For the first time in the history of mankind they proclaimed genuinely democratic standards of international relations and denounced colonialism. The Decree on Peace, for example, raised the question of liberating all enslaved nations and recognised as legitimate all forms of national liberation struggle. The Declaration of the Rights of the Peoples of Russia stated that all nations are equal and sovereign, and emphasised their rights to self-determination and to set up independent states.

Thus, already at the dawn of its existence the young Republic of Soviets proclaimed its support for the peoples of the colonial and semi-colonial countries in their just struggle for national independence. This has become one of the basic principles of Soviet foreign policy.

* * *

The 1970s are marked by a historic turn towards relaxation of international tension.

Under the present conditions detente has become a factor which determines the world development. This is a process which embraces interstate relations; it implies recognition by all states of the principle of peaceful coexistence, and overcoming of mutual distrust and suspicion in international relations.

At the same time, detente has nothing in common with any artificial preservation of a social status quo. It proceeds from the objective content of the historic process, from inevitability of the struggle for elimination of inequality and exploitation, for recognition of the right of every people to choose, at its own discretion, the path of political, economic and social development.

Detente is inseparable from the struggle for peace and international security; it accords with the basic interests of all peoples, including those still dominated by racist and colonialist regimes. The enhancement of detente presupposes further efforts to eliminate the existing hotbeds of tension and prevent the rise of new ones.

In conditions of detente, with universal recognition of the principle of peaceful coexistence of states with different social systems, imperialism finds it much more difficult to interfere in the internal affairs of the developing countries, especially by means of military force.

By creating favourable conditions for consolidating the sovereignty of the developing countries, detente enables them to find new ways of waging the anti-imperialist struggle, carrying out national construction and accomplishing progressive socio-economic reforms.

The materialisation of detente presupposes practical steps towards universal disarmament. It is difficult to overestimate the real benefits that disarmament could bring to the developing countries, including those of Africa. The world's annual military spending today has been put at more than 350,000 million dollars. The realisation of disarmament would make it possible to use part of this astronomical sum, and of other material resources thus released, to boost the economy of the developing countries and combat the poverty and backwardness prevailing there.

African statesmen are generally aware of their peoples' vital interest in detente. This is testified, in particular, by the very active participation of their representatives in the debates on detente at the United Nations' 33rd General Assembly. With their unanimous approval and support the General Assembly adopted the Declaration on the Deepening and Consolidation of International Detente, based on the Soviet draft of the respective document.

* * *

Africa today is at the same time a rich and a poor continent. It is rich, first and foremost, in valuable minerals: phosphorites, chromites, titanium, tantalum and bauxites, as well as copper, manganic, cobaltic and uranic ores, etc. But up till now nearly all the raw materials extracted there are exported to the industrial capitalist countries. As to the building of an industrial base in the African countries themselves, this process, with very few exceptions, is only beginning. Characteristic of the economy of the African countries are a poor economic infrastructure and highly

limited domestic markets. In addition, it suffers from the fluctuation of world prices and instability of agricultural production.

The independent African states are faced with the complex tasks of developing their economy and transport network, of diversifying their exports and finding stable markets for them.

Many of the African countries are still facing the employment problem. The primary cause of this is the monstrous colonial deformation of social production. In a number of countries this problem is aggravated by an ever increasing work-force stemming from a rapid population growth and by sharp reductions in the number of jobs effected by scientific and technological progress. The potential manpower resources of Africa, whose population, according to UNESCO, exceeds 400 million today, are vast. And if we take Africa's rather acute food problem into account, we can visualise the dimensions of the socio-economic problems confronting the African states.

Bourgeois propaganda has been trying to convince the Africans that the best way of solving their problems is to maintain allround cooperation with the capitalist monopolies. The deplorable results of such cooperation can be seen from the example of Zaire.

As is known, in the early 1960s, the United States and other NATO countries went out of their way to retain Zaire in the orbit of neocolonialist development. As a result, Zaire, as Western experts admit, is now on the brink of an economic collapse: its debts to the West at the end of 1977 amounted to nearly 4,000 million dollars; the price index was 80 per cent higher than in 1976; more than 70 per cent of Zaire's budget is spent on maintaining the state apparatus, the armed forces and punitive bodies. Popular indignation in that country is so overwhelming that the government is losing control over the country and even has to keep foreign bodyguards.

The situation in Zaire is an example of the fact that neocolonialism brings the African countries a further aggravation of the problems caused by their colonial past. Local capital in Africa, as a rule, is incapable of withstanding competition of foreign monopolies and grows mainly in the hothouse of state protectionism or as a junior partner subordinated to foreign monopoly capital—a factor that helps to preserve economic dependence. Capitalism has demonstrated its complete inability to solve Africa's most acute problem—backwardness.

Under the social set-ups prevailing today in the majority of African countries, they will be able to double their per capita gross national product (which is 10 to 12 times smaller than in the developed countries) not earlier than at the beginning of the 22nd century, and to reach the present level of the former metropolitan

countries only in the middle of the 23rd century. This is not surprising, considering that only in nine African countries real per capita income went up in the last 15 years, while in 14 African countries it went down.

From 1967 to 1975 direct foreign investments in the African countries (excluding the Republic of South Africa) rose from 6,600 million to 11,100 million dollars—an increase of 1.7 times.¹ Preference was given, as a rule, to countries rich in oil and other valuable resources (Nigeria, Gabon, Zaire, etc.), and to states which had taken the course of stimulating capitalist relations and partnership with foreign capital (Ivory Coast, Kenya, Senegal).

Another notable fact: the average rate of profit on the US monopolies' investments in Africa is about 50 per cent higher than elsewhere in the world.

The aid the West grants the African countries ordinarily serves political purposes. It does not usually serve to develop the productive forces, and is calculated in such a way that once the receiver has spent the aid, it will have to ask for more. As a result, the financial dependence of many young African states on the former metropolitan countries has been growing. According to official figures, the debts of 45 countries of Africa reached 31,600 million dollars in late 1975, and payments made in the same year to liquidate them amounted to 4,100 million dollars, which makes up 12 per cent of the value of their annual exports.

Of the 29 countries classified by the United Nations as the least developed economically, 17 are in Africa. In the 1970s, Africa's food crisis too became visibly more acute. In most African countries the output of foodstuffs is too small to provide even a minimum food ration. As a result, every fourth indigenous African is either starving or undernourished; the average lifespan of the Africans is about 45 years.

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The young developing states cannot consolidate their political independence unless they build up their national economies. In this endeavour many African states, especially the socialist-oriented ones, have already achieved certain successes. But life does not allow them to be content with what has been achieved. The task of abolishing the still existing unequal economic relations, which make the developing countries dependent on the main imperialist powers, dictates the need for the African peoples and the world's progressive forces further to mobilise efforts to reshape these relations.

In this connection the question of a "new international

economic order" has lately acquired special importance for the independent states of Africa. Its establishment would facilitate the solution of, among others, these vital problems of Africa: closing the gap in levels and rates of economic development between the developing and the industrial countries; real exercising by every nation of its sovereign right to take full charge of its national wealth; establishment of a just relationship between the prices of raw materials and agricultural produce, on the one hand, and the prices of industrial goods, on the other; extensive development of trade relations without artificial barriers or discrimination.

* * *

Africa now has more than ten socialist-oriented countries, including Algeria, Angola, Guinea, Mozambique, the People's Republic of the Congo, Tanzania, Ethiopia and Benin. They account for 30 per cent of the continent's territory and for nearly 25 per cent of its population.

In Angola, Mozambique, Ethiopia, Benin and the People's Republic of the Congo, scientific socialism has been declared to be the basis for ideological and economic activities. It can be said that in these and some other countries, despite numerous difficulties, revolutionary democracy is coming closer and closer to the ideology of Marxism-Leninism. The working people at large are involved in the management of production and in state administration. In this way the social basis on which state power stands is being broadened.

The economic policy of the revolutionary democrats is increasingly manifesting the influence exerted on it by scientific socialism and by the practice of building the new society in the socialist countries. In practical work to overcome economic dependence on the world capitalist system, the socialist-oriented states increasingly resort to scientific planning. A state economic sector is being built on the basis of nationalised and new enterprises, and cooperative societies and state farms are being organised. An offensive on the positions of private capital is being launched and the question of land is being solved. Of significant importance in all these undertakings are external factors, above all the extent of economic cooperation with the socialist states.

Progressive social reforms are an important component of the revolutionary process in the socialist-oriented countries. The principle of equality of nations and ethnic groups is being consistently implemented there. Extensive educational work is being carried on to combat local nationalism and tribalism. Social measures are being carried out to settle inter-nationality conflicts.

In Guinea, Benin and Ethiopia tremendous work is being done to Africanise study programmes and create written languages for nationalities which do not have them. Newspapers and periodicals are published, and radio programmes are broadcasted in national languages. Efforts are being made to eliminate these grim consequences of colonialism: unemployment, disease and illiteracy; the living conditions of the mass of the people are being improved.

Radical measures are being taken to reorganise the system of education and train national skilled personnel. In Algeria, for example, universal education for children is to be introduced in 1978-1980, in Tanzania, towards 1989. The African countries already have many thousands of specialists who graduated in the USSR and other socialist countries.

Thus, the results of the socialist-oriented countries' development show that, on the whole, the positions of revolutionary-democratic forces there have been consolidated, progressive changes in the economies are under way, possibilities for strengthening the alliance of proletariat and peasantry are opening wider, prerequisites for uniting the working people to fight for democracy and progress are being created, and the role of the working class in the struggle for social liberation becomes more significant.

Experience has shown that socialist orientation is striking deeper and deeper roots, and makes it possible to solve a whole series of problems, both internal and external. It has become an objective reality in the world revolutionary process and offers, in my opinion, the most favourable prospects for a rapid progress of the African peoples.

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An important feature of the revolutionary process in the developing countries is the broadening of its social base and the growing role of the working class. Experience has shown that as national-democratic revolutions unfold and socio-economic reforms become more and more radical in the liberated countries, there takes place "a complicated process of class differentiation ...with the class struggle gaining in intensity".² Various social strata and political groups, including a section of the national bourgeoisie, move away from the national front and enter into alliance with local and foreign reaction, and oppose the course towards socialist orientation. This seems to narrow the basis of the revolution. But at the same time, the struggle for social transformations, for preservation of the gains of socialist orientation, is joined by new social forces, primarily by working people in

town and country who had hitherto been taking no active part, or no part at all, in political struggles.

A similar process is taking place in countries of capitalist orientation. The only difference is that here it is a national liberation revolution that is unfolding, and it is developing into a national-democratic one. Since on the agenda of these countries are general democratic, anti-imperialist reforms, the national bourgeoisie as a class continues to take an active part in the national patriotic front, which is abandoned by a few groups only. The process of working people joining political struggles takes place here too, though more slowly than in socialist-oriented countries.

Thus, as a result of the deepening of class differentiation and of the aggravation of the class struggle in Africa, "new generations and social strata, new parties and organisations are joining the revolutionary process".⁵ Events in Africa have borne out this prediction of Lenin's: "As man's history-making activity grows broader and deeper, the size of that mass of the population which is the conscious maker of history is bound to increase."⁴

Over the years of independence the working class in Africa has grown numerically and particularly qualitatively. The number of African proletarians is reaching the 20-million mark. Although the existence of an enormous number of small business is characteristic of the continent, the bulk of the workers are concentrated at the few big plants and mines. The proportion of industrial workers in the total mass of wage labour has increased. All this makes for a more significant role of the African proletariat in the revolutionary process.

Being more interested than the other classes in ending capitalist exploitation, the working class in the socialist-oriented countries actively supports progressive reforms, although so far it has not everywhere become the main support of the progressive regimes. In countries of capitalist orientation, the working class is waging an active struggle for radical socio-economic transformations, the democratisation of social life and transition to the road of non-capitalist development. The advanced revolutionary ideology of the working class is exerting an ever greater influence on the trend and pattern of development of the social processes in Africa.

The growing influence of the working class and its ideology makes it possible in many countries to resolve in a new way the question of political guidance of the revolutionary process. As is known, in most socialist-oriented countries the function of supervising progressive reforms continues to be successfully performed by national-democratic governments and revolutionary-democratic parties of the national-front type. In some countries,

however, this supervision has certain shortcomings (poor party and state discipline, growing bureaucracy, inadequate contact with the masses, administration replacing party guidance, etc.). Because of this, in a number of countries which have embarked on progressive social changes attempts were made to use the system of a People's Democracy (already tried and tested in some countries of Eastern Europe and Asia), i.e., a state in which, unlike a national-democratic one, bourgeois elements have been ousted from the administration of the country, and power is in the hands of the working class and all working people, their parties being guided by the principles of scientific socialism. People's Democratic states are being built in, for example, Mozambique and Angola.

The more usual process is the setting up of vanguard revolutionary-democratic parties, or the reorganisation into such parties of existing revolutionary-democratic parties of the national-front type.

The vanguard revolutionary-democratic parties set up in a number of African countries are not Communist Parties, but they are characterised by a growing role of the working class, working people in them, a more clear-cut ideology (scientific socialism), trained cadres, high party discipline, expanding and stable ties with the international working-class and communist movement, etc.).

The specific features of the world revolutionary process and the trends of its development on the African continent show that the conditions for the furtherance of the liberation struggle there are becoming more and more favourable.

* * *

It would be a serious mistake in assessing the positive revolutionary changes in Africa to underestimate those forces which are still trying to change the course of history. In this connection it seems appropriate to make note of some new features that are appearing in the strategy and tactics of imperialism and reaction in Africa.

Africa remains a scene of tense struggle between the forces of national liberation and progress, on the one hand, and the forces of imperialism and reaction, on the other. The struggle is a continuous one; it takes on a variety of forms and often develops into armed conflicts, which break out now and then in different parts of the continent. The imperialists would not quit Africa voluntarily; they resort to all possible means to retain their positions there and keep as many African countries as possible inside the orbit of their domination. This is the essence of imperialist strategy in regard to all developing countries, a strategy

that has remained unchanged ever since the process of decolonisation assumed a global character, ever since independent states began to emerge in place of the crumbling colonies.

While the basic aims pursued by imperialism in Africa have remained the same, the ways and means by which it tries to attain them undergo significant changes.

A number of recent events have shown that imperialism's "modernised" policy in Africa involves mostly such intrigues as the kindling of inter-tribal, national and inter-state hostility; vigorous encouragement of separatist, chauvinist and expansionist ideas and movements; provocation of border conflicts; support of reactionary governments; destabilisation of progressive regimes; and the drawing of African states into aggressive military blocs. All such manoeuvres aim primarily at destroying the anti-imperialist foundation of African unity. With the polarisation of socio-political forces taking place on the continent today, divisive activity is sometimes effective and enables the imperialists to implement their African policy with the hands of the Africans themselves.

The peoples of Africa, who only recently broke the chains of colonial slavery, have to hold out against the growing onslaught of world imperialism and its agents in the person of local reaction. The events of recent years offer quite a few examples of how imperialism, resorting to neocolonialist methods and also organising direct armed intervention in the internal affairs of independent states, has been trying to compel them to give up their chosen course and to subject their development to Western interests. Economic levers are also used for this purpose, and they play a leading part in the policy of neocolonialism.

In a number of progressive African states domestic and international reaction organises conspiracies, and pro-capitalist elements, with the support of imperialism and some reactionary Arab regimes, have openly embarked on the elimination of social gains and departed from the course of socialist orientation.

The onslaught of the reactionary and imperialist forces became particularly conspicuous during the notorious separatist talks on Middle East settlement.

In the Horn of Africa a strained situation developed as a result of Somalia's illegal claims on Ethiopia and of Somalian aggression against that neighbouring country, and the interference in the conflict by some Western states and their accomplices. Regretfully, this situation has not been yet normalised.

As to the developing states which are planning to establish a "new international economic order", imperialism, resorting to all manner of "dialogues" and delaying tactics, is trying to force them to give up such plans. It is also trying to take advantage of the "petrodollars", especially their inflow into the industrial capitalist

countries. We are also witnessing attempts to build "sub-imperialist" bastions, i.e., bases in different parts of Africa. And there is a gamble on collective neocolonialism, which reflects the intention of the United States and the Common Market countries to bolster their influence in Africa. They exploit more and more frequently Beijing's official policy in Africa which is closely linked with the policy of imperialist powers.

The United States and its allies interfere in the affairs of the African countries with the aim of suppressing the liberation struggle of the peoples, preserving the existing reactionary regimes, consolidating and expanding their domination. In furtherance of precisely these aims NATO intervened in Zaire.

All these acts betray yet another aim of the NATO strategists in Africa: to undermine the power and cohesion of the Organisation of African Unity (OAU).

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Among the major problems confronting the independent African states today is that of the conclusive elimination of colonialism and racism. The existence of racist-colonialist regimes in southern Africa is rightly regarded by the whole world and especially by the African nations as a challenge to the cause of national liberation and a constant threat to their recently achieved independence. Ever since the white minority Nationalist Party came to power in 1948 in the Republic of South Africa, apartheid became the policy of that country. Theoretically apartheid means that each racial group of the population—whites, Africans, coloureds and Asians—take their "own path of development" under government supervision. A central link in the system of apartheid is the racist plan to set up "independent African homelands" or "Bantustans" within the bounds of the Republic of South Africa. Racism has become a full-grown monster there, and it is trying in practice to entrench its doctrine about inequality of the human races. This doctrine which actually came into being in slave-owning society, is presented today by the apologists of segregation and apartheid as the "latest solution" to the problem of relations between the whites and the Africans.

The results of this social policy are well known: the overwhelming majority of the indigenous population in South Africa have been reduced to outcasts deprived of elementary human rights.

The present conflict situation in southern Africa is due to the racist, inhumane system of relationship between the races: the whites are the elite, while the Africans are politically rightless and ruthlessly exploited economically. The latter are unanimous in their striving to put an end once and for all to apartheid in the

Republic of South Africa and to the racist-colonialist order in Rhodesia. In this endeavour they have the sympathy and support of the Soviet Union and other socialist states, of all progressive mankind.

The existence of racist regimes in southern Africa has brought about an explosive situation in that region. Constant provocations and threats, acts of aggression against the neighbouring independent states, the militarist frenzy whipped up by the racists, the illegal stationing of South African troops and administration in Namibia—these and other factors have created hotbeds of war in the area, and there is a danger of hostilities blazing up beyond the bounds of a local conflict under certain circumstances.

The Western states put their stakes on building up the military potential of the Republic of South Africa, on enlarging the racist regime's punitive forces with the help of mercenaries. The joint diplomatic efforts of these states, which have so far only been hampering the granting of independence to the peoples of Zimbabwe and Namibia, also have an encouraging effect on the racists.

There is no end to the declarations of the Western powers that the dangerous situation in southern Africa needs to be rectified. This is no more than lip service to the establishment of black majority rule, to the need to "settle the problems in the tense situation in southern Africa".

However, the United States, the Federal Republic of Germany, Israel and some other states are constantly violating the economic sanctions applied by the United Nations against racist regimes in Africa. Owing to close Western cooperation in the nuclear field with the Republic of South Africa, who refuses to sign the Treaty on the Non-Proliferation of Nuclear Weapons, it is now able to make its own weapons of mass destruction.

Today the South African racists are resorting to manoeuvres in order to remain in power. An eloquent example is their "new constitutional form of government" which they want to impose on the country under the guise of "liberalisation" of the regime. But every year the African workers step up their mass actions against the apartheid yoke, against the political and economic oppression of the non-whites, in other words, against the "separate development" doctrine. The struggle of the forces of national and social emancipation in southern Africa is becoming more and more acute and assuming an international character.—Involved in the struggle are not only the domestic progressive forces of the Republic of South Africa, Rhodesia and Namibia, but also the independent states of Africa. Their opponents in the fight are the Western imperialist circles supporting the racists.

The most important aspects of the liberation struggle in southern Africa are its mass character, long duration, wide territorial scope, firm determination to hold out against the most ruthless terror, and increased solidarity of the non-white people. On the whole we may conclude that pressure on the Pretoria regime "from below" has been increasing and, simultaneously, a crisis has been building up in top government circles.

In Namibia, SWAPO has invigorated its struggle against the South African occupation forces, forcing the Pretoria regime to switch to neocolonialist manoeuvres there. The attempts to settle the question of Namibia's peaceful transition to genuine independence have failed to produce effective results. SWAPO President Sam Nujoma has announced that the "compromise plan" submitted by the West to the organisation cannot be accepted, and that SWAPO, recognised by the United Nations as the sole legitimate representative of the Namibian people, continues to demand that South African troops should be withdrawn from Namibia, that responsibility for that country's security should rest on the UN.

In Zimbabwe, the white minority has for many years persisted in refusing to hand power over to the African majority. As a result, the Zimbabwe African People's Union and the Zimbabwe African National Union joined forces in the national liberation movement to form the Patriotic Front. Headed by Joshua Nkomo and Robert Mugabe, the Front is the only detachment in the national liberation movement that is really waging war against the racists. Though the conciliationist policy of Muzorewa, Sithole and Chirau, three leaders of break-away organisations, enables Ian Smith for the time being to contain the process of social emancipation by means of his "internal settlement", all manoeuvres that keep the foundation of the present racist regime intact are doomed to failure.

* * *

The preservation and consolidation of the African states' anti-imperialist unity is of paramount importance to the future of the African continent. This is dictated by the interests of the Africans themselves.

An important role in organising the struggle and cementing unity in Africa is played by the Organisation of African Unity and, in particular, by its political organ—the Committee for Aid to National Liberation Movements in Africa. The decisions of the Liberation Committee's sessions, like those of the OAU's Assemblies, are of significant importance to the liberation struggle of the African peoples.

Questions connected with the eradication of racism and

apartheid have always taken and still take a central place in the activities of the African states. The participants in the 13th Assembly of the OAU (Mauritius, 1976) emphasised that racist oppression in the Republic of South Africa can be eliminated only by means of an armed struggle and declared their willingness to give maximum political, economic and military aid to the liberation movements in southern Africa.

The sessions of the OAU Assembly, held in 1977-1978, and also the UN Conference on Southern Africa (Maputu, 1977) and the Conference for Action Against Apartheid (Lagos, 1977) demonstrated the determination of the participants to attain the goals set by the United Nations in regard to southern Africa.

The alliance of the five "frontline states", set up in the course of the anti-racist struggle in southern Africa and consisting of Zambia, Mozambique, Tanzania, Botswana and Angola, represents a tangible force. These states have been rendering political, material and diplomatic support to the people of Zimbabwe in their fight for liberation.

Some African states have recently called for the setting up of what they called a "Confederation of African Socialist Parties" (CASP), or of an "African Socialist International" based on the doctrine of "democratic socialism". It is to be an allegedly effective factor in the political, economic and social development of the African continent. A Coordination Committee has already elaborated a Charter for the Confederation. To manifest African solidarity and cooperation the advocates of the Confederation would like to include in it the ruling parties of Tanzania, Zambia and some other countries. However, their slogans of strengthening unity and liberation from all forms of exploitation and domination are not backed by deeds. What is more, they reflect the views of Right-wing Social-democracy in Western Europe, which, as is known, expresses the interests of capitalism and neocolonialism, which have never endeavoured to strengthen African unity; they have always sought to undermine it.

* * *

The Soviet Union gives its full backing to the changes taking place in Africa. "The USSR and other countries of the socialist community have always supported and still support the just struggle of the African peoples",⁵ says the Soviet Government Statement of June 23, 1978. This stand has nothing to do with the policy of artificially fomenting revolutions and revolts that is often ascribed to the Soviet Union. The socialist states are principled opponents of the export of revolution. Marxist-Leninist theory

maintains that a revolution can be successful and benefit the cause of social emancipation of the peoples only if the objective conditions for it are ripe. "Every revolution," L. I. Brezhnev said at the 25th Congress of the Communist Party of the Soviet Union, "is above all a natural result of the given society's internal development."⁶ At the same time the Soviet Union and other socialist states are resolute in their stand against foreign intervention and the export of counter-revolution. This stand is in conformity with the principles of contemporary international law.

On the eve of the 20th anniversary of the Year of Africa, the Soviet people confirm their desire to see all nations, those of Africa among them, living in peace and freedom. In the struggle for this cause, the Soviet Union has been and remains a reliable ally of the forces of social progress and the national liberation movement.

NOTES

- ¹ *Development Cooperation. 1974 Review*, OECD, Paris, 1974; *Development Cooperation. 1977 Review*, OECD, Paris, 1977.
- ² L. I. Brezhnev, *Report of the CPSU Central Committee and the Immediate Tasks of the Party in Home and Foreign Policy. 25th Congress of the CPSU*, Moscow, 1976, p. 15.
- ³ L. I. Brezhnev, *op. cit.*, p. 33.
- ⁴ V. I. Lenin, *Collected Works*, Moscow, Vol. 2, p. 524.
- ⁵ *Pravda*, June 23, 1978.
- ⁶ L. I. Brezhnev, *op. cit.*, p. 39.

Foreign Capital in Africa

LEONGARD GONCHAROV

The disintegration of the colonial system has led to important changes in the forms and methods of the export of capital to the African countries. The African nations intensified their struggle against foreign monopolies and this is an increasingly formidable factor undermining imperialism's positions in that part of the world. As the anti-imperialist revolution unfolds in the African countries, the clash between national liberation and neocolonialist tendencies of development affects mostly that sphere of the world economic relations of these countries which constitutes the export of capital from the imperialist powers.

As Lenin emphasised in his *Imperialism, the Highest Stage of Capitalism*, the export of capital is "one of the most essential economic bases of imperialism".¹ At the present stage the export of capital to the developing countries forms the economic basis of neocolonialism; it is this basis that up till now accounts for the economic and financial dependence of the young sovereign states of Africa on foreign industrial, raw-material and banking monopolies. And it is primarily the export of capital that ensures the flow of super-high profits to the imperialist powers from countries which have achieved political independence but still have an unequal status in the capitalist world economy, and are therefore subject to imperialist exploitation. Addressing the International Meeting of Communist and Workers' Parties in Moscow in June 1969, Leonid Brezhnev said: "Even today, after the collapse of the foundation of imperialism's colonial system, the pillaging of the natural resources and the exploitation of the labour of the population of the weaker and less developed countries remains an inalienable feature of imperialism, although"

the imperialists are now compelled to act more craftily and disguise their pillage."²

The continuation and, in a certain respect, the intensification of the exploitation of African countries by means of the export of capital are possible due to objective causes. The colonial mechanism of reproduction inherited by the liberated countries cannot be reorganised immediately after the achievement of state sovereignty. The developing countries can eliminate their deep economic dependence only by means of the flexible use and gradual reshaping of their production and market ties with the world capitalist economy, from which the majority of these countries have not yet torn themselves free, although they occupy a special place in it. The abolition of exploitation and inequality and the formation of foreign economic ties on a new basis are a long and complicated process. This process, however, has already begun in many developing countries of Africa, and it is more and more profoundly affecting the economic ties based on the export of capital from the imperialist powers. Analysis of the concrete forms of the export of capital today, of the correlation of these forms, of their role as instruments for imperialism's foreign economic expansion, on the one hand, and of their impact on the process of reproduction in the developing countries, on the other, is valuable in deciding whether and when conditions are ripe for liquidating the economic positions of imperialism in these countries.³

The forms, methods and conditions of the activity of foreign monopolies in African countries at the present stage are largely determined by the rapid development of state-monopoly tendencies in the export of capital, which are the consequence of one of the features characterising the growth of monopoly capitalism into state-monopoly capitalism. "State monopoly capitalism," the Programme of the Communist Party of the Soviet Union points out, "combines the strength of the monopolies and that of the state into a single mechanism whose purpose is to enrich the monopolies, suppress the working-class movement and the national liberation struggle, save the capitalist system, and launch aggressive wars."⁴ With the aggravation of the contradictions between the liberated countries and foreign monopoly capital, primarily its main link—the monopolies, the features of state-monopoly capitalism in the export of capital to African countries become more and more pronounced. The monopolies take measures to perfect the mechanism for exporting capital, adapt it to the changed situation on the continent and, in particular, to subordinate the export of capital along state channels to their interests. Foreign capital's state-monopoly methods of maintaining economic domination or influence in the developing countries

become the main determinant of neocolonialism as distinct from colonial policy in its old, traditional forms.

The forms and methods of exporting capital are modified in conformity with the global processes involving the coexistence and struggle of the two world social systems (the disintegration of the colonial system and the further narrowing of imperialism's sphere of domination, the rivalry between the imperialist powers, the scientific and technological revolution), as well as with domestic processes in the liberated countries (realisation of development programmes, creation and expansion of a state sector, progressive changes in the structure of reproduction of the social product, intensified struggle for economic independence). Under the impact of these factors some forms of foreign investments become more important, others less; conversely, the export of capital itself has a varied influence on many forms of world economic ties and on internal socio-economic processes in the developing countries.

The present stage of the general crisis of capitalism complicates the pattern of the economic relations between the countries exporting capital and those where investments are made. The enhancement of the role played by the export of capital as a means of economic exploitation of the former colonies is accompanied by the broadening of its participation in the realisation of programmes for the economic development of these countries, in the formation of their fixed production assets, and in the financing of some social projects (e.g., vocational and technical training). Such investments are increasingly linked with the export of capital along state channels. The increasing proportion of state-channelled investments is due not only to the rapid growth of state-monopoly capitalism in the countries exporting capital, but also to the growing requirements of the liberated countries for external sources of finance; this is the fact that both the monopolies and the imperialist states have to reckon with. The forms, methods and conditions of operation of foreign capital in the liberated countries are increasingly affected by the mutually advantageous cooperation of these countries with the world socialist community.

The conditions promoting qualitative changes in the system of economic ties between the liberated countries and the imperialist powers did not emerge until the third stage of the general crisis of capitalism. The downfall of the colonial system of imperialism—the second greatest historical phenomenon after the formation of the world socialist system—exerted and continues to exert a growing impact on the export of capital as a form of the international motion of value, on the one hand, and on its specific effect on separate groups of developing countries and on the relationships between them, on the other. Alongside such

phenomena as the growth of state-monopoly tendencies in the export of capital and the heightened role of multinational companies on the capitalist world market, a new tendency has appeared and is becoming more and more pronounced in the system of capitalism's international economic relations—namely, the reverse dependence of the export of capital, of its forms and branch and geographical distribution on socio-economic and political changes in the Third World countries, on the degree of maturity of the anti-imperialist struggle in these countries.

Assessments of the present status of the liberated countries often proceed from Lenin's well-known pronouncement about the transitional forms of state dependence: "Since we are speaking of colonial policy in the epoch of capitalist imperialism, it must be observed that finance capital and its foreign policy, which is the struggle of the Great Powers for the economic and political division of the world, give rise to a number of *transitional* forms of state dependence. Not only the two main groups of countries, those owning colonies, and the colonies themselves, but also the diverse forms of dependent countries which, politically, are formally independent, but in fact, are enmeshed in the net of financial and diplomatic dependence, are typical of this epoch."⁵ This fundamental thesis is still meaningful today. However, whereas in the epoch when imperialism determined the main trend of historical development, the transitional forms of state dependence indicated by Lenin reflected the process of enslavement of formerly independent countries, at the present stage, when the determinant force of world development is socialism, they reflect a reverse process—the gradual liberation of the former colonial and semi-colonial periphery from all forms of dependence.

This process is irreversible, and this fact should be the starting point when appraising imperialism's possibilities to exploit the former colonies by means of the export of capital and to force upon them new forms of economic and political dependence. The world socialist system has been undermining imperialism's monopoly of granting credits to the developing countries and of delivering industrial and other goods to them, and enables these countries to secure concessions also from foreign companies operating in the production sphere. The general weakening of imperialism's positions in the competition and rivalry with world socialism brings out the characteristic features of imperialism's home and foreign policies, their adaptability to new conditions. "The growth of socialism's might, the abolition of colonial regimes...increasingly influence the inner processes and policies of imperialism. Many important features of modern imperialism can be explained by the fact that it is compelled to adapt itself to new

conditions, to the conditions of struggle between the two systems.⁶

By now the developing countries of Africa have accumulated considerable experience of struggle against foreign monopolies, and are implementing various measures to restrict the extent to which their resources are exploited by imperialism on the basis of export of capital. Significant changes have taken place in the structure, forms and mechanism of the export of capital. While adapting itself to the new conditions, foreign capital is compelled to participate more widely in financing enterprises in the state economic sector in the African countries, although it aims at gradually undermining its progressive socio-economic role. The direct participation of foreign capital by means of organising subsidiary companies or branches in these countries is complemented by the setting-up of mixed state-private companies on a share-holding basis. Although in establishing mixed enterprises foreign capital aims at retaining its positions and hopes to strengthen its class alliance with the emerging African bourgeoisie, there is a tendency towards a gradual enhancement of the national state's role in such enterprises. In the new conditions increasing importance is attached to such forms of export of capital as long-term export credits from private as well as state-owned sources, the fulfilment of works under contract, and the granting of technical aid, also financed by credits. Foreign capital's activity involves certain concessions on its part and is subject to state control in the liberated countries.

The changes which have been taking place in the correlation of the various components of the export of capital under the impact of the colonial system's disintegration reflect the transfer of the foreign monopolies to more flexible and diversified methods of activity in the liberated countries as well as a weakening of the imperialist powers' positions there.

One of the essential features of the relations taking shape between imperialism and the African countries on the basis of the export of capital is that the latter is being carried out at a time when the process of nationalising foreign-owned property is accelerating. At the present time the effort to restrict and abolish foreign capital's control over the economy of the African countries is inseparable from the general tasks of the developing countries' struggle to improve the system of international economic relations, secure observance of the sovereign right of every state to take full charge of their own natural resources, and to fix fair prices of raw materials exported to the West. These important issues were discussed, as is known, at the Sixth and Seventh Special Sessions of the UN General Assembly, at a number of UNCTAD sessions and numerous conferences, seminars and symposiums held on an international and regional scale.

Owing to different conditions in each African country, the rate and forms of restricting the activity of foreign capital are basically different. Nationalisation is more intensive in the countries with the mining or oil-extracting industries, developed on the basis of direct foreign investments, i.e., in the countries where the foreign sector accounts for a large share of the economy. In a number of countries (Algeria, Zambia, Libya) the nationalisation has also affected the interests of the multinational companies.

At the same time there is a large group of countries whose priority task at the present stage is not nationalisation of foreign capital, but the efficient use of it under state control as an additional source of finance for economic and social development programmes. In the main these countries are the least developed economically; their natural resources are inadequately explored and difficult for access, and they lack the accumulations required for financing the economy and the social infrastructure, for ensuring extended reproduction at the expense of domestic sources. It should also be noted that countries which are carrying out nationalisation of the most profitable foreign enterprises, especially of the oil and mining industries, show interest in the inflow of foreign capital in the form of direct investments in other branches of the economy, the processing industry above all. These countries attract new foreign companies even to the oil and mining industries which were nationalised, although they do so on terms more advantageous to themselves.

At the present stage of the African countries' development foreign capital can be used, and is often used, as a complement for domestic financial resources, for strengthening their national economy. The need for such use is dictated by the objective conditions characteristic of all African countries: a low level of development of their productive forces, a growth of surplus product that lags behind the requirements of extended reproduction, and a low rate of domestic accumulation. The feasibility of such use is attributable to a radical change in the alignment of world forces not in favour of imperialism—a change that has compelled it to make concessions to the Third World countries. In conditions of political independence the African countries (like other developing countries) are able to carry out measures to alleviate the adverse consequences of foreign investments and counter the political subjugation that comes with finance capital.

The inevitability of resorting to foreign capital as a factor of economic growth at a certain period is closely linked not only with the internal conditions of reproduction in the African countries, but also with the conditions of world development at the present stage. Imperialism's monopolisation of the achievements of the scientific and technological revolution (STR) within the capitalist

system of world economy confronts the developing countries with the problem of importing "technological capital" in order to catch up with the present STR. Even the introduction of what is called "intermediate technology" impels most African countries to turn to foreign credits.

The efforts of the liberated countries of Africa are directed at making the use of foreign capital a secondary part of the national strategy of development, which envisages a broad complex of progressive socio-economic reforms. Only in this case can foreign capital be used, despite the fact that it is essentially an instrument for economic expansion and exploitation, in the national interests of the African countries.

An analysis of foreign capital's activity in these countries shows that its participation in financing their development by granting loans, setting up mixed companies and rendering technical aid does not have the same pattern everywhere, produces contradictory results, and takes place against a background of endless struggle between national liberation and neocolonialist tendencies in the development of the countries concerned. The neocolonialists tendency manifests itself in, among other things, the formation of new elements of economic dependence on the basis of intensifying new methods of export of capital or of transforming the old ones. In countries which allots a subordinate role to foreign capital in the solution of economic problems, these elements are shaken and erased at every new stage of the fight for economic independence. But in countries which regard foreign capital not so much as an additional source of material and financial resources but as the main factor of economic growth and the fulcrum of development of private capitalist relations, the increased "infusion" of capital in the form of direct investments and loans inevitably leads to an intensification of neocolonialists forms of dependence.

In a number of countries the struggle against foreign monopolies has become extremely acute because of crisis phenomena in the energy and raw-material base of the capitalist world. These phenomena reflect the aggravation of the contradictions of present-day capitalism, the disproportion in the development of the processing and the mining industries, and the maintenance of monopoly-dictated low prices of raw materials and fuel. The world energy crisis has disclosed the potential and real possibilities of the developing countries to bring political pressure to bear on the imperialist monopolies and to secure a redistribution in their favour of that part of incomes which is accounted for by differential rent and which was until recently appropriated by the monopolies operating in the production of mineral raw materials and fuel. At the same time recent years have seen the

growing role of private loan capital as a source of incomes for the imperialist powers.

On the purely economic level state sovereignty enables the African countries to convert into their income the growing part of the surplus value earlier transferred overseas as profit for foreign companies. As a result of the measures taken by the African countries to curb the exploitation of their resources by the imperialists, the growth of the absolute volume of profit from the export of capital to Africa is accompanied by a decrease in the proportion of that profit in the surplus product of these countries. In other words, the income growth of the foreign investors lag behind the swelling economic parameters of the countries where their capitals are invested. This phenomenon reflects the emerging crisis in the system of relations based on the exploitation of African countries by means of the export of capital.

On the other hand, it should be emphasised that the growth of state-monopoly tendencies in the export of capital finds reflection in the redistribution in favour of the monopolies of part of the surplus value which is created in the countries exporting capital and which takes the form of state loans and subsidies to the developing countries. The mechanism for deriving profits from the exploitation of these countries by means of state-monopoly export of capital is highly disguised.

Foreign capital plays a variety of roles in the economy of the African countries, depending on the degree and form of its penetration there.

An analysis of data on the reproduction of the social product shows that in some countries the role of the foreign economic sector in the formation of fixed productive assets has been growing, whereas in a number of others there has been a tendency towards a reduction of its share in net savings and in net investments in fixed capital. These are primarily the countries where the foreign sector has already reached a high proportion in the production of the gross national product, where the profits transferred abroad exceed the inflow of new direct investments and reinvestments, where a relative "decapitalisation" of the foreign economic sector is observed. Nevertheless, in this group of countries direct investments still constitute an important source of incomes for foreign capital. In a number of countries the nationalisation of foreign companies has gained much ground, hitting hard at their incomes from direct investments. At the same time in recent years the growing role has been played by the export of private loan capital as a source of incomes for the imperialist powers.

The scope of the struggle against foreign capital, as well as the ways and means of using it in individual countries, depend on

concrete conditions. Yet a number of general features can be distinguished in the policy towards foreign capital in the group of countries oriented towards capitalism, on the one hand, and in the socialist-oriented countries, on the other. In the first group of countries the stimulation of capitalist production relations connected with the inflow of foreign capital coincides with the official economic and social policies of these countries, although the foreign companies often compete with private national companies. Since the latter still lack financial resources and organisational and technical know-how, they are interested in setting up joint enterprises with foreign capital. In capitalist-oriented countries the state normally plays an auxiliary role in regard to private national and foreign capital, and foreign capital is used for resolving some purely economic questions, including the search for additional funds for financing development programmes. Although the activity of foreign capital in such countries is regulated, quite strictly sometimes, the regulation aims at utilising it to create the material-production base of capitalism and in the interests of the emerging African bourgeoisie.

In countries of socialist orientation, the policy towards foreign capital follows from the general nature of socio-economic reforms designed to promote development along the non-capitalist road. It would be a mistake to search for the reason prompting such a policy towards foreign capital in the levels of economic development of these countries as compared with those of the capitalist-oriented countries. Nor does the economic basis of the African countries at the time of achievement of independence give grounds for opposing the policies of the two groups of countries towards foreign capital. The reason lies in the qualitatively different socio-economic essence of the political superstructure of the countries taking the non-capitalist path of development.

While for purely economic reasons these countries are no less interested in utilising (at a certain stage) direct foreign investments and loans, the attraction of these is subordinated to the development of social forms of ownership, especially the public sector of the economy. This is the basic difference in the policies adopted towards foreign investments by the two groups of countries—socialist-oriented and those taking the capitalist path of socio-economic development.

Quantitative indicators of the inflow of foreign capital and differences in the financial terms for its functioning are sometimes of secondary importance. The progressive nature of political power in a country oriented towards non-capitalist development enables it to make the foreign private sector, which may be more powerful than any other sector, serve the national and social interests; Algeria and Guinea are examples of this. On the other

hand, the relatively weak flow of direct private investments in such countries as Tunisia, Morocco and Zaire, and, as a consequence, their wide use of foreign loans for financing public sector enterprises, do not mean that they are less dependent on foreign capital or point to more pronounced progressive socio-economic tendencies. Private capitalist relations are encouraged in these countries largely by the use of foreign loans, which consolidate the state-monopoly basis of the enterprises they finance. The public economic sector grows into a state capitalist one due in a great measure to increasing dependence on foreign capital. Such a threat also hangs over the countries which have taken the non-capitalist path of development once they open the door wide to foreign capital, be it in the form of loans or direct investments not subject to appropriate control.

The question is a special one as regards the role that foreign investments can play in the least developed countries of Africa (Chad, the Central African Empire, Upper Volta, Niger, Ruanda, Burundi, Malawi and some others). The predominance of pre-capitalist and the wide spread of pre-feudal forms of social relations, coupled with extreme economic backwardness and nearly total illiteracy of the population, make it difficult for these countries to embark on the non-capitalist road of development. Owing to the low level of development of commodity production and the predominance of a subsistence economy, so far there is no adequate basis for the development of capitalism there. The export of state capital to these countries is carried out mostly in the form of non-repayable subsidies and loans on easy terms with a view to speeding up the primitive accumulation of capital, creating conditions for the inflow of private foreign capital, and drawing these countries into the system of world capitalist economic ties.

The ruling circles of the imperialist powers and the monopolies inspiring their policies seek to make more flexible and disguised use of the export of capital in the specific conditions of the developing countries. The global strategy of imperialism is to a large extent designed to serve this purpose, for one of its main tasks is to alleviate the consequences that the collapse of the colonial system has entailed for the imperialist world.

As the African countries face a growing number of tasks in the construction of their national economy and as they make economic progress, domestic means of financing development programmes become ever more important. The unlimited inflow of foreign capital as a factor of development and its protracted preponderance in the economy are incompatible with the concept of economic independence in terms of the tasks and goals of the imperialist monopolies, on the one hand, and of those of the

national forces directing economic development, on the other. Foreign capital is adapting itself to the changed situation and altering its forms and methods of expansion without changing its nature and its class role as an instrument of the imperialist bourgeoisie in exploiting the economically less developed countries and peoples.

While resorting to foreign investments as a complement to domestic means of ensuring high rates of production and growth of employment, the independent countries of Africa consider it their programmatic and strategic aim to promote development on the basis of their own resources—material, financial, manpower. They can achieve genuine emancipation from all forms of foreign economic exploitation and dependence by gradually limiting and ousting foreign capital from the sphere of production and by eliminating its dominant position in the credit sphere.

NOTES

¹ V. I. Lenin, *Collected Works*, Moscow, Vol. 22, p. 277.

² *International Meeting of Communist and Workers' Parties*, Moscow, 1969; Prague, 1969; p. 143.

³ Some specific features of the export of capital and of its activity in developing countries have already been investigated by Soviet scholars. See, among others, V. G. Solodovnikov, *The Export of Capital* (Moscow, 1957); V. M. Kollontai, *Foreign Investments in Economically Less-Developed Countries* (Moscow, 1960); A. Yu. Shpirt, *The Expansion of Foreign State-Monopoly Capital in Africa* (Moscow, 1966); A. S. Solonitsky, *The Export of Capital in the Neocolonialist Strategy of the Former Metropolitan Countries (On the Example of France)* (Moscow, 1971); V. V. Shcherbakov, *The Export of Capital in the System of Imperialism* (Moscow, 1966); G. Andreyev, *The Export of American Capital, From the History of the Export of US Capital as an Instrument for Economic and Political Expansion* (Moscow, 1957).

⁴ *Programme of the Communist Party of the Soviet Union*, Moscow, 1961, p. 27.

⁵ V. I. Lenin, *Collected Works*, Vol. 22, p. 263.

⁶ *International Meeting of Communist and Workers' Parties*, Moscow, 1969, p. 141.

Revolutionary Democracy: Its Ideology and Policies

NIKOLAI KOSUKHIN

The social changes sweeping Africa today have led to the emergence of a whole group of states which are carrying out progressive socio-economic reforms with a socialist perspective. The number of such countries has been growing.

Capitalist orientation, which had entrenched itself in some countries, proved its bankruptcy before long; and in recent years a new group of countries switched to socialist orientation. It should be noted that on the continent as a whole democratic tendencies have been growing. This, as the recent period has shown, is due to the fact that it is extremely difficult to resolve a nation's social and economic tasks within the framework of capitalism.

For example, the National Charter of Algeria adopted in June 1976 affirms: "Having emerged as a reaction to capitalism and in view of the latter's incapability to solve the constantly growing problems it causes, socialism provides clear answers to the burning questions of our epoch."¹

* * *

The mid-1970s are marked by a number of phenomena that testify to the deepening of revolutionary processes in the socialist-oriented countries, and to the expansion of the anti-capitalist struggle on the continent as a whole—a struggle aimed at achieving genuine economic independence.

A specific feature of socialist orientation in African countries is that it is being realised in a period characterised by a lack of a broad proletarian movement, by an organisationally and politically weak working class, and at the same time by vigorous socio-political activity of petty-bourgeois and other non-proletarian strata, above all the revolutionary intelligentsia. The socialist-oriented states are making their first steps towards the progressive transformation of their societies, and since the latter are just emerging from their colonial status, the difficulties and problems involved are enormous and complicated. The revolutionary democrats who are in power in these states have to overcome the resistance and pressure of foreign monopoly capital, the neocolonialists, the local compradore bourgeoisie, the feudal lords and the clan-tribal elite.

With the development of the social stage of national liberation revolutions, class antagonisms become more acute; so do the ideological and political struggles over the question of the further socio-economic development of the socialist-oriented states.

In recent years there has been a lively discussion in Soviet science on the ideological trends which have become widespread in socialist-oriented countries: their origin, formation and the evolution of their component parts and sources; and their relationship with Marxism-Leninism and social practice.² The keen attention paid to this problem is due to the fact that it concerns the natural allies of the socialist countries in the anti-imperialist struggle.

Revolutionary democratic thought in Africa stemmed from the national liberation movement, from the search for a way of development undertaken by the countries which freed themselves from colonialism. It was the result of the active influence of the broad masses exerted on the shaping of the ideology of revolutionary democracy, who reject capitalism and regard it as being connected with colonialism in all its forms, old and new. The choice of a social system has become the key issue in the political thought of the national liberation movement today.

Although Marxism-Leninism is but one of the sources of revolutionary democracy, it often has a decisive influence on the adoption of practical measures. Statesmen and public figures in the liberated countries do not fail to take into account the experience of Marxist theory and practice. Marxism's prestige is due primarily to the fact that its theoretical and practical value has been objectively confirmed by the entire course of historical development. That is why Marxism-Leninism and the practice of socialist construction are of special importance in regard to the formation of the ideology of revolutionary democracy in particular, and to African socio-political thought in general.

Revolutionary democracy as propounded by such prominent figures as Kwame Nkrumah, Houari Boumedienne, Gamal Abdel Nasser, Amilcar Cabral, Agostinho Neto, Samora Machel, Sékou Touré, Marian N'Gouabi and Julius Nyerere is a progressive socio-political trend that has a marked effect on socio-economic processes in the socialist-oriented countries.

Revolutionary democracy there represents the ideology and policies of the Left wing of the national liberation movement, and reflects predominantly the interests of the peasantry, the working class, as well as those of the petty bourgeoisie, the radical intelligentsia and individual representatives of the patriotic-minded national bourgeoisie.

Contemporary revolutionary democracy is a qualitatively novel socio-political category. It has taken shape as an ideology as a result of the ideological demarcation of class forces in the national liberation revolution, of its development into a revolution spearheaded against exploitative relations.

Broadly speaking, after the achievement of independence by the African countries the revolutionary-democratic ideology passed through two stages. The first stage—the 1960s—is characterised by the crisis of the theory and practice of “African socialism” and by the adoption of revolutionary-democratic ideology as the theoretical and practical basis for the activity of the parties and the states, which chose a socialist road of development. After the defeat of the revolutionary-democratic forces in Ghana and Mali imperialist propaganda tried to discredit socialist orientation. But the temporary retreat of the revolutionary forces in these countries did not bring Africa's revolutionary process in general to a standstill. Their example only shows that a persistent and prolonged struggle has to be put up if the aims set are to be achieved.

The second stage began in the late 1960s and early 1970s and is continuing up to the present time. It is characterised by an acceleration of the progressive evolution of the ideology, and by the emergence of new states whose leaders are convinced of the need to endorse the socialist alternative. At this stage revolutionary democracy comes closer to scientific socialism, and in a number of countries Marxism-Leninism is officially proclaimed the ideological basis of the party and the state (the People's Republic of Angola, the People's Republic of Benin, the People's Republic of the Congo, the People's Republic of Mozambique, Socialist Ethiopia).

It is a general law that in the course of the struggle for social emancipation the alliance of the revolutionary-democratic forces with world socialism and the communist movement is strengthened, and the process of radicalisation of revolutionary democracy's ideological-political programmes is speeded up. On

the other hand, the practice of the socialist-oriented countries shows that the process of getting rid of petty-bourgeois and nationalistic ideas is complicated, contradictory and non-uniform.³

Experience points to a close interdependence existing between the rate and depth of revolutionary transformations, on the one hand, and the ideological platform of the ruling parties, on the other. As a rule, their ideological positions are closely connected with socio-economic programmes designed to achieve genuine independence. The ideological and political maturity of the guiding core of the ruling revolutionary-democratic parties is one of the most important criteria and factors of socialist orientation.

The formation of a modern proletariat, its growth and the development of its class consciousness are hampered by the backward structure of the economy, deep-rooted remnants of tribal relations and obsolete religious-communal relationships. It should also be noted that the predominance of national general democratic tasks of interest to a large section of the population creates among some national-democratic leaders the illusion of a permanent "national unity", of a classless and socially homogeneous African society; they even believe that their society has been a socialist one since time immemorial. Let us point to another important factor. The backwardness of social and class relations gives rise to the wrong belief that there are no fundamental differences between general democratic and socialist tasks. Some leaders go so far as to declare the present national-democratic stage of the revolution to be socialist. They do so for political and propaganda purposes: socialist slogans attract the working masses and serve as an efficient instrument of mobilisation.

Far from being stereotyped, the ideology of revolutionary democracy is in the process of formation and development.

Characteristic of the ideological-political evolution of revolutionary democracy are the following tendencies.

Firstly, there is the increasing awareness of its progressive representatives for a radical restructuring of society on the basis of the principles of scientific socialism. The choice of a path of social development has in principle already been made by revolutionary democracy: it has chosen socialist orientation. The question now is how to effect a restructuring of society, taking into account the specific national-historical and socio-economic conditions.

Secondly, inside the revolutionary-democratic movement there is a trend whose representatives (owing to petty-bourgeois, religious-nationalist and other deep-rooted beliefs, to imperialist pressure and other factors) show inconsistency, vacillations in regard to scientific socialism, to worldwide experience in socialist construction. Some factions of revolutionary democracy do not go

beyond the framework of petty-bourgeois relations in their socio-economic reforms.

Thirdly, the wavering of some revolutionary-democratic leaders leads to their slipping into Right nationalist and even chauvinist positions. In such cases we see a political degeneration of revolutionary democrats who have actually become bourgeois nationalists and no longer express the interests of broad sections of the radical petty bourgeoisie and the working masses. The result is a consolidation of forces which oppose progressive changes and the emergence of phenomena which show a regression back to capitalism. Needless to say, these tendencies may be interlaced or operate simultaneously. Other ideological deviations are also possible.

* * *

It is an urgent task in the socialist-oriented countries in Africa to overcome backward views and cultivate progressive revolutionary-democratic consciousness in the masses. Lenin noted: "In every country there has been a period in which the working-class movement existed apart from socialism, each going its own way; and in every country this isolation has weakened both socialism and the working-class movement. Only the fusion of socialism with the working-class movement has in all countries created a durable basis for both. But in every country this combination of socialism and the working-class movement was evolved historically, in unique ways, in accordance with the prevailing conditions of time and place."⁴ The process of combining scientific socialism with the working-class movement in countries taking the non-capitalist path where communist parties are lacking, proceeds, as experience has shown, in two stages.

At the first stage the working people come to accept the ideas of scientific socialism mainly through the activity of revolutionary-democratic parties which have adopted, to a lesser or greater extent, the principles of Marxism-Leninism. This stage prevails in some countries today.

The second stage sets in as the revolutionary democrats come closer and closer to working-class positions and grasp the ideas of scientific socialism. As a result the ideology of revolutionary democracy comes very close to the policies of Marxist-Leninist parties. In the final analysis this stage is connected with the transition of the revolutionary-democratic party to Marxist-Leninist positions, with its conversion into a vanguard party of the working class and the working peasantry, or with the emergence of a Marxist-Leninist party proper. It is difficult, of course, to foresee all the possible variants.

In the effort to carry out progressive reforms, ensure rational development of the national economy and improve the revolutionary-democratic state, Communists in many ways proceed from the same positions as revolutionary democrats do.

The philosophy and religious convictions of revolutionary democrats, in our view, present no obstacle to their cooperating with Communists in a joint struggle against imperialists and racists.

One of the momentous events which occurred in the socio-political life of such African countries as Angola, Benin, the Congo and Mozambique was the foundation of vanguard revolutionary-democratic parties guided by Marxist-Leninist ideology.

The process of formation of vanguard parties in different countries and of their organisational shaping is at different stages and meets with a variety of difficulties and conflicts. A common factor in the approach of revolutionary democrats to the formation of their parties is a revision of their social structure. The main emphasis is laid on attracting to their ranks mostly representatives of the working class, the peasantry and revolutionary intelligentsia. The ideological basis of the parties are proclaimed to be the principles of Marxism-Leninism and proletarian internationalism. The building up of the party takes place on the principle of democratic centralism; the territorial-industrial principle underlies its organisation; members are admitted individually. Members are required to accept the party's programme and aims, to participate in the drive to carry them into effect, to observe revolutionary discipline, to attain a high degree of consciousness and subordinate personal interests to the interests of society. Some of the parties make special demands on the guiding cadres, who are selected from among the workers, peasants and the revolutionary intelligentsia: they are prohibited from holding shares in businesses, being on the board of directors of private companies, receiving more than one salary and owning houses for the purpose of renting out.

As a result the ruling party is marked by a greater degree of class distinctiveness, by the ideological unity of its steering core; the views of the Left Marxist wing of revolutionary democracy thus take deeper roots in the party.

The leadership of such parties has become convinced that if the party is to be turned into a really leading force in society, it should necessarily be a vanguard revolutionary-democratic party of the new type, one that has a Marxist-Leninist platform.

The vanguard parties being formed are increasingly approximating to Marxist-Leninist ones in their long-term objectives, programmes, principles and ideological basis. Yet by their social composition they are to a considerable extent parties of the revolutionary intelligentsia. The traditionally tribal and petty-

bourgeois illusions of the working class, the peasantry and in no small measure the intelligentsia make it difficult for these parties to become a veritable revolutionary proletarian force. A number of leaders of the revolutionary-democratic movement are aware that at the present stage tremendous ideological and political work needs to be conducted among party members, that their role and consciousness need to be enhanced. At the same time there is a danger of elements appearing which take a sectarian attitude towards the broad working masses, a danger of the vanguard being severed from its social basis. The vanguard parties are called upon to instill the ideology of scientific socialism in the non-proletarian strata, to combine their natural yearning for social justice with scientific socialism, to introduce political consciousness in revolutionary practice.

Under these circumstances revolutionary democrats emphasise the importance of setting up everywhere primary party organisations as the backbone for any kind of political organisation. They keep in contact with the broad working masses and propagate the party's aims and tasks. However, the role of the party's primary links and rank-and-file members are as yet inconsiderable.

Indeed, the main hindrance to the formation of a genuine Marxist-Leninist party in most countries are objective socio-economic backwardness, a weak working class, the lack of adequately trained party cadres, etc.

The formation of ruling parties with the ideology of scientific socialism in countries taking the non-capitalist path is likewise highly complicated and contradictory. A significant role in this process is played by the development and consolidation of allround ties with the socialist community and the world communist movement.

As the working masses are brought into contact with progressive ideas, some public figures and politicians in the socialist-oriented countries frequently "adapt", whether intentionally or not, certain propositions of Marxist theory to religious and nationalist concepts.

This, without doubt, is due to the ideological-political climate which prevails in the majority of African countries, including the socialist-oriented ones. This climate is characterised by a still strong influence of nationalism and religion, and of the remnants of the tribal, patriarchal and caste systems, and by a certain effect of Right-wing Social Democracy.

We emphasise this point: not only scientific socialism, but revolutionary democracy, too, encounters considerable difficulties before it becomes the dominant ideology. We have already named some of the reasons. It should be added that the African working class, at the present stage of its development, often harbours

petty-bourgeois and reformist trade-unionist ideas, and the communal psychology that prevails over it as yet is dominated by religious and tribal prejudices. The latter is also characteristic of the peasantry, who rarely go beyond utopian, non-Marxist forms of socialism; the rural dwellers adapt the concept of socialism to their own way of life and level of consciousness. That is why in creating the conditions for inculcating progressive ideas in the working people of the liberated countries a big role is also played by the ideological impact of the world socialist system and the practice of socialist construction. The working people will understand socialist ideas if they understand their class interests. Their ideological education is promoted by success in carrying out socio-economic reforms, by improvement of their social and living conditions. It should be noted that over the years of the African countries' independent development along the path of socialist orientation the consciousness of the masses has grown; ever broader sections of the population are accepting revolutionary-democratic views.

However, the process of involving the working people in the management of production and social administration is hampered because of their low political and cultural levels, and sometimes because a section of the revolutionary-democratic leadership fears to give wide scope to the initiative of the masses and the revolutionary intelligentsia. Not only do these factors hamper the development of the revolutionary consciousness of the working people, but also restrain the social renovation of society.

* * *

The ideological activity of the socialist-oriented states in Africa aims at moulding a new man—a patriot who performs his civic obligations. The urgent task is to cultivate revolutionary consciousness, a sense of responsibility for the attainment of the goals set.

In his *The Strategy and Tactics of the Revolution* Sékou Touré writes: "Ideological education, revolutionary ideology—these are the arms of today which the oppressed peoples are perfecting in order to overcome their shortcomings and answer the challenge which the exploiter states are constantly hurling at us."⁵

Success in mobilising the working people in a drive to overcome social and economic difficulties and in getting the masses to accept progressive ideas depends largely on the effectiveness of the ideological and educational work of the party, the state, public organisations and the mass media.

The main aims of this work, as the experience of the socialist-oriented countries shows, are:

- to eliminate illiteracy among the adult population and expand the general-education network for school-age children;
- to foster patriotism, a sense of civic duty, a new attitude towards work;
- to propagate the ideas of revolutionary democracy and the principle of scientific socialism; to combat tribalism, bourgeois and petty-bourgeois ideology.

The attainment of these aims involve a series of problems connected mainly with a cultural revolution, the overcoming of the colonial heritage, and the wiping out of the remnants of the past in the fields of ideology, culture, social psychology and social conduct.

The campaign to eliminate illiteracy among the adult population and expand the general-education network for school-age children, and the introduction of free education are key factors promoting the political, economic and social emancipation of the working people and the development of their class consciousness. The content of education must necessarily be transformed. The reform of public education in the socialist-oriented countries as a rule entails the democratisation and nationalisation of educational establishments, the setting up and broadening of a uniform system of schools, the bringing of the school into closer touch with life, the Africanisation of personnel, the organisation of the higher school, and a revision of the curricula.

In the socialist-oriented countries today the curricula of general-education schools aim at educating the new man, eradicating the remnants of colonialism and tribalism, and explaining the essence of imperialism and colonialism.

African revolutionary democracy has outlined the strategy of development of education. It is based on such principles as equal opportunities for all children to study, regardless of their social origin; optimal proportions between primary and secondary education; consideration of the current and long-term requirements of the country; guarantees of the democratic character of education; combination of general and specialised education; increased attention to less developed areas.

In colonial days the population regarded the school as a means of freeing themselves from manual labour. This is why it is extremely important, in the opinion of the organisers of the educational system, to uproot this prejudice by combining school subjects with vocational training. The task of the school, they say, is not only to provide the rudiments of knowledge, but to serve as an efficient instrument for transforming an underdeveloped into a developed and harmonious society.

In Guinea, for instance, the basis of the cultural revolution in the localities are what are called Centres of Revolutionary

Education. They are called upon to train personnel for the cooperative movement, carry on literacy work among the adult population, and conduct extensive propaganda activity for the ideological and political education of the working people.

In the People's Republic of Angola, a two-year literacy campaign (1977-1978) resulted in 187,000 adults having learned how to read and write. The literacy courses are being attended by a total of 600,000 people in 1979.

The report of the Central Committee of the MPLA to the First Congress of the Party pointed out that in 1977 the enrolment of pupils in primary and secondary schools doubled over 1973.

The task has been set to train 25,000 primary school teachers by 1980; this is four times the number registered in the colonial period.

Some more examples. The People's Republic of the Congo takes the first place in Africa in the size of school attendance. Seventy per cent of the children in the republic (335,000) attend school, i.e., every fourth citizen is a pupil.

The Central Committee of the Congolese Labour Party has advanced this slogan: "A new education for the new system, a socialist education for the socialist system". The task was set to create a genuine people's school, democratic in character and oriented towards the education of pupils in the spirit of scientific socialism.

In the Republic of Guinea, the number of pupils in primary schools increased over the years of independence (1958-1976) from 42,000 to 350,000, in secondary schools from 600 to 140,000. Formerly there was not a single higher educational establishment; today the 25 departments of the University of Guinea are attended by more than 12,290 students.⁶ Under a government decision three-fourths of the total enrolment study in the agronomy departments.

On April 1, 1968, Guinea launched a universal literacy campaign, which was preceded by many years of preparatory work for composing written local languages, publishing textbooks, etc. Instruction is given in local languages. Everybody who can read and write is recruited to teach those who cannot, after working hours.

In Tanzania, the primary school attendance was about 825,000 in 1967, and 1,532,000 in 1975. In 1967, the schools admitted 187,537 pupils, in 1976—665,625. A production self-sufficiency programme has been introduced in public education. In the 1974-1975 school year, school-children turned out 7.7 million shillings' worth of products, mostly agricultural.⁷

In Benin, from 1977 on, the educational system is being reorganised under the slogan "Study and Production". Primary

school instruction has an agro-technical bias. The university and secondary specialised educational establishments train personnel according to the requirements of the national economy, special attention being paid to the technical grounding of future specialists. One-fourth of the state budget is spent on public education—far more than in many other African countries. Wide use is made of local languages to combat illiteracy. Everywhere in both town and country public library-reading rooms have been opened.

In Ethiopia, under the "Development Through Cooperation" programme 60,000 secondary school pupils, students, teachers and servicemen were sent to the countryside to train and organise the peasants in cooperatives.

The chief task of the programme was to help the rural population to reach the present socio-political level of the country's development by explaining to them the goals and tasks of the revolution, eliminating illiteracy, and involving the peasants and nomads in the revolutionary process of construction.

In Tanzania, too, a broad movement has been launched to eliminate adult illiteracy under a programme of "functional literacy" (combining vocational training with learning how to read and write). In the 1973-1974 school year, 2.9 million Tanzanians attended various kinds of schools and courses. On the basis of the 1974 results, UNESCO awarded Tanzania the International Krupskaya Prize for successes in eliminating adult illiteracy.

The expansion of the public education network in the socialist-oriented countries involves many a difficulty. Up till now universal primary education has not been introduced; teacher training lags behind the growth of the pupil enrolment; many other major problems are to be solved yet.

A key task is to erase the colonial psychology of those strata of the population which regard labour activity to be forced labour. "The socialist principle—from each according to his abilities, to each according to his work—must become the basic principle of our social organisation," says the National Charter of Algeria. And the Arusha Déclaration specifies that persistent labour "is the basic condition for the country's development" and that it "will not find the desired results unless it is supplemented with knowledge".

The importance of the ideological work of party and state bodies has been growing also due to the constant increase in the number of enterprises in the state sector, and to the need to ensure their profitability. At the enterprises attempts are being made to organise socialist emulation; subbotniks (voluntary unpaid work performed collectively on a rest day) and other undertakings are conducted.

In the Congo, the Congolese Confederation of Trade Unions is

broadening the movement against negligence and irresponsibility. The slogan at industrial enterprises and institutions is: "Seven hours of work, not seven hours at work." "No true independence and sovereignty can be achieved in conditions of undue slackness, lack of discipline, laziness and irresponsibility," says the report of the Central Committee of the Congolese Labour Party to the Second Party Congress.

In June 1975, by a decision of the Central Committee of TANU the post of Party Secretary was instituted at industrial enterprises, and he was vested with wide powers in their management.

The struggle for productive labour in the socialist-oriented countries in Africa is coupled with an effort to curb corruption, bribery, wastefulness, to regulate administrative spending, to undertake an economy campaign, etc.

A major sector of ideological work there is the propagation of advanced ideas, including the ideas of scientific socialism. The leaders of the countries which have proclaimed Marxism-Leninism the official ideology point to the importance of mastering scientific socialism, especially by party and state functionaries.

In one of his speeches President Marian N'Gouabi of the People's Republic of the Congo emphasised: "At the present stage of our Revolution the teaching of Marxism-Leninism to cadres of medium and higher qualification is becoming an imperative need."

The Chairman of the Provisional Military Administrative Council of Ethiopia Mengistu Haile Mariam declared that the proclamation of socialism as the guiding principle of the revolution has created favourable conditions for the propagation and study of scientific socialism, and facilitated the translation of Marxist-Leninist literature into the local languages, thereby promoting greater political consciousness among the people.

An important role in carrying out this task is assigned to the Provisional Bureau on Organisation of People's Masses, which works for the political education and organisation of the workers and peasants, explains in simple language the essence and aims of the government reforms, propagates the ideas of scientific socialism and the experience of socialist construction in other states.

The Bureau's representatives are actively engaged in a nationwide explanation of its policies. They are rallying the working people for struggle against reaction, for the unity of the nation, propagating the achievements of the Ethiopian revolution, the first successes of the agrarian reform, and mobilising the population to increase agricultural and industrial production.

In the People's Republic of Benin, ideological and political work is carried on by the National Centre for Revolutionary Education. In their spare time workers attend literacy circles and political seminars, which are held regularly every week. The audience is informed about current political events and hears news about the social and cultural life of the country. Compulsory study of the fundamentals of Marxism-Leninism has been introduced in schools and universities.

Members of the Democratic Party of Guinea are obliged to study the history of the party, philosophy, the classics of Marxism-Leninism, and also to learn Party decisions and explain them to the people.

In the People's Republic of the Congo, the ideological work of the Congolese Labour Party aims mainly at extensive propaganda of socialist ideas. The report of the Central Committee of the Congolese Labour Party to the Second Party Congress (December 1974) stresses that "exposure of bourgeois ideology must become an important aspect of our propaganda activity". It stipulates that party members should combat "imperialist ideology, nationalist bourgeois ideology, tribal views, and opportunism, both Right and Left." The Congress decisions pay special attention to the ideological seasoning of party and state cadres and to the dissemination of the ideas of Marxism-Leninism among the working masses, and note, among other things, that the Party's political cadres "must be guided by communist morality" and "set an example in their working, social and personal life".

A party school has been set up under the Central Committee of the Congolese Labour Party to train party and state functionaries and teaching personnel on the basis of Marxist-Leninist theory. A course of Marxist-Leninist philosophy has been introduced at the University of Brazzaville, and of the social sciences in all secondary specialised institutions and schools. At the seminars and circles of the party's political education system instruction is given in the fundamentals of Marxism-Leninism and the political activity of the party.

The last few years have seen an intensification of ideological and political work in the national army, which is carried out by the army's Institute of Political Commissars. A special colloquium on questions of army construction, sponsored by the Central Committee of the Congolese Labour Party, adopted a number of important recommendations aimed at enhancing the party's influence in the army.

The socialist-oriented countries widely celebrated the centenary of Lenin's birth and the 60th anniversary of the Great October Socialist Revolution. Lectures on Lenin, exhibitions of the works of the great leader, ceremonial meetings, and film shows about Lenin

and the Great October Revolution helped to acquaint the people with the ideas of scientific socialism.

The dissemination of Marxist-Leninist ideas in the socialist-oriented countries in Africa is carried out, apart from the above-mentioned channels, with the help of the mass media (the press, radio, TV), and also by distributing Marxist-Leninist literature and the works of progressive authors among the population.

In our time the revolutionary democrats are carrying out an important task which Lenin in his day set before the communists of the East: "To translate the true communist doctrine, which was intended for the Communists of the more advanced countries into the language of every people."⁸

NOTES

- ¹ *Révolution Africaine*, No. 644, 1976, p. 9.
- ² K. N. Brutents, *Present-Day National Liberation Revolutions (Some Questions of Theory)*, Moscow, 1974; R. A. Ulyanovsky, *Socialism and the Liberated Countries*, Moscow, 1972 (in Russian).
- ³ For more details see *Africa: Problems of Socialist Orientation*, Moscow, 1976 (in Russian).
- ⁴ V. I. Lenin, *Collected Works*, Moscow, Vol. 4, p. 368.
- ⁵ Sékou Touré, *Stratégie et Tactique de la Révolution*, Conakry, 1976, Vol. 21, p. 10.
- ⁶ *Horoja*, July 18, 1976; August 20, 1976.
- ⁷ Julius K. Nyerere, *The Arusha Declaration. Ten Years After*, Dar-es-Salaam, 1977, pp. 11-13.
- ⁸ V. I. Lenin, *Collected Works*, Vol. 30, p. 162.

African Studies in the USSR: the 1960s-1970s

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After the Great October Socialist Revolution of 1917, the humanistic, anti-racist traditions of Russian science and culture and the Russian people's respect for the African peoples were not only accepted, but considerably enriched and developed in the Soviet state. Suffice it to mention that back in 1919, when the civil war was at its height, a book by V. Markov (V. Matvei) *The Art of Negroes* came off the press in Petrograd; in it the Russian scholar was one of the first in the world to recognise the general historical value of African creative thought.

Of paramount importance for the development of Marxist-Leninist social science were Lenin's writings on the national and colonial questions. On the basis of Lenin's works, the problems of the imperialist powers' colonial policy in Africa and the liberation struggle of the peoples of that continent after the October Revolution were studied by eminent Soviet scholars M. Pavlovich (M. Veltman), V. Kitaigorodsky, F. Rotstein, and the outstanding figure of the Soviet Communist Party and state, Mikhail Frunze—the author of a book on the Riff rebellion in Morocco.

An important role in accumulating information about the new Africa and studying its problems was played by the contacts, exchanges of views and scientific discussions of Soviet scholars of Africa, notably, I. Potekhin, A. Zusmanovich and the Hungarian scholar E. Sik, who lived in the USSR, with representatives of the progressive forces of many countries on the continent, who were students at the Communist University of the Working People of

the East in Moscow. They shared their information and knowledge about African reality with Soviet scholars of Africa.

Soviet scholars began to elaborate the problems of African studies on the basis of Marxist-Leninist methodology and gave to these studies the features of an independent scientific field. At the turn of the 1930s Soviet scholars of Africa began to theoretically elaborate questions of the history, ethnography and culture of African peoples and socio-economic problems of that continent.

In the late 1920s, an "African Cabinet" was organised at the Scientific Research Association to study national and colonial problems. It soon published a number of interesting works on political and socio-economic problems of the continent. At that time the first joint work by Soviet scholars and an African scholar was prepared and printed in Moscow: I. Potekhin, A. Zushmanovich and Tom Jackson (pseudonym of Albert Nzula, a prominent figure in the workers' and Communist movement in South Africa) published *Forced Labour and the Trade Union Movement in Black Africa* (M., 1933), analysing some aspects of the political and economic situation on the continent.

An analysis of colonialism in Soviet scholars' works, their popularisation of the achievements scored by the anti-colonial forces against the background of the general moral and political support rendered by the countries of victorious socialism to the fighters for national emancipation have been of great significance in the social development of the progressive-minded forces in Africa.

In the first years after the Second World War, a number of books were published in the USSR devoted to the history of the colonial enslavement of the continent and the liberation movement of the African peoples. Many of them were of a popular scientific or journalistic character, nevertheless, they played a definite role in the shaping of the Soviet school of African studies. Accumulation of knowledge and experience made it possible to print a fundamental work compiled by a large group of scholars, *The Peoples of Africa*, edited by I. Potekhin and D. Olderogge (M., 1954). It was devoted to the life of the peoples of the continent, their cultures and their struggle against colonial enslavement and for national independence. The authors endeavoured to trace the origin and history of the African peoples, their languages, culture, family and social life. This work by Soviet scholars of Africa convincingly demonstrated the true essence of the concepts propounded by some Western scholars, who, falsifying the real causes of the difficulties that faced Africa in its economic and cultural progress, were trying to expound various colonialist theories about the African peoples' "inability" to absorb modern

culture and scientific and technical knowledge. This work was later published in German (Berlin, 1961).

The successes scored by the national liberation movement on the continent in the late 1950s and early 1960s, the disintegration of the colonial system and the formation of new sovereign states, as well as the development of relations on the state level between the USSR and the newly liberated African countries have contributed to a considerable intensification of research into African problems. Life insistently demanded that Soviet scholars switch from historical, ethnographic and linguistic problems to an allround and profound investigation of the socio-economic and political processes going on in Africa, a detailed study of the economy and the social and class structure of the African countries, their new international relations as a whole, and especially Soviet-African relations. It was precisely with this aim that the Institute of African Studies was organised in October 1959, within the framework of the USSR Academy of Sciences. This action was received with interest and satisfaction by the African public and in scientific and educational centres of the continent.

After the young countries in Africa gained political independence, Soviet scholars of Africa in the sphere of social sciences acquired opportunities to visit the continent, study materials in its archives and libraries, conduct field work, organise scientific expeditions and meet representatives of various social strata. Soviet scholars now have broad access to first-hand sources and information not distorted in political and research centres of Western states—former metropolitan countries.

All this has largely contributed to the systematic, comprehensive and profound research into the problems of Africa in our country. Apart from the leading centre of African studies in the Soviet Union—the Institute of African Studies of the USSR Academy of Sciences—a number of other institutes of the Academy tackle African problems. In Moscow, these are the Institute of the World Economy and International Relations, the Institute of Oriental Studies, the Institute of the State and Law, the Institute of Philosophy, the Institute of World Literature, the Institute of General History, the Institute of Geography, the Institute of Linguistics; in Leningrad—the Institute of Ethnography; in Georgia, Armenia, Azerbaijan and Uzbekistan—institutes of Oriental studies; universities in Moscow, Leningrad, Kiev, Baku, Tbilisi, Yerevan, Tashkent, Alma Ata, Frunze, Ashkhabad, Tartu, Kazan, Sverdlovsk, and other cities also make their contribution to African studies.

The main trends in the activities of the Soviet students of Africa are as follows:

— comprehensive study of the economic and socio-political problems of African countries, requisites and laws for their taking the non-capitalist path and gaining economic independence; elaboration of the Marxist-Leninist concept of the development of the former colonial and semi-colonial countries on the continent;

— expansion of Soviet-African cooperation and improvement of the theoretical foundations and practice of the Soviet Union's relations with independent African states, considering their growing role in world development and present-day international relations;

— analysis of the policies and ideology of neo-colonialism and its Maoist and other henchmen in Africa; disclosure of the aims, means and methods of the neo-colonialist expansion of the imperialist powers;

— study of the history of the national liberation movement on the continent and methods for liquidating once and for all the racial-colonial oppression of the African peoples;

— study of the problems of Africa's south, the struggle against apartheid and racism;

— analysis of African cultures and their place in world cultural development, problems of shaping modern African culture, and the transformations carried out in this sphere by the independent countries of the continent;

— further expansion of ethnographic research taking due account of the social relations now emerging, especially the ethnic structure of the independent African countries, as well as problems of the classification of the African languages; investigation of the role and structure of the family, tribe, community, etc.;

— study of geographical problems: the development and transformation of the territorial structure of the economy and the processes of urbanisation and migration of the population, making inventories and territorial distribution of natural resources, socio-ecological consequences of the demographic explosion, ecological and economic division into districts of Africa and the creation of a base for environmental protection, etc.

In the field of economic investigations one of the major tasks facing Soviet scholars is the elaboration of means and methods of overcoming the backwardness of African countries. Naturally, the Soviet school of African studies proceeds, above all, from the interests of the working masses of the continent. Among the important aspect of the studies are the volume and structure of production, its growth rates, foreign economic ties and financial and currency questions.

Along with a quantitative analysis of economic growth, its structural changes are being studied from the point of view of utilising the national income for the purpose of accumulation

(capital investments) and consumption, the influence of external and internal factors, the correlationship of the development rates of industry and agriculture, the structure of employment, changes in the character of foreign economic ties, and the position of Africa in the world market, and the processes of integration. The socio-economic structures and the basic forms of property are studied as part of development problems.

The evolution of traditional structures, the development of commodity-money relations, the emergence of capitalist forms of the economy, the positions of foreign capital, the role and character of the public sector, the processes of nationalisation and Africanisation—such are the principal aspects of the African countries' economies analysed by Soviet scholars. One of the first such fundamental works was the book *Construction of the National Economies in African Countries* (M., 1968, edited by L. Goncharov).

In the field of economic problems the following works were published in recent years: a collection *The Economies of Independent Countries of Africa* (M., 1972, edited by V. Solodovnikov); I. Svanidze, *Agriculture of Countries of Tropical Africa* (M., 1972); N. Gavrilov, *Problems of Planning and Development of Agriculture in African Countries* (M., 1973); a collection *Activities of International Economic Organisations in African Countries* (M., 1973); *Problems of Overcoming Economic Backwardness and Development Strategy of African Countries* (M., 1974); L. Goncharov, *Export of Capital to the Developing Countries of Africa* (M., 1976); *The Public Sector in African Countries* (M., 1976).

Scholars sought to disclose the laws and specific features of the transformation process in the main branches of the economies of the countries of the African continent and determine their development prospects both with regard to the renovation of their production basis (technical reconstruction) and the progressive reorganisation of social relations. These problems are examined, for example, in a monograph *Agriculture* (M., 1978) put out in a multi-volume series *The Productive Forces of African Countries* (edited by L. Goncharov). In another monograph, *Transport* (M., 1978) in the same series, the data of a comprehensive investigation of the transport system of the African countries are published for the first time, revealing its cargo-carrying capacity and the principles of creating a Pan-African continental transport system. The authors proceed from the premise that the formation of an independent economy requires an adequate development of the infrastructure as a whole, especially transport, inasmuch as the significance is growing of both interregional and external ties.

A number of other works of an economic nature disclose the internal and external development factors, the specific features of

state regulation in the sphere of production and circulation, the specific features of the struggle against the economic expansion of imperialism, for reorganisation of international economic relations. Among them are the following books: Yu. Osipov, *Developing Countries: Financing of the Economies and Inflation* (M., 1978), which analyses the causes, main directions and consequences of inflation in the developing countries; Kh. Fundulis and E. Popov, *Association of Developing Countries with the European Economic Community* (M., 1978), giving a comprehensive assessment of new phenomena in the economic relations between the newly liberated countries and the European Nine; M. Golansky, *Self-Developing Systems in Economic Analysis and Planning* (M., 1978), which elaborates a number of important principles of the methods of economic analysis, drawing widely on materials on the developing countries.

In the studies of individual countries, there is a monograph *Nigeria. Present Stage of Development* (M., 1978), by a group of authors, edited by An. Gromyko, which examines the economic and socio-political aspects of the development of that "giant of Africa". Monographic reference books on Guinea, Tanzania and Togo have been prepared for publication.

Soviet scholars devote special attention to studying problems of the African countries that have chosen socialist orientation. The experience of those countries has been partially summed up; it was revealed how socialist orientation is implemented in various spheres of social life, and the conclusion was reached that capitalism as a system has no future in the newly free countries. The results of investigations were summed up in the following books: I. Potekhin, *Africa's Future. The Soviet View* (M., 1960, in Russian; M., 1962, in French; London, 1961, in English; Berlin, 1961, in German); V. Solodovnikov, *Africa Is Choosing the Road* (M., 1970); a collection *The Experience of Socialist Transformations in the USSR and Its International Significance* (M., 1974); a monograph by a group of authors, *Africa: Problems of Socialist Orientation* (M., 1976, edited by G. Starushenko); V. Stekolshchikov, *The People's Republic of the Congo in the Struggle for Socialist Orientation* (M., 1976); a number of works and articles by An. Gromyko; a book by G. Starushenko, *Africa Makes a Choice* (M., 1975, in French and English), *Socialist Orientation in Developing Countries* (M., 1977); a book by A. Kiva, *Countries of Socialist Orientation. Main Development Trends* (M., 1978). All these publications are of an all-embracing character; along with posing and examining theoretical problems of non-capitalist development in policy, economy, social life, ideology and culture, they examine and sum up the implementation of the practice of building a new society on the African continent.

A recent monograph by a group of authors of the Institute of

African Studies, *Two Trends of Socio-Economic Development*, on the basis of a comprehensive study of implementing socialist orientation and its manifestations in the basis and the superstructure, formulates the laws and criteria of non-capitalist development at the present stage. The book shows that socialist orientation goes beyond the bounds of the tasks of a national-democratic revolution and creates requisites for future, genuinely socialist transformations.

Questions of economic planning are examined from the angle of the scientific and technological revolution's influence on them. One of the major consequences of this revolution has been the intensified social character of production. The socialisation process is the basis of planning. Embracing more and more spheres of social production this process creates requisites for specific forms of planning, including national planning, which especially concerns the utilisation of the African continent's resources, which are increasingly being drawn into world economic circulation.

The requirements of the scientific and technological revolution and the entire social progress are embodied in numerous specific programmes, which are often only insignificantly connected with each other, elaborated on national and international levels. The scientific and technological revolution, however, creates possibilities for improving the methods of planning. This revolution gave an impetus to the development of a systems approach in economic analysis and planning and led to the development of economic simulation on the basis of applying electronic computers. These problems are examined in works by S. Bessonov—*Economic Planning in the Developing Countries of Africa* (Budapest, 1974, in English), and *National Planning and Economic Development of African Countries* (M., 1975); a book by A. Spirt, *Technical Progress and Colonialism* (M., 1978), and also in a monograph prepared jointly by Bulgarian and Soviet scholars, and their counterparts in the German Democratic Republic, *The Theory and Methodology of Planning in Developing Countries* (M., 1978, edited by G. Smirnov; this book is being prepared for publication in foreign languages).

Soviet scholars devote considerable attention to the problems connected with the increasing role of the liberated African countries in world development, their international relations, and especially, Soviet-African cooperation.

The main premises of the USSR's policy with regard to African states and national liberation movements has been outlined in the decisions of the CPSU Congresses, plenary sessions of the Central Committee of the CPSU and the new Constitution of the USSR. These premises express active support to all forces waging a struggle against imperialism, neocolonialism, racism, apartheid and Zionism, for the liquidation of the survivals of the colonial

system, for political and economic independence, genuine equality in the international division of labour, for sovereignty over their own natural resources, for equal and mutually advantageous cooperation with all countries and for non-recognition and resolute condemnation of racist regimes.

Scientific elaboration of the ways and means to implement these premises embraces a multitude of concrete subjects. Among them are the state and prospects of the development of political economic, scientific and cultural ties between the USSR and African countries, Soviet-African collaboration in the UN and cooperation in resolving international problems, the Soviet Union's role in strengthening the statehood and international positions of the newly-free African countries, their unity, and in settling inter-African conflicts, and joint actions in the struggle for peace, disarmament and the prevention of aggression. Of great importance is an analysis of the situation in Africa's south, and also the support rendered by Soviet scholars to the struggle for the liberation of Zimbabwe and Namibia, for the liberation of the Portuguese colonies, for the abolition of the regimes of racism and apartheid.

These problems are constantly under scrutiny. This is done in such works as a monograph written by a group of authors, *Africa in International Relations* (M., 1970, edited by An. Gromyko), and also in a monograph by a group of authors, *The USSR and African Countries (Friendship, Cooperation, Support of Anti-Imperialist Struggle)* (M., 1977, edited by E. Tarabrin). This work, in a revised edition, is now being prepared for publication in foreign languages. In it the authors convincingly show how the political essence of the USSR's ties with independent Africa is enriched from day to day.

An analysis of the foreign policies of African countries reveals intensification of the complicated processes of regrouping the class and social forces, their polarisation, class and social demarcation and the growth of the class struggle. This is described in a book by L. Yablochkov, *Principles of the Foreign Policies of African States* (M., 1974).

The study of the policies of the imperialist powers in Africa and the strategy and tactics of neocolonialism uncovers new reserves and possibilities for improving national strategy and intensifying anti-imperialist struggle. The problems of inter-imperialist antagonisms in Africa, the aggravation of the general crisis of capitalism, the specific features of the evolution of neocolonialism and new phenomena in the African policies of the principal imperialist powers are analysed in books by L. Goncharov, *The Imperialist Exploitation of the British Colonies in Africa* (M., 1961); *New Forms of Colonialism* (M., 1963, edited by

L. Goncharov and I. Yastrebova); E. Tarabrin, *The New Gamble for Africa* (M., 1972, in Russian; 1974, in English; Berlin, 1974, in German); a monograph written by a group of authors, *The Policy of the Imperialist Powers in Africa by the 1970s* (M., 1973); a joint Soviet-Bulgarian monograph, *Neo-Colonialism and Africa in the 1970s* (editor and leader of the group of authors E. Tarabrin, M., 1975, in Russian; M., 1978, in English and Portuguese; M., 1979, in Arabic; Sofia, 1978, in French). This work examines strategy and possibilities of offering resistance to neo-colonialist influences on the example of Africa, and the objective laws and specific features of neo-colonialism are analysed in close connection with the struggle of the two world systems in the conditions of international detente and the development of national liberation revolutions. The book criticises the bourgeois reformist theories of new colonial policies.

A book by D. Ponomaryov, *The Neo-colonialist Policy of Israel in Tropical Africa* (1958-1973), devoted to an important aspect of neo-colonialism, is being prepared for publication. The author reveals Israeli methods of interfering in the internal affairs of the African peoples, designed to cause disunity among them and isolating them from the progressive-minded forces of the world. Israeli neo-colonialist policy is seen as a natural product of the Zionist ideology of the ruling circles of that country. The book also denounces Zionist myths in regard to Africa and vividly shows how "assistance" and technical and economic cooperation are being used by Tel Aviv for its economic and political penetration in Africa.

In investigating social and political problems considerable attention is paid to studying the specific features of the social policy of the young independent states, the processes of national integration, the distinctions in the relations between the classes and class struggle, the formation of the proletariat, the national bourgeoisie, and the role and place of the middle and intermediary sections in the national liberation movement. These problems are examined in the context of national and state construction in the young countries of the continent, as well as questions connected with the functions of the traditional community in the new conditions, the overcoming of ethnic separatism, patriarchy, etc.

These aspects are discussed in monographs by M. Braginsky *The Working Class in Africa* (M., 1974); R. Ismagilova, *Ethnic Problems of Tropical Africa. Can They Be Solved?* (M., 1973 in Russian, and M., 1978 in English); a collection of essays *Community in Africa: Problems of Typology* (M., 1978); works by group of authors, *Society and the State in Tropical Africa* (edited by An. Gromyko, in the process of being printed); *Social Changes in the*

Independent Countries of Africa (M., 1977); books by A. Levkovsky, *The Petty Bourgeoisie: The Make-Up and Destiny of the Class* (M., 1978); L. Entin, *Political Systems of Developing Countries (the State and Political Parties in Asian and African Countries)* (M., 1978); I. Katagoshchina, *The Intelligentsia of Nigeria* (M., 1977), and L. Tumanova, *The Formation of the African Bourgeoisie* (M., 1969); works by group of authors *Law in the Independent Countries of Africa* (M., 1969); *The State and Law in Developing Countries* (M., 1976), etc.

During the past 10 to 15 years Soviet scholars have written a number of scientific works investigating, from the Marxist-Leninist point of view, the complex problems of the social development of the Afro-Asian countries. Among these works are *The Classes and Class Struggle in Developing Countries*, in three volumes (M., 1968, edited by V. Tyagunenکو); *National Liberation Movement in Asia and Africa*, in three volumes (Vol. 1, M., 1967, Volumes 2 and 3, M., 1968, edited by B. Gafurov, G. Kim, S. Rostovsky, V. Solodovnikov, R. Ulyanovsky). In these works conclusions and premises about the developing countries are formulated, which took shape in the first half of the 1960s, that is, during the period of a mighty upsurge of the national liberation movement, the collapse of the colonial system of imperialism and the crystallisation of the trends of non-capitalist development in a number of Asian and African countries. These works also dwell on some new trends and processes that manifested themselves in the mid-1960s and show that the development path of the newly-free countries is a complex and contradictory one. A profound analysis of new processes is needed, when these countries become more settled and the trends of social development become more clear-cut.

Soviet scholars have prepared several monographs, individually and collectively written, which formed a series *The Economies and Policies of Developing Countries* (edited by V. Tyagunenکو). In a fundamental work *Developing Countries: Laws, Trends, Prospects* (M., 1974, group of authors directed by V. Tyagunenکو) the writers analyse a new historical experience and, above all, lessons of the events of the mid-1960s and beginning of the 1970s, i.e., a period when rejoicing and illusions were replaced by a prolonged struggle, painful self-searchings and harsh realities. It was there, in the Third World, in the mid-1960s, that the imperialists were mustering forces to deal their main counterblow and attempting to wrest the initiative from the world liberation movement.

The works of Soviet scholars pose methodological problems in a more profound manner, and work out new approaches to investigating the problems of the developing countries, which was manifested, for example, in an analysis of the correlation of the internal and external, international and national (local) factors

of their development, in the elaboration and substantiation of a "single structural" and "multi-structural" approaches in studying the nature of the societies of the Third World, etc. More attention was paid to the problems of methodology and technique of investigations, especially those of an applied nature, and comparison of the conclusions obtained at this level of analysis with general theoretical premises. As these problems were being studied more thoroughly, the connection between the national and the social aspects of the revolutionary process in the countries of Asia and Africa was revealed ever more comprehensively.

Renovation of the forms of social life in developing countries is proceeding in the period of the scientific and technological revolution, unprecedented in its scope and consequences, which has an impact on all aspects of society's life, causing changes in the productive forces, the base and the superstructure. The scientific and technological revolution gradually encompasses, to various degree, all countries of the world. This has posed an important theoretical and practical task before Marxist scholars: to study, on the basis of the general laws of the scientific and technological revolution, its specific features as a world process and its manifestations in the developing countries.

New phenomena engendered by scientific and technical progress in the social life of the developing countries in Asia and Africa attracts ever growing attention of Marxist scholars. These problems are dealt with in a work written by a group of authors, *Developing Countries: Science, Technology, Economic Growth* (M., 1975, edited by G. Skorov); a book by A. Spirt, *The Scientific and Technological Revolution and the Developing Countries in Asia and Africa* (M., 1970); a work by a group of authors, *The Scientific and Technological Revolution and the World Revolutionary Process* (Kiev, 1977).

The starting point of an analysis in the first of these works was the contradiction between the potentials of the scientific and technological revolution and their realisation in the developing countries. The utilisation of modern scientific and technical achievements, speaking generally, holds unheard-of possibilities for accelerating the economic growth of the Asian and African countries and abolishing poverty, hunger, disease and illiteracy. However, the reality and the experience of the development of the newly-free countries during the past two decades, or more, show that the potentialities of modern science and technology remain largely unrealised in the Third World. The authors try to answer the question why this is so, what obstacles stand in the way of scientific and technical progress in these countries, whether they can be surmounted, and if they can, how and under what social conditions this task can be carried out.

The classics of Marxism-Leninism attached great importance to the study of the problems of scientific progress and the role of science and technology in social production, the interrelationships of science with the industrial revolution and with social revolutions and radical economic transformations. The scientific and technological revolution exerts a contradictory influence on the socio-economic and political processes taking place in the developing countries of Asia and Africa. A number of these aspects are discussed by D. Ponomaryov in his book *Organisation and Development of Scientific Research in Africa (1960-1970)* (M., 1974) and a work by a group of authors, *The Third World and Scientific and Technical Progress* (M., 1974). They are also comprehensively examined by R. Avakov's monograph, *Developing Countries: the Scientific and Technological Revolution and the Problem of Independence* (M., 1976). The author points out that the realisation of a historical task—winning economic independence by the developing countries—is indissolubly linked with their struggle for scientific and technical independence. This is a uniform process of overcoming backwardness and the dependent character of the development of the Asian, African and Latin American countries.

Soviet scholars are studying the problems of ideological struggle and ideological currents on the continent, especially the evolution of the revolutionary democrats' views and the political ideology of the ruling parties.

The works now in print—*African Revolutionary Democrats, Shaping of Ideology and Ideology of Revolutionary Democrats in Africa*—show the processes of the formation and development of revolutionary-democratic ideology on the continent; they contain an analysis of the views of revolutionary democrats on questions pertaining to the present stage of revolution; paths and programmes of socio-economic development. They have also elaborated criteria of a class evaluation of revolutionary-democratic ideology. N. Illarionov's monograph, *Ideology and Social Progress in the Countries of Tropical Africa* (M., 1978) discusses various concepts of national development which are widespread on the continent. The author pays a great deal of attention to the problem of modernising traditional social structures, and to the influence of the ruling circles' ideological orientation on the socio-economic development of African countries.

A three-volume monograph, written by a group of authors, *The Classes and Class Struggle in Developing Countries* (M., 1968) contains an allround scientific analysis of the present correlation of class forces and the experience of the class struggle in three continents; shows the political struggle of various classes and parties in choosing the path of development; examines the ideology of the classes and ideological struggle; lays bare the

ideology of the national bourgeoisie; studies the role of religious teachings; subjects to a critical analysis the theories of "national socialism". A work by E. Trotsky, *Non-Marxist Concepts of Socialism and the Struggle for Social Progress in Asian and African Countries* (M., 1974, in Russian; M., 1978, in Arabic and French) examines various socialist concepts in Asian and African countries, shows the progressive and negative aspects of these concepts and emphasises the possibility of cooperation between Communist and revolutionary-democratic parties and their alliance in the struggle against imperialism and reaction. A monograph by A. Grigoryev, *Development of Economic Thought in the Third World Countries* (Lvov, 1977) analyses contemporary non-Marxist economic theories in Asian and African countries; shows the internal and external factors that have led to the emergence of non-proletarian socialist concepts; examines the basic trends of non-Marxist socialist thought: revolutionary-democratic, petty bourgeois-utopian and bourgeois national-reformist. The monograph discusses their role in the struggle to choose roads of economic development.

The development of social thought is closely connected with concrete historical conditions. Modern ideological trends in Tropical Africa have taken shape in the course of the struggle against colonial regimes. And this struggle itself has been, and is, going on in the conditions of the world historic triumphs of socialism. The defeat of imperialism in Africa has aggravated the general crisis of bourgeois ideology. The work *Ideological Trends in Tropical Africa* (M., 1969) edited by L. Yablochkov and K. Kremen) dwells in detail on the evolution of such leading ideological and political trends in the continent as nationalism and pan-Africanism; it analyses the role of Christianity, Islam and traditional cults in the socio-political life of Africa. A special chapter is devoted to the theories of "African socialism"; it describes the sharp ideological struggle around the question of paths of development of the newly-free countries of Tropical Africa, as well as the influence of socialist ideas on social thought in those countries.

The third volume of a monograph written by a group of authors, *The Struggle of Ideas in the Modern World* (M., 1978), edited by Academician F. Konstantinov, deals with a wide range of problems. In this work Soviet scholars point out, among other things, that multiform ideological currents, sharply conflicting with one another, have been brought to life by the growth of the national and class self-consciousness of the peoples on the African continent, and the striving of each politically active group, both progressive and reactionary, to have its own ideological basis at the decisive historical stage for the liberated countries.

Specialists showed great interest in a monograph by scholars of

the USSR and the German Democratic Republic, *Afrika: Gegenwärtige soziale Prozesse und Strukturen*, (Berlin, 1976, in German). It analyses the laws and specific features of social development; elaborates on the problem of the driving forces of the national-democratic revolution, and shows the external and internal factors which exert an influence on the basis of African society. The authors of the monograph stress that at present a possibility is emerging on the continent for a broad cooperation between various class groups and layers, for the formation of a class-coalition state.

The following problems are being studied within the framework of research into the national liberation movement in the countries of the African continent: the turning of the peoples of Tropical Africa into a subject of world history and world politics; the influence of the ideas of the Great October Socialist Revolution in Russia on the continent; the laws and specific features of the national liberation movement in Africa at the first and second stages of the general crisis of capitalism; methodology of studying modern African historiography and the history of the African peoples' social thought. In using the general methodological principles of historical materialism, Soviet historians examine such fundamental problems as the national liberation movement, the colonial expansion of Western powers, the mechanism of exploitation of the colonies by the metropolitan countries, inter-imperialist contradictions on the continent, our country's historical ties with Africa, etc.

The range of problems of the modern and contemporary history of the newly-free countries is exceptionally broad. Of great importance are theoretical works by leaders of the CPSU, particularly by Academician Boris Ponomaryov, and the premises about real socialism as a factor of national independence for the countries that have thrown off the colonial yoke.

Disintegration of the colonial system of imperialism has made urgently necessary the comprehensive study of the socio-economic and political processes going on in Asian and African countries. The great scope, depth and originality of these processes can be understood only on the basis of a Marxist-Leninist analysis of the present development of these countries, as well as of their historical past. In this connection Soviet scholars of the Orient and Africa have undertaken publication of a major work *National Liberation Movements in Asia and Africa*. It is comprised of three volumes: *Centuries of Unequal Struggle* (M., 1967), *The Awakening of the Oppressed* (M., 1968), and *Along a New Road* (M., 1968). The three volumes cite a wealth of material showing the emergence and development of the colonial system of capitalism and the struggle of the peoples of Asia and Africa against colonial

enslavement (the 16th-early 20th centuries); analyse the problem of the national liberation struggle of the peoples of the two continents and the beginning of the crisis of the colonial system and its development at the first stage of the general crisis of capitalism and in the early second stage (1917-1945); show the disintegration of the colonial system and discuss the problems of the development of the newly-free countries; dwell on the struggle of the world socialist system in the present epoch against imperialism along the development road of the newly-free countries, as well as various forms of cooperation between the USSR and other socialist countries and the peoples of Asia and Africa.

Fundamental works by R. Ulyanovsky, *Socialism and the Liberated Countries* (M., 1972), *Essays on National Liberation Struggle. Questions of Theory and Practice* (M., 1976), and *Present-Day Problems of Asia and Africa* (M., 1978); B. Gafurov, *Pressing Problems of the Modern National Liberation Movement. Developing Countries of Asia and Africa* (M., 1976) and *The October Revolution and the National Liberation Movement* (M., 1967); K. Brutents, *Modern National Liberation Revolutions (Some Questions of Theory)* (M., 1974); a monograph *The Great October and Africa* by a group of authors prepared for publication by the Institute of African Studies of the USSR Academy of Sciences (edited by An. Gromyko) dwelling on the theoretical problems of the national liberation movement which are under constant study by Marxist-Leninist science. Soviet African and Oriental studies are being conducted at an especially rapid pace today and confidently project broad theoretical generalisations of complex realities that are typical of the developing countries in Asia and Africa.

During the period under review Soviet scholars of Africa have published a number of works summarising past and present liberation struggles on the African continent. Among them: a monograph by a group of authors, *History of Africa in the 19th-Early 20th Centuries* (M., 1967); *A History of Africa 1918-1967* (M., 1964 and 1968, M., 1968 in English); V. Subbotin, *French Colonies in 1870-1918. Tropical Africa and Indian Ocean Islands* (M., 1973). Monographs *History of the National Liberation Struggle of the Peoples of Africa in Modern Times*, Vol. I (M., 1976), and *Africa in Modern and Contemporary Times* (M., 1976), written by groups of authors, contain new data about the development of the national liberation movements in the period between the two world wars, analyse the specific features of colonial policies in individual African regions and show the forms of resistance to the invaders. The second volume of *History of the National Liberation Struggle in Contemporary Times*, by a group of authors (M., 1978), analyses the requisites, laws and stages of struggle for independence, investi-

gates the specific features of the development of anti-imperialist revolutions on the continent, shows the evolution of the class structure of the anti-colonial front and traces the influence of world socialism on the progress and forms of the liberation movement in Africa. A book by S. Abramova, *Africa: Four Centuries of Slave Trade* (M., 1978) and a work by a group of authors *The Study of Africa in Russian (Pre-revolutionary Period)* (M., 1977), as well as I. Tsintsadze's work *Basic Principles of British Colonial Policy* (Tbilisi, 1978, in Georgian) are of special interest.

For many years Soviet scholars of Africa have been conducting research into political and economic problems of Africa's south. Already during the 1960s many works were published, which consistently, from the point of view of progressive science and its individual branches—anthropology, ethnography, archaeology—denounced the anti-scientific, inhuman concepts about superiority of some races and peoples over others. A collection *Against Racism* (M., 1966) in the series "Races and Peoples", prepared by the Institute of Ethnography of the USSR Academy of Sciences, devoted much attention to South Africa.

Among works dating to the 1960s, there are books by I. Yastrebova, *The Union of South Africa After World War II* (M., 1960); A. Pokrovsky, *Mining Industry of South Africa* (M., 1967); T. Tairov, *Apartheid—Crime of the Century* (M., 1968); a collection *The South African Bloc of Colonialists* (M., 1968, edited by An Gromyko); V. Sheinis, *Portuguese Colonialism in Africa after World War II* (M., 1969). These works describe the mechanism of exploitation of the African population in the Republic of South Africa and analyse the inhuman rules and regulations of the racist legislation in the country, which contradict international legal rules and the UN Declaration of Human Rights, as well as the imperialist foreign policy of the ruling circles in the Republic of South Africa and their ties with international imperialism.

A new aspect of the study of South Africa is that of the attitude of the progressive-minded forces in the world to the problems of the Republic of South Africa—apartheid, reactionary domestic policies and racism. *The United Nations Against Colonialism and Racism in the South of Africa*, a book by E. Pchelintsev, V. Shkunayev and Ya. Etinger, (M., 1970) examines the place of the UN in the struggle against racism, discrimination and oppression of the non-white peoples in the region and analyses the positive experience of the UN, as well as the inconsistency and hesitation of this international organisation in the drive to protect the indigenous people of the region.

A number of works came off the press in the 1970s, among them: Yu. Guk, *Foreign Policy of the Republic of South Africa* (M., 1973); A. Pokrovsky, *Monopoly Capital in South African Countries*

(M., 1976); I. Cherkasova, *Foreign Economic Ties of the Republic of South Africa* (M., 1977). These works are distinguished by a common approach to the "allies" of the Republic of South Africa. Using the wealth of material the authors show that the monstrous laws of South Africa have strong defenders in monopoly circles of Western countries. These groups, for selfish aims, are interested in the exploitation of the peoples and resources of South Africa. It is due to their support that the South African racist regimes still exist and have not fallen under the blows of the liberation forces.

Works by A. Davidson, *South Africa. Formation of the Forces of Protest* (M., 1972), and by V. Gorodnov, *The South African Working Class in the Struggle Against Reaction and Racism* (M., 1969), are devoted to the liberation forces in the south of the continent, their formation and role in the struggle against colonialism, racism and apartheid.

In recent years the Institute of African Studies, the USSR Academy of Sciences, has conducted research, under the guidance of Anatoly Gromyko, into a whole range of problems of the African continent's south. A work has been prepared for publication under the title *The South of Africa: Struggle for Emancipation* (edited by An. Gromyko); also numerous articles have been printed in scientific journals. This work deals with the topical problems of the national liberation struggle of the peoples in the Republic of South Africa, Namibia and Rhodesia. It analyses difficulties and successes of this struggle; discusses the domestic policies of the racist regimes; describes the support they receive from international imperialism, and the manoeuvres of the neo-colonialist forces striving to prevent the peoples from gaining genuine independence. The work devotes considerable attention to describing the positions taken by the independent African countries with regard to the conflict in the south of Africa, as well as the assistance rendered the patriotic forces by the socialist states and the progressive-minded world public.

Anatoly Gromyko has sent to the printers his monograph *Conflict in the South of Africa* (international aspect), which analyses in detail the factors underlying it. The monograph draws conclusions about possible alternative ways of development of this dangerous conflict engendered by such social anomaly as apartheid, and also by the policy of the West.

The study of the cultural problems of Africa during the period prior to 1970 had the aim of "taking an inventory", as it were, of the cultural achievements of the African peoples in the various spheres of creation; on the other hand, it was also aimed at "rehabilitating" African cultures, that is, showing the grandeur of the African's cultural achievements and their genuine place in the history of all human culture. Indicative for this stage of the study

of culture was publication of a collection, *Essays on African Culture* (M., 1966, in English and French, edited by M. Korostovtsev), which attempted to generalise individual questions of the theory of the cultural development of the peoples on the continent.

During that period many works were published devoted to the art of African peoples. Works by N. Grigorovich, V. Mirimanov and G. Chernova analysed the various stages and aspects of the development of artistic creation—from rock drawings of the Neolithic Period to modern forms of drawing and plastic art. Among the most significant works is one by V. Mirimanov, *Africa. The Art* (M., 1967), and another, by G. Chernova, *The Art of Tropical Africa* (M., 1968).

One of the leading fields of research into African cultures at the time was the study of religious beliefs of the peoples of the continent. A book by B. Sharevskaya, *Old and New Religions of Tropical Africa* (M., 1964) gives a profound analysis of the traditional religions of the continent, their interrelationships with world religions and the role of some African religious movements in anti-colonial struggles. A reference book by G. Shpazhnikov was issued, *Religions of African Countries* (M., 1968).

Questions of the cultural history of the continent were discussed in a book, *Africa Is Not Discovered Yet* (M., 1969), and *Africa: Encounters of Civilisations* (M., 1969).

With the accumulation of material and the experience of studying the cultural problems of the continent, a shift to a new stage of investigations began to be traceable in the 1970s. Its specific feature was greater attention to culture as an integral complex of phenomena, to the problems of the development of new culture in independent countries. In close connection with this change of emphasis is a growing interest in general theoretical problems of African cultural development. The first testimony to this is a collection, *Problems of Cultural Construction in Independent Countries of Africa* (M., 1971). It attempted to examine general requisites and specific features of cultural construction on the continent—socio-economic, language, ideological; to ascertain the typological affiliation of present-day processes of cultural development, and also to analyse the state of training of national personnel in Africa.

A serious analysis of the African leaders' attitude to cultural problems is contained in B. Erasov's book, *Tropical Africa. Ideology and Problems of Culture* (M., 1972). General theoretical investigations of African cultures deal, above all, with the entire ideological aspect of the formation of "national" cultures. These questions generally coincide with social thought as such and are investigated in a series of articles and works by B. Erasov, M. Frenkel and A. Moseiko.

A great amount of research work is being conducted by Soviet scholars of African ethnography in Leningrad, with the Corresponding Member of the USSR Academy of Sciences D. Olderogge at the head. In recent years they have been working on the problems of the kinship system, ethnolinguistic situations in African countries and traditional social institutions in Africa. These investigations mainly deal with the pre-colonial period of the continent's history. They revealed a new aspect in the interpretation of Africa's general history. Soviet ethnographers proved the ancient and genuine character of African culture, both social and material, as well as art and social institutions, the complex, developed character of these institutions and the inclusion of the continent, from ancient times, in the orbit of international cultural and ethnic ties. They established that the African continent had never been isolated from other world civilisations. In investigating the problems of transition from pre-class to class society, Soviet scholars arrived at the conclusion that the general laws of social development are typical of Africa, too, although there exist some specific, original features peculiar to that continent. The attention of the reader can be attracted by ethnographers' works, written by groups of authors, among them, *Basic Problems of African Studies* (M., 1973); *Africa: Emergence of Backwardness and Ways of Development* (M., 1974); articles and essays in special publications "Peoples and Countries of the East" and "Africana".

Soviet geographers studying African problems are delving into the problems of man and the environment, ecological-economic problems, utilisation of natural resources, etc. The study of the problems of "desert creep" and man's rational economic activities is of great economic significance for the majority of countries in Africa. Soviet geographers have published 15 monographs in the past 15 years devoted to individual countries, groups of countries, or general African geographical problems. At present, work is being done to investigate the development of the natural medium of the continent under the impact of anthropogenic factors and the influence of the scientific and technological revolution, as well as the state of the environment and the prospects of economic development in the zone of periodic droughts to the south of the Sahara. Among major works by Soviet geographers specialising in African problems are *Problems of Using the Natural and Labour Resources of Developing Countries* (M., 1974, edited by N. Asoyan, M. Gornung, and others); *History of the Discovery and Investigation of Africa* (M., 1973); a comprehensive work *East Africa. Essays on Economic Geography* (M., 1974); *Developing Countries: Problems of the Territorial Structure of the Economy (Geographical Aspects)* (M., 1978, in English, edited by Ya. Mashbits and G. Sdasyuk).

Essays on the problems of economic development of the People's Republic of the Congo and other countries on the continent are prepared for publication or have already been published.

Of great interest are the results of the work of Soviet scientific expeditions to African countries: archaeological to Ancient Nubia (1961-1963) linguistic to Mali (1963-1964), geophysical to Mali (1964-1965), botanical to Algeria (1967-1968), meteorite-ionosphere to Somali (1967-1970), geological and geophysical to countries of East Africa—Kenya, Uganda, Tanzania, Ruanda, Burundi (1967-1969), a Soviet-Somali historical expedition to Somali (1971). All these expeditions have opened up great possibilities for further developing Soviet-African scientific cooperation and contributed to establishing individual branches of science in a number of African countries.

It is also necessary to say a few words about the activities of the Scientific Council of the USSR Academy of Sciences on African problems, which has been headed, since the end of 1976, by Anatoly Gromyko, Director of the Institute of African Studies, the USSR Academy of Sciences. The main tasks of the Scientific Council are to coordinate research being carried on in institutes of the USSR Academy of Sciences, the academies of sciences of the Union republics and at higher educational establishments of the country; analyse the state of investigations of African problems in the USSR and socialist countries; organise scientific conferences and discussions with the participation of specialists on Africa, professors and instructors at higher educational establishments and officials of government bodies, and develop cooperation and contacts with the centres of African studies in socialist countries.

The Scientific Council has organised three all-Union conferences of African scholars, the first of which (Moscow, 1969) was devoted to the current problems of African research in the USSR, the second (Moscow, 1974) discussed the subject "Marxist-Leninist Science on Ways of Overcoming Backwardness in African Countries", and the third one (Moscow, October 1979) dealt with the problem "Africa in the Modern World". In June 1979 the Council held an all-Union conference on Ethiopian studies, in Moscow.

The Institute of African Studies of the USSR Academy of Sciences as the main research centre has accumulated a wealth of positive experience in publishing works jointly with specialists on Africa working in other institutes and organisations of the USSR and socialist countries. A number of fundamental works has been prepared by groups of scholars representing various academic centres and educational institutions of the country. The Scientific Council is carrying on a great deal of work in pursuing qualified research and teaching personnel in the country's institutes of higher learning to tackle African problems. The Council has held,

in conjunction with other institutes and universities, a number of scientific conferences in Moscow, Leningrad, Kiev, Odessa and Lvov, as well as scientific symposiums with the participation of senior-course students. In April 1978, the Council organised and held the first scientific course for young research associates and postgraduate students, which helped to create an overall picture of African studies being done by young research workers at universities and institutes. An exchange of opinions between young scholars and leading Soviet scholars of Africa familiarised the former with the achievements of Soviet African studies in recent years.

In 1976-1979 the Scientific Council organised a number of sessions to discuss timely problems, in particular, the Great October Socialist Revolution and Africa, Soviet-African economic relations, 15 years of the Organisation of African Unity, the socialist countries and Africa in international relations, urgent problems of African studies, nationalism in present-day Africa.

On the basis of recommendations made by Leonid Brezhnev, General Secretary of the Central Committee of the CPSU and Chairman of the USSR Presidium of the Supreme Soviet, at a conference of heads of the Academies of Sciences of the socialist countries in Moscow, on February 17, 1977, the Scientific Council of the USSR Academy of Sciences on African problems constantly develops fruitful scientific contacts, holds joint scientific conferences, discussions, etc., and prepares joint research, thereby strengthening the foundation of multilateral scientific cooperation between the Academies of Sciences of socialist countries.

Coordinating the activities of the centres of African studies in the USSR and other socialist countries, the Scientific Council contributes to the work of African scholars united in working groups within the framework of multilateral cooperation between the Academies of Sciences of socialist countries on the basis of the sub-commission "The Economies and Policies of African Countries". The working groups—"Foreign Policies of African Countries", "Methodology and Methods of Planning in the Developing Countries", "A History of Africa and the National Liberation Movement in Africa", "Ideological Problems in African Countries", "Economic Ties of Socialist States with African Countries"—conduct a great deal of research and have already published a number of interesting fundamental works.

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The study of African literatures began in the Soviet Union as a special field of literary criticism in the 1950s-1960s and was a direct result of the intensive development of these literatures

during the preceding decade, an epoch of the African peoples' active anti-colonial struggle. Prior to that only a few literatures of the African continent were studied in our country, mainly the literature of Ancient Egypt and Egyptian literature of modern times, as well as Ethiopian literature; a weighty contribution to their study was made by such outstanding scholars of the Orient as Academician B. Turayev and Academician I. Krachkovsky. (About work of Soviet literary scholars of Africa see also Ye. Trushchenko, "Studies of African Literatures in the USSR", *Social Sciences*, No. 2, 1971.)

Of great significance for scholars of the literatures of the peoples on the continent are works by the Corresponding Member of the USSR Academy of Sciences, D. Olderogge, for example, his forewords to the Russian editions of African folklore (*Tales of African Peoples*, M.-L., 1959, etc.). In 1970, a big collection of articles about the folklore and literatures of the peoples of North, North-East, Tropical and South Africa was published, under D. Olderogge's editorship.

Since the end of the 1950s, when works by English-language writers of the Union of South Africa (now the Republic of South Africa) denouncing race discrimination and social oppression of the African and coloured population in South Africa, appeared in Russian translation, and then, in the late 1950s-early 1960s, translations of works by writers of Tropical Africa were published, Soviet readers and literary critics have developed a much greater interest in African literatures in European languages. As is known, European languages and literatures in European languages to this day play a major role in multilingual African countries, for they are an important factor of national and political consolidation and dissemination of advanced social ideas.

The First Conference of Writers of °Asian and African Countries held in Tashkent (Uzbekistan) in October 1958 contributed to the growth of interest in and attention to African writers' work. While the Conference was being prepared, articles about poetry of Tropical Africa were published by the literary critic E. Galperina, who played a significant role in popularising works by English- and French-language poets of Tropical Africa and the Caribbean Islands: she prepared collections *In Tom-Tom Rhythm* (M., 1961) devoted to African poetry, and *Time of Trees Aflame* (M., 1961), the first Soviet anthology of modern poetry of West Indies and the Antilles. A collection of translations of African poetry in Portuguese, *As Seen by the Heart* (M., 1962), was prepared by I. Tynyanova and L. Nekrasova, with the foreword written by the well-known Soviet scholar of Africa G. Potekhina (1926-1979). The Soviet literary critic and translator, E. Ryauzova devoted much effort to familiarising Soviet readers with African

literature in Portuguese. Among the existing anthologies of African poetry, mention should be made of an impressive volume *Poetry of Africa* (M., 1973), which was published in the series "World Literature Library" and was a result of a great deal of work by a large group of Soviet translators and scholars of Africa.

A milestone in the study of African literatures in our country was the publication of a collection of articles, *Literature of African Countries* (M., 1964) prepared by research associates of the Institute of African Studies of the USSR Academy of Sciences and edited by F. Breskina. The second collection of the same title came off the press in 1966 and contained translations of articles written by African cultural figures.

In 1966, the Gorky Institute of World Literature of the USSR Academy of Sciences held an All-Union Conference of scholars of African literatures. Its main subject was—"The Pressing Problems of Study of African Literatures"—and it attracted teachers and research associates of many educational and scientific institutes in Moscow and Leningrad, who grapple with the problems of literatures and cultures of countries not only to the south of the Sahara, but also in North America. The materials of that conference provided the basis for a collection of articles—*Current Problems of Study of African Literatures* (M., 1969), edited by I. Nikiforova. Subsequently, the principle of a "continental scope" of material is observed in all big works on African literatures written by groups of authors. This distinguishes works by Soviet scholars from those of their Western counterparts, who regard as African only literatures of the peoples of the so-called Black world, that is, the sub-Sahara Africa and the Caribbean Islands. Soviet scholars maintain that the decisive factor determining the affinity of the literary process of different peoples is not their race affiliation, but the affinity of the historical and social destinies of these peoples at definite stages of social development. The affinity of the social development of the countries of Tropical and North Africa during the period of anti-colonial struggle and in the present period of independence and radical social changes ultimately determines the evident typological parallels in the development of literatures in these regions, making parallel studies and typological comparisons of these literatures expedient and promising.

A whole number of monographs appeared in Soviet African studies in the late 1960s-early 1970s. They were devoted to the development of literatures in various countries and regions of Africa. Among them are books by V. Ivasheva, *Literature of Countries of West Africa. Prose* (M., 1967); G. Potekhina, *Essays on Modern Literatures of West Africa* (M., 1968); I. Nikiforova, *About National Specifics of West African Literatures* (M., 1970), and *African*

Novel. Origination and Problems of Typology (M., 1977); E. Ryauzova, *Portuguese-Language Literatures of Africa* (M., 1972); V. Vavilov, *Nigerian Prose* (M., 1973); S. Prozhogina, *French-Language Literature of the Maghrib Countries* (M., 1973); N. Lyakhovskaya, *Poetry of West Africa* (M., 1975); G. Jugashvili, *Algerian French-Language Novel* (M., 1976), etc. Special mention should be made of works by the well-known Soviet scholar of African folklore, E. Kotlyar, and first and foremost her book, *Myths and Tales of Africa* (M., 1976).

The study of African literatures in the Soviet Union has been given a fresh impetus by the organisation of a single centre of studies of African literatures within the framework of the USSR Academy of Sciences—the department of African literatures in the Gorky Institute of World Literature of the USSR Academy of Sciences. The task of this body of research workers is to study the general laws governing the literary process on the African continent, and African literatures as an organic part of world literature and also the contribution of the African writers to the treasure house of world culture. The biggest work of the department of African literatures is a two-volume collection *Modern African Literatures* (M., 1973-1974), edited by I. Nikiforova. It deals with the history of literatures of various regions of the African continent from the latter part of the 19th century to our day (up to 1970).

A continuation of this work is another work written by a group of authors, *Development of Literature in the Independent Countries of Africa*, which will shortly come off the press. It investigates the specific features of the literary process in the countries of North and Tropical Africa in the present epoch of independence. These two big works feature several hundred names of modern African writers—prose writers, poets, playwrights; special articles are devoted to critical analyses of well-known authors. Among them, M. Mammeri, Kateb Yassine (Algeria); A. Neto, L. Vieira (Angola); B. Dadié (Ivory Coast); F. Bebey, M. Béti, F. Oyono (the Cameroons); Ngugi Wa Thiongo (J. Ngugi) (Kenya); D. Chräibi (Morocco); H. Lopes, Tchicaya U. Tam'si (People's Republic of the Congo); Ch. Achebe, J. Munonye, W. Soyinka, L. S. Sengor, Sembène Ousmane (Senegal); Shaaban Robert (Tanzania); P. Abrahams, A. La Guma (Republic of South Africa). Mention should also be made of a work written by a group of authors, *Interconnections Between African Literatures and Literatures of the World* (M., 1975), edited by I. Nikiforova, which aims at a better understanding of the role of original African literatures in the world literary process.

An important task facing scholars of Africa working at the Gorky Institute of World Literature is to help colleges and universities in writing textbooks and other aids which they need.

At present the Vysshaya shkola Publishers is preparing the first Soviet book of this kind—*Literatures of Africa* (edited by V. Vavilov and A. Kudelin), compiled by research associates of the Institute jointly with professors and instructors of Moscow and Leningrad universities.

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The development of African linguistic studies during the 1970s is distinguished in our country by tackling and elaborating big, comprehensive themes at institutes of the USSR Academy of Sciences, the Institute of Linguistics, as well as increasing the number of African languages being studied in higher educational establishments of Moscow and Leningrad. (About work of Soviet linguists studying Africa see also N. Okhotina, "Problems of African Linguistical Studies in the USSR", *Social Sciences*, No. 2, 1971.)

The sociolinguistic trend in the study of African languages is one of the new and very promising fields which has been elaborated in recent years. Investigation of linguistic situations in individual countries, construction of a single typological model conformably to a description of the linguistic situation in entire African regions, questions of language planning and policy in the developing states of the continent, the problems of influence of the communicative status of a language on the character of changes in its grammatical structure and vocabulary—this is a far from complete list of the problems being tackled by Soviet scholars of Africa at present. Several monographs written by groups of authors working in the Department of African Languages of the Institute of Linguistics of the USSR Academy of Sciences are devoted precisely to these problems. Among them, *The Linguistic Situation in African Countries* (M., 1975), written by V. Vinogradov, M. Dyachkov, A. Zhurinsky, B. Zhurkovsky, A. Lutskov, N. Okhotina, V. Porkhomovsky, I. Ryabova, V. Khabirov; *Problems of Linguistic Policy in Countries of Tropical Africa* (M., 1977), written by V. Vinogradov, M. Dyachkov, A. Zhurinsky, B. Zhurkovsky, A. Lutskov, K. Pozdnyakov, I. Ryabova. Scholars of the Soviet Union and their counterparts from the German Democratic Republic are currently preparing a monograph investigating the development of national languages in Africa. These problems are also dealt with in monographs written by groups of authors which are now in print: *Formation and Functioning of the Languages of Inter-Ethnic Contacts in Africa* (authors—A. Zhurinsky, B. Zhurkovsky, M. Dyachkov, A. Lutskov, N. Okhotina, I. Ryabova), and *Socio-Linguistic Typology (Tropical Africa)* (authors—V. Vinogradov, A. Koval, V. Porkhomovsky).

Further development of sociolinguistic investigations is prompted by life, when the newly-free countries of Africa, in the conditions of national advancement and a technical revolution, face the necessity of solving the urgent problems of linguistic planning and the choice of linguistic policy.

African linguistic studies in the Soviet Union now include the comparative-historical study of languages of the continent. African scholars of the Institute of Linguistics of the USSR Academy of Sciences, in conjunction with associates of the Institute of Oriental Studies of the USSR Academy of Sciences (A. Belova, I. Dyakonov, A. Militarev, V. Porkhomovsky, O. Stolbova, A. Chetverukhin) have begun preparing a multi-volume *Comparative-Historical Vocabulary of Afrasian Languages*. The first volumes of this work are about to be printed, and sample copies of them are already published in the USA, in the *Journal of American Oriental Society*.

Such an undertaking is unprecedented in world Oriental and African studies. This dictionary embraces practically all branches of the Afrasian family of languages. Apart from that, scholars of African languages are engaged in comparative-historical reconstruction of the Chadic languages and the Mande languages; they are also working on elaborating principally new methods of comparative-historical studies conformably to the languages recently put into writing and the non-written languages of Africa (K. Pozdnyakov, V. Porkhomovsky, O. Stolbova).

Typological investigations of African languages continue, with the ultimate aim of creating a typological classification of the languages of the continent. Typological descriptions are being done on a vast amount of material on the Bantu languages, such as Swahili, Lingala, Kuria, Kipare, Zulu, Mwera, Ganda, Shambala, Ndebele, Shona, Venda, and many others, and also languages of West Africa—Fula, Hausa, Margi, Bamum, Bamileke, etc. These typological investigations resulted in the publication of a number of monographs written by groups of authors: *Phonology and Morphology of African Languages* (M., 1972), by V. Vinogradov, B. Zhurkovsky, A. Koval, N. Okhotina; *Typology of Verb in African Languages* (M., 1972), by I. Aksyonova, V. Porkhomovsky, I. Ryabova, I. Toporova. In 1979, the first volume was published of a two-volume monograph *Morphology and Morphology of Word Classes in African Languages (Nouns and Pronouns)*, by V. Vinogradov, A. Koval, I. Toporova. Publication of the second volume of this monograph—*Verbs and Periphery Word Classes*—will be undertaken in the next few years, by V. Vinogradov, A. Zhurinsky, I. Aksyonova.

Great attention is devoted to describing languages with a recent system of writing and non-written languages of Africa. The

collections *Non-Written Languages and Young Written Languages of Africa* (M., 1973), and *Young Written Languages of Africa. Questions of Phonology and Grammar* (M., 1977), published by the Department of African languages of the Institute of Linguistics of the USSR Academy of Sciences, for the first time in linguistic literature, described such languages as Kuria, Gusii, Kipare, Hadia, Margi, Bura, Alur, etc.

If we take into account that the African branch of Soviet linguistics is comparatively young, only coming into being in the 1960s (before that Soviet publications devoted to African languages were few and far between)—it becomes clear that the interest in African linguistic studies in our country, the range of research and the quality of theoretical study of the languages of the continent have been growing.

Teaching of African languages has made considerable progress during these years, both qualitatively and quantitatively, in higher educational establishments of Moscow and Leningrad. Apart from the most widespread African languages—Swahili, Amhara and Hausa, which have been taught in Leningrad University since the 1930s, and in the Institute of Asian and African Countries at Moscow University, the Moscow Institute of International Relations and the Patrice Lumumba Friendship University, more languages have been introduced in Leningrad University to be studied by future scholars of Africa: Lingala, Bamana, Fula, Yoruba, Malinka, Somali, and several others.

Teachers and research associates at higher educational establishments have in recent years compiled textbooks, dictionaries, theoretical monographs and other aids. Among them, *Swahili Textbook* (M., 1973), by N. Gromova and E. Myachina; *Russian-Swahili Dictionary for Students* (M., 1977), by N. Gromova and N. Fyodorova; *Study Aid for Translating Social and Political Texts. The Swahili Language* (M., 1977), by N. Gromova and N. Fyodorova. An expanded and revised new edition of Swahili-Russian dictionary (N. Gromova, V. Makarenko, E. Myachina and N. Fyodorova) is being prepared for publication; also to be published soon are *Fula-French-Russian Dictionary* (by G. Zubko) and *Lingala-Russian Dictionary* (I. Toporova).

The growing number of the African languages taught, inclusion of theoretical courses of African linguistics in higher educational establishments curricula entail the necessity of elaborating the concrete problems of phonetics, grammar and lexicology of those African languages which have already been introduced or are going to be introduced for studying. In view of this more articles on the above-mentioned subjects are included in periodic publications of Leningrad and Moscow Universities, the Moscow Institute of International Relations, and more collections of articles entirely

devoted to these problems are published. In recent years, teachers at higher educational establishments, with the participation of associates of academic institutes have published a number of collections, each devoted to a definite subject. Among them, *Problems of African Linguistics* (M., 1972), by I. Aksyonova, V. Beilis, L. Vishnevskaya, B. Zhurkovsky, A. Ionova, G. Korshunova, E. Kotlyar, V. Kuleshova, V. Mayants, N. Okhotina, V. Porphomovsky, V. Sulima, I. Toporova; *Questions of Phonetics, Morphology and Syntax of African Languages* (M., 1978), by N. Gromova, A. Zimensky, G. Zubko, A. Lutskov, N. Okhotina, I. Surkanova, I. Togoyeva.

The higher educational establishments of Moscow and Leningrad, where African languages are being taught, train not only practical workers, but also theoretical, highly qualified specialists in the field of African linguistics. Similar work is being conducted by institutes of the USSR Academy of Sciences, where not only Soviet citizens, but people from African countries are taking their postgraduate course.

In recent years works by Soviet linguists specialising in African studies have been published more frequently in Soviet academic journals, as well as in periodicals of Africa, Europe and America (journals *Swahili*, Nairobi—Dar-es-Salaam; *Folia Orientalia*, Krakov; *Journal of American Oriental Society*, etc.). Soviet scholars of Africa actively participate in international and all-Union conferences, congresses and symposiums of Oriental and African scholars of the world.

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Africa has now entered the international arena. Soviet scholars consider it their duty to render aid to Africans. They want African studies to serve the progress of Africa. The USSR's attitude to the national liberation movements of the oppressed peoples has been characterised by a principled, class approach throughout the entire period of the Soviet state's history.

At the present stage, the Soviet scholars of Africa are faced with the task of helping the African peoples to overcome economic backwardness, become active participants in and contributors to the scientific and technological revolution, contribute to a further consolidation of friendly Soviet-African relations, assist the fighters for Africa's social progress in their efforts to oppose the influence of bourgeois neo-colonialist ideology and adopt the positions of advanced science, the positions of scientific socialism, and make for the creation of a genuinely national history and culture of the African peoples, the flourishing of education and science, and the social progress of the continent.

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Soviet Historians on the Reactionary Essence of Maoism

GENNADY ASTAFYEV

A number of fundamental works have been prepared in recent years by Soviet scholars tracing the historical roots of Maoism and the causes of its appearance in China—in the past an economically backward country where feudal and semi-feudal relations prevailed and which was politically, economically and ideologically dependent on imperialism.

In their studies of Maoism in China and its current manifestation in the international arena Soviet Sinologists explore its sources also in works relating to the history of that country. The results of these researches are briefly set out and generalised in the book by S. Tikhvinsky, Corresponding Member of the USSR Academy of Sciences, *A History of China and Our Times* (Moscow, 1976).

The author's analysis of the main stages in the history of China, the object of sharp ideological struggle, holds a central place in this work. He shows that gross distortion of the past, anti-historical parallels with the present, utilisation of the historical theme to substantiate Maoist postulates are some of the means employed in Maoist "historiography". In his criticism of the main elements of the Maoist concept of China's history, Tikhvinsky gives it a scientific interpretation. The extensive factual material amassed by Soviet science and cited in the book equips the reader with a knowledge of the real facts of history, falsified by the Maoists to suit their great-power chauvinistic purposes.

When dealing with the history of international relations in ancient and mediaeval China, the author notes that it was in that period that the concept of "Great China" was evolved, which supposedly was the centre of the world and the bearer of

sovereign power. According to this concept, all peoples, except the Chinese, were barbarians and inferior in all respects, whose "prime duty" was to "become civilised", in other words, recognise the supremacy of the Chinese emperors and accept the "Chinese way of life".

The book gives a detailed picture of the gradual development over two thousand years of China's intricate system of norms of diplomatic and trade relations with other countries. The author shows how facts of usual trade ties, for instance, the arrival of foreign trade caravans or ships were represented as an expression of allegiance and homage by China's vassals to their emperor as the suzerain. This feudal racist concept, recast in a hegemonic mould, has now been adopted by the Beijing leaders.

In its drive for world hegemony Maoism lays the emphasis on political and ideological expansion. But at the same time the groundless territorial claims on the USSR, India and other countries, and statements to the effect that it means to return to China a number of states of Southeast Asia allegedly in the past in vassalage to it, go to show that Beijing will not scruple to use force, which was proved by the aggression against Vietnam in February 1979.

When discussing the history of the Tatar-Mongolian conquests in Asia and Europe and the Manchu dynasty in China, the author shows that in their pseudo-historical science the Maoists propagandise the cult of aggression and force, even going so far as to falsely idealise the foreign despotic regimes which had enslaved, along with the peoples of other countries, also the Chinese people, and to glorify such bloody figures of world history as Genghis Khan, K'ang-hsi, and others who had exterminated entire peoples and destroyed ancient civilisations. The reason behind such distortion of historical truth is the striving of the Chinese chauvinists to justify their territorial claims on Mongolia, the Central Asian republics of the Soviet Union and the territories of Southeast Asia which had once fallen under the temporary sway of the Mongol-Tatar and Manchu feudal conquerors.

The author focuses attention on the fact that the militaristic character of the Manchu dynasty in China is very similar to the methods employed today by the Maoists to hold the Chinese people in obedience. "The inability of the Manchu rulers to find a sensible solution to the problems confronting the country accounted for the predominance of military-political methods in their policy, reliance on brute force coupled with active police control of the minds and sentiments of the population and systematic ideological indoctrination of the empire's subjects," writes Tikhvinsky. The Manchu emperors particularly centred attention on "improving minds" through the "introduction of

ideas" and various rules of moral behaviour. This system of ideological indoctrination may be regarded as the forerunner of the Maoist policy of "improving the style" and "introducing the ideas of the great helmsman".

An important and topical problem discussed in the book is the process of the emergence of bourgeois nationalism in China and its influence on the Maoist leaders of the Communist Party of China. The author lays bare the social roots of Chinese nationalism and shows in this connection the internal contradictions of its evolution, stemming from the influence exerted by various strata of the bourgeoisie, beginning with the bourgeoisified landowners, compradors and representatives of bureaucratic capital and ending with the democratic strata of the national and petty bourgeoisie. The entrenchment of a reactionary nationalistic ideology was one of the factors that led to the betrayal of Marxism-Leninism by the Maoist wing of the CPC.

Tikhvinsky's analysis of the policy of "self-reinforcement" pursued by China's ruling circles (1860-1895) reveals the sources of the current "isolationism" (the concept of "reliance on one's own forces") which is being played up for contrasting the People's Republic of China to the socialist community and in an attempt to foist it upon other countries, the developing nations above all.

The closing section of the book is devoted to problems of the country's contemporary history, to showing the significance the friendly relations between the USSR and China had for the victory of the people's liberation struggle and for the building of socialism in China. Surveying the works of Soviet historians on this subject, in particular O. Borisov's monograph *The Soviet Union and the Manchurian Revolutionary Base (1945-1949)* (Moscow, 1977), the author traces the history of the development of Mao Zedong's special course within the country and in the international arena. This course, as is generally known, led to renunciation of the CPC's socialist general line adopted in 1953 and approved by the First Session of its Eighth Congress in 1956. Tikhvinsky convincingly shows the disastrous consequences of this course for China's socio-economic development, and for its cooperation with the Soviet Union and the entire socialist community, and in this connection discusses how China's superstructure, deformed by the Maoists, has affected its basis, the foundations of socialist construction laid during the first and second five-year plan periods in the country.

A number of books by Soviet scholars, recently published, deal with various aspects in the history of Soviet-Chinese relations, a principled characterisation of which is contained in CPSU documents. Among these works are the fundamental research by M. Sladkovsky, Corresponding Member of the USSR Academy of

Sciences, *A History of Soviet Trade and Economic Relations with China. 1917-1974* (Moscow, 1977) and by B. Koloskov, *China's Foreign Policy. 1969-1976. Main Factors and Leading Trends* (Moscow, 1977). In the first work its author, citing extensive factual material and his own experience of work in the sphere of economic cooperation with China, shows the vast scale of Soviet disinterested assistance to the Chinese people, who fought for their liberation and the building of socialism. The second book contains a scientific analysis of the great-power chauvinistic essence of the Maoist leaders' foreign policy course, shows how they gradually exposed themselves by their open alignment with imperialism against the socialist community, the international Communist and workers' movements and against the liberation struggle of the peoples.

Particular mention should be made of the fundamental research by the Soviet Sinologists O. Borisov and B. Koloskov, *Soviet-Chinese Relations* (2nd enlarged edition, Moscow, 1977), which traces the state of these relations over the period 1945-1977, shows the principal directions of the internationalist assistance rendered by the CPSU to the revolutionary forces of China, the Leninist character of the Soviet state's policy towards the PRC.

After noting that in the post-October period relations with the USSR played an exceptionally important part in China's development, these relations becoming an integral factor in the radical transformations of Chinese society, the authors, drawing on voluminous factual material, trace the organic connection between the building of socialism in China in the first ten years after the establishment of the PRC and the history of Soviet-Chinese relations. This is the theme of the first three chapters of the book which examine the events covering the period from the defeat of Japanese imperialism up to the completion of the first Chinese five-year plan (1953-1957).

These three chapters show that the victory of the Chinese people in 1949 was achieved thanks to the policy of the CPC which at that time took due account of the specific features of China, and to the support of the other Marxist-Leninist parties; that in the restoration period China was able, with the internationalist support of the peoples of the socialist countries, to overcome its internal and external difficulties and to prepare the conditions for transition to planned socialist construction; that the substantial successes achieved in the economic and democratic reconstruction of the country, made possible by the selfless labour of the Chinese people and disinterested assistance of the USSR, enabled the CPC to implement in 1953 its general line of transition from capitalist to socialism.

The first decade of the existence of the PRC convincingly proved, we read in the book, that all the objective conditions were at hand for Soviet-Chinese relations developing in that direction and that such development accorded with the vital interests of the peoples of the Soviet Union and China, with the interests of the peoples of all other countries. Consistently adhering to the Leninist policy of internationalism in their relations with China, the CPSU and the Soviet Government spared no effort to develop and strengthen the friendship, alliance and allround cooperation between the USSR and the PRC, the CPSU and the CPC and between the peoples of the two countries.

The authors note, at the same time, that already in 1956-1957 the struggle between the two lines in China—between the Marxist, internationalist and the petty-bourgeois, nationalist—gradually grew sharper. This affected also Soviet-Chinese relations.

At the close of the 1950s negative tendencies began to surface ever more openly in these relations, through no fault of the Soviet Union. From a policy of friendship and cooperation with the Soviet Union and the other socialist countries the PRC began to deviate to positions of struggle against them. In subsequent chapters the authors deal at length with the nationalist and anti-Soviet policies of the CPC leadership and their roots; with Soviet-Chinese relations in the period when Beijing was devising its special course in home and foreign policy and orienting on an open struggle against the CPSU and the Soviet Union; Soviet-Chinese relations on the eve of and during the notorious "cultural revolution" when anti-Sovietism was proclaimed a component part of the political programme of the Ninth Congress of the CPC, the preparation of which was begun by the armed provocations of the Chinese authorities on the border with the USSR in March 1969.

A specific new period in the development of China's internal position and foreign policy began in the early 1970s (Chapter 9). This period, defined by the author as one of consolidating the Maoist regime, was marked by the fact that Beijing, after wrecking the possibility of restoring goodneighbour relations that had emerged following the meeting of the heads of government of the USSR and the PRC in September 1969, and the bilateral negotiations on border settlement in every possible way opposed the line of the 24th CPSU Congress to normalise Soviet-Chinese relations. Ignoring all Soviet constructive steps and initiatives the Beijing leaders reaffirmed their anti-Soviet stand at the Tenth Congress of the CPC and in the country's Constitution adopted in 1975.

The closing chapters (10 and 11) of the book cover the period from January 1975 to August 1977 when the Chinese leaders, notwithstanding the aggravation of crises phenomena in the

country's home and foreign policy, pursued a course of escalation of anti-Sovietism, although the decisions of the 25th CPSU Congress and the congresses of other fraternal parties created favourable premises for reverting to the path of establishing relations of friendship and cooperation with the Soviet Union and the other socialist countries. But this did not happen even after the advent of the "new" leadership to power.

After the death of Mao Zedong the Soviet Union took a series of steps attesting to its readiness to improve relations with the PRC. How did the new Beijing leadership respond to the Soviet state's steadfast course? Far from renouncing their policy of anti-Sovietism the present Chinese leaders are accentuating their adherence to this policy and are using every occasion to demonstrate their implacable hostility to the Soviet Union. The Eleventh Congress of the CPC affirmed Maoism as the country's ideological-political platform and, orienting itself on Mao Zedong's great-power and militaristic precepts, in effect enunciated a policy of struggle against the USSR and the other socialist countries. It is no accident that Deng Xiaoping's visit to the United States in February last bore such an openly anti-Soviet inflammatory character.

Of course, this might prompt the question: is there any point in the Soviet Union trying to normalise relations with the PRC when Beijing persists in its anti-Soviet course? The authors answer in the affirmative and underscore in this respect that the Soviet Union's measures aimed at normalisation expose the anti-Soviet essence of the PRC leaders' policy. The Soviet initiatives, irrespective of Beijing's attitude to them, are favourably viewed by all who sincerely want to see the normalisation of cooperation between the two countries. The significance of these initiatives also lies in that they enable the Chinese people to see for themselves that everything possible and necessary is being done by the Soviet side to turn the trend of developments towards restoration of goodneighbour relations between the two countries.

Thus the books under review lay bare—and in this lies their undoubted scientific and factual value—the historical, political and ideological roots of Maoism and its present inflammatory and aggressive role on the international scene.

On Criteria for the Periodisation of History

EVGENY ZHUKOV

The first outlines of a scientific periodisation of history were given by Marx and Engels in one of their early works, *The German Ideology*, written in 1846. They regarded social development as the succession of forms of property—tribal, ancient, feudal and bourgeois. And they were the first to suggest that the periodisation of the entire process of history should be based on economic history or, more accurately, on the different stages in the development of material production.

The idea was carried further by Marx in his Preface to *Critique of Political Economy* (1859): the forces of production determine the relations of production. Here we have a direct reference to a socio-economic formation.¹ Obviously Marx was referring to historically definite stages in the development of society.

In his Preface to the first volume of *Capital* (first edition), Marx remarked that he viewed the evolution of the economic formation of society as a process of natural history.²

We know that Marx displayed a keen interest in geology. And it was from geology that he borrowed the term "formation" to define the gigantic strata accumulated in the history of mankind, which he examined in their succession and change.

In his second draft of a letter to Vera Zasulich (1881), Marx wrote: "The archaic or primary formation of the Earth consists of a number of strata deposited at various periods one over the other. In the same way, the archaic social formation opens to us different stages denoting the consistent change of epochs..." In the third draft Marx speaks of the secondary formation encompassing three epochs of development: slave-owning, feudal and

bourgeois society.³ These draft letters remained unsent: Marx apparently believed his judgements required further thought. For us, however, the interesting thing is that Marx—and this is confirmed by later archaeological findings—regarded pre-class society, which he described as “the primary or archaic” formation, as a long historical period subdivided into several epochs.

The complex problem of historical periodisation is further complicated by the difficulty of establishing a uniform criterion that would fit both the worldwide historical process and regional or local historical development. Doubtlessly, the theory of socio-economic formations is in every case a valuable guide to a scientific periodisation of history. But we should not lose sight of the fact that the change of socio-economic formations is by no means a synchronous process: social revolutions in different regions occurred at different points in history. Leaving aside the longest period, that of primitive-communal society, that primary and universal socio-economic formation, we can say that the emergence of slavery marked the beginning of the existence of two or more formations. Hence, even for purposes of periodising the worldwide process, the formation principle has to be supplemented.

In this respect the most convenient method is to operate in terms of historical epochs.

Lenin repeatedly had recourse to that concept and gave it a profound scientific substantiation. In his article, “Under an Alien Flag” he wrote: “We are undoubtedly living at the juncture of two epochs, and the historic events that are unfolding before our eyes can be understood only if we analyse, in the first place, the objective conditions of the transition from one epoch to the other. Here we have important historical epochs; in each of them there are and will always be individual and partial movements, now forward now backward; there are and will always be various deviations from the average type and mean tempo of the movement. We cannot know how rapidly and how successfully the various historical movements in a given epoch will develop, but we can and do know *which class* stands at the hub of one epoch or another, determining its main content, the main direction of its development, the main characteristics of the historical situation in that epoch, etc. Only on that basis, i.e., by taking into account, in the first place, the fundamental distinctive features of the various ‘epochs’ (and not single episodes in the history of individual countries), can we correctly evolve our tactics; only a knowledge of the basic features of a given epoch can serve as the foundation for an understanding of the specific features of one country or another.”⁴

In this way, Lenin conclusively shows that the definition of an historical epoch must rest on an objective, class analysis uninfluenced by partial modifications of the general historical process in individual countries. The boundaries of an epoch are established within an international framework. The epoch is expressive of different social processes in which one or another social class is the leading, determinative force.

While formulating the concept of epoch and showing the prevailing trends of social development during this epoch, Lenin constantly warned against simplification, against a stereotype approach. "An epoch," he wrote, "is a sum of varied phenomena, in which in addition to the typical there is *always* something else."⁵ An epoch is not abstract logical construct, but the sum-total of varied phenomena, both typical and atypical, big and small, occurring in advanced and backward countries.

Reverting to the subject in his article "Military Programme of the Proletarian Revolution", Lenin remarked that the 1914-1918 was "the continuation of the imperialist policies of two groups of Great Powers, and these policies were engendered and fostered by the sum-total of the relationships of the imperialist era. But this very era must also necessarily engender and foster policies of struggle against national oppression and of proletarian struggle against the bourgeoisie and, consequently, also the possibility and inevitability, first, of revolutionary national rebellions and wars; second, of proletarian wars and rebellions *against* the bourgeoisie; and, third, of a combination of both kinds of revolutionary war, etc."⁶ The imperialist epoch has therefore often been described as the epoch of wars and proletarian revolutions. Lenin's understanding of epoch includes his definition of the leading trend of social development, singling out the classes that play a central and directing part in historical progress and the class forces confronting them. The process of history is considered not in the abstract, but as the totality of all its concrete phenomena.

Of great importance also is Lenin's proposition that in setting the concrete boundaries of an epoch we must under no circumstances absolutise them. For, he remarked: "Here, of course, as everywhere in Nature and society, the lines of division are conventional and variable, relative, not absolute."⁷ This is clearly aimed at the dogmatic penchant for periodising historical process by days, even hours, absolutising the importance of historical dates, which, in the end, only leads to oversimplification.

The concept of epoch is inseparable from the Marxist-Leninist theory of the progressive change of socio-economic formations, for no epoch can be assessed out of context with its socio-economic formations.

An epoch is a long span of history characterised by more or

less stable interaction of two or more socio-economic formations existing at one and the same time. The chronological boundaries of the epoch depend on radical changes in the correlation of these formations. An epoch is characterised also by the dominant tendency of social development, which finds expression in the progressive strengthening and growing role of the more advanced socio-economic formations.

The dynamism of the historical process is manifested not only in the changing correlation of different formations, but also in the marked changes within each formation. For all of them pass through different stages of maturity, development and decline (on the eve of revolutionary transition to a higher formation), and this is bound to influence the epoch as a whole. It is therefore necessary to distinguish, within each historical epoch, the different periods that mark its internal development.

Lenin gave us concrete outlines of the periodisation of the historical epoch of transition from feudalism to capitalism.⁸ In the present epoch of transition from capitalism to socialism we can distinguish periods corresponding to the stages of growth and increasing influence of world socialism. And so, an historical epoch can have its subdivisions.

Naturally, drawing the boundaries of historical epochs in world history requires much preparatory research. And this applies particularly to distant times, when regions were much more isolated from each other and the interaction of different formations much weaker. Before world history was transformed into an "empirical fact" it was broken up into a maze of separate sectors with socio-economic processes maturing autonomously in each of them.

The more we go back in history, the more difficult it becomes to etch out epochal boundaries. This applies especially to the social revolutions that powered the transition from classless to class society and later from slave to feudal society. In the former case the revolutionary process was a very long one and largely spontaneous, and to establish anything resembling accurate chronological boundaries for this amorphous process is practically impossible. We can only hope for an appreciable measure of approximation in fixing its space and time limits. As for the transition from the slave to the feudal formation, here, too, we cannot speak of a rapid or simultaneous process confined to a definite area. An accurate chronology is hardly achievable, and we sometimes encounter highly questionable dates. One example is dating the end of the slave-owning formation in Europe to the collapse of the Western Roman Empire.

In this context, one can legitimately question the advisability of singling out so-called inter-formational transition periods. We

sometimes come across the term "pre-feudal period" purporting to describe the transitory gap between the collapse of slave society and the assertion of feudal relations. But could we not single out a longer stage in the disintegration of pre-class society? For instance, the complex period known under the controversial appellation of "military democracy" and usually considered the concluding stage of the primitive-communal formation. All this goes to show that a more precise concept of the historical epoch, particularly as applied to pre-bourgeois formations, requires much more research.

In some cases we can probably take external conditions as a criterion of the development of one or another region, the vast Euro-Asian continent, for instance. From time immemorial it was the scene of violent clashes between class and ethnic entities and civilisations, wars of conquest and plunder with all the attendant destruction of productive forces. Much the same, though in a somewhat different form, applies to pre-colonial America and Africa.

The concept of historical epoch, being so closely linked with the concept of socio-economic formations, can, I believe, be used for a scientific periodisation of world history. But global periodisation has to be complemented by scientific research and periodisation on a regional and more local scale.

The two are intertwined for, ultimately, both are determined by the regularities of progressive social development, that is, by the change of socio-economic formations. The operation of these regularities can be traced in every region without exception, indeed, in every country. But it is not a synchronised process, for regions or countries reach one and the same level of development at different times.

The solution is to set up a "hierarchic" system, showing the dependence of local historical phenomena on regional, and regional on the more general phenomena that go into the making of a historical epoch. Studies of the history of individual countries and peoples must bring out the crucial turning points in their development and see its inner logic. Such local periodisation can be considered the first, lowest level of a general system. The next level is the chronologically organised data characterising the development of an entire region. A comparison of dates pertaining to similar processes at local and regional levels will enable us to establish more or less accurately the interdependence of these processes, and thus etch out the contours for uniform periodisation of the region as a whole and of its component elements. Lastly, the data thus received can be correlated with the objective material of global periodisation. This, in turn, will fix the place of the given region in a concrete historical epoch. The researcher will

thus be better equipped to assess the impact of the worldwide historical processes on the destinies of a given region and its constituent parts.

Naturally, the pattern thus arrived at will be relative. But, then, any periodisation is relative and approximate, for it is practically impossible to name precise dates for major historical processes. The most important thing here is to establish—even if only approximately—the dependence of local historical processes on the general trend of social development, which expresses the fundamental regularities of mankind's forward movement.

Soviet historiography regards the 17th-century bourgeois revolution in England as the beginning of the new history. This is based on the fact that it marked the first triumph of bourgeois over feudal relations in a leading country. The English Revolution ushered in the epoch of revolutionary transition from the feudal to the capitalist formation. Consequently, the formational principle is here taken as a criterion of historical periodisation.

Of course, there are other ways of approaching and solving the problem. Without in any way transgressing on the formational principle we could take as our point of departure the 16th century revolution in the Netherlands, or the 18th century French Revolution (the American Revolution, which came somewhat earlier, was basically of an anti-colonial nature and from the formational standpoint did not play an independent part).

Taking the English Revolution as the opening chapter of the new history should not be absolutised: it is purely conventional. The three variants mentioned above are equally legitimate since they do not violate the formational principle. And yet there are many arguments in favour of the variant chosen by Soviet historians.

England played a very big part in European political life, much bigger than the Netherlands. Marx considered England the classical country of the capitalist mode of production.⁹ By the time of the Revolution, England had become an important colonial power, her influence extending far beyond Europe. Besides, the English Revolution, even allowing for its compromise character, can be considered the starting point of the epoch in which bourgeois relations were to triumph over the prevailing feudal relations.

As for the French bourgeois revolution, which was the most resolute in demolishing the feudal order, it should be regarded not as the beginning, but rather as the peak point in the development of the new epoch, after which the bourgeoisie rapidly lost its revolutionary character.

Throughout the 17th century, and in some places even earlier, there were molecular processes that helped to bring to the fore

and enrich bourgeois elements and lay the foundations of the capitalist formation. These processes evident in most more or less economically developed countries still under feudal domination, exerted a direct or indirect influence on other countries with lower rates of economic development. We should not, I might add, absolutise asynchronism of similar historical phenomena. All the objective data suggest that they mature simultaneously which in one or another way corresponds to the general trend of social development.

In his paper at a conference on archaeological historicism (Moscow, 1976), S.Semyonov noted that there was a definite unity in the bases of material and spiritual culture of different peoples. He mentioned the repetition (and parallel existence) of certain historic phenomena in peoples that did not even know of each other's existence.¹⁰

For instance, Academician N.Konrad wrote in connection with the growth of feudalism that "one is amazed to find that the process developed at more or less the same time in the three leading states of the ancient world: Eastern Asia, the Middle East and Western Europe".¹¹ He also noted the striking resemblance of legislation of the landed nobility at the rise of absolute monarchies in the early 17th century in France and Japan: their reglamentation of peasantry was similar even in terminology, and this in two countries at the opposite ends of the Euro-Asian continent and vastly different in every respect. This evidence suggests that absolutism as a special form of the feudal state at the time of the decline of the feudal formation faced similar problems in different countries, regardless of regional or local specifics. And this, too, can be taken as further proof of the unity of the world historical process.

France was directly influenced by the English bourgeois revolution; Japan was not, of course. And yet both in France and Japan we find concrete features of development that can be made the basis of local periodisation.

Nor would we be acting arbitrarily in comparing these partial periodisations with those of world history—say, examining the history of France and Japan against the background of such epochal events as the triumph of bourgeois relations in England. This would only contribute to a better understanding of the dynamics of the subsequent development of both French and Japanese society. In the case of France, this is perfectly obvious: the English Revolution accelerated anti-feudal tendencies which a century later brought on the Revolution. As for Japan, the collapse of the Tokugawa feudal rulers' policy of self-isolation was largely due to the advance of the bourgeoisie influenced by the events in Europe. Many facts of Japanese 17th and 18th-century history fully accord

with the worldwide process of the disintegration of feudalism.

Let me note parenthetically that Russian history is no exception in this respect. The rise and development of Russian absolutism can be properly understood only in the context of the general crisis of the feudal formation.

Reference has been made above to the realistic possibility of working out local periodisations. Equally possible is partial periodisation of any social organism, including its microcells (provinces, towns, etc.). However, the main shortcoming in all these partial microperiodisations is that they do not bring out the mainsprings of social progress. It is only on a much larger scale that we can judge the regularities of historical processes.

Periodisation depends very largely on the methodology employed. Only if we accept the objective laws of social development, including the law of progressive change of socio-economic formations, can we achieve a scientific periodisation of history that is entirely free of subjectivism.

The first prerequisite for an objective periodisation of history (as of all generalisations), is detailed knowledge of all the factual material. Only if one has verified data at all the parameters of a concrete historical process can one proceed to a preliminary synchronisation of the material. The next step is to group the historical data, always guided by objective indicators.

In working out criteria for the periodisation of the history of any country we must always start from these objective indicators, which reveal the dynamics of socio-economic development. And these include such indicators as substantial changes in the growth of material production forces (technological "turning points"), their inevitable reflection in production relations; significant developments in mass social movements and their influence on superstructural categories; direct or indirect impact of crucial international events. These processes are by no means synchronic, and priority should be given to events exerting a direct influence, positive or negative, on the dominant socio-economic relations. In other words, the formational approach ultimately determines the objective assessment of the historical process at the given level of periodisation.

Attempts to periodise history without relying on the formational approach always lead to subjectivism, with investigators arbitrarily choosing one or another date, or one or another event as their starting point, without regard to their real significance in the process of history making. There are numberless examples of how periodisation is simplified: there is the purely formal chronological approach—"history of the 16th century" or, "history up to the year 1500", etc. This, of course, departs from scientific periodisation. Another example of a non-objective approach is periodisa-

tion based on formal constitutional change. The extreme example here is the so-called "dynastic histories".

In recent years there has been a tendency to exploit periodisation to promote the nationalistic and political interests of certain social groups. For instance, there have been attempts to separate the history of one country from the worldwide process, even counterpose it to that process, so as to "enhance" its importance and minimise the influence of world events, or to justify hegemonistic proclivities, or even territorial claims. Needless to say, nationalistic interpretations of history have nothing in common with science. In some cases there are attempts artificially to "lengthen" the history of one's country on the fallacious assumption that the older a country and its culture, the bigger its present and future role.

We should remember that sometimes nationalistic interpretation of history in ex-colonial countries is, in a way, a reaction to long years of silence or deliberate distortion of their history by the colonial powers. One can understand their attitude, but nationalistic distortion of the history of any people does not make it more scientific.

As for traditional bourgeois historiography, its negative attitude to the Marxist-Leninist principles of historical periodisation stems from its refusal to accept the objective laws of social development, particularly its negation of the theory of socio-economic formations.

Many bourgeois historians try to evade any global periodisation of history, preferring to concentrate on local, "partial" periodisation. This attitude, I think, comes very close to that of the nationalistic elements who concentrate exclusively on "national" periodisation and deliberately gloss over the process of revolutionary change of socio-economic formations.

In dealing with the periodisation of history one should avoid the quantitative or arithmetical approach to the totality of phenomena that indicate the rise or development of more progressive socio-economic relations. As a rule, new phenomena are at first weaker than those of the old formation which they will ultimately replace. The area covered by the new social relations is at first limited. Sometimes only a component of the new formation emerges, the vehicle of more progressive socio-economic relations. The very fact that a new element has surfaced demands that it be reflected in the periodisation of history inasmuch as it is part of an overall tendency (or regularity) that will set the pace of mankind's advance.

The triumph of the Great October Socialist Revolution was a law-governed result of the operation of objective and subjective internal and international factors. The Revolution began in a vast

country, and from its very first days exerted a constantly growing influence on the march of world history. And this despite the fact that in its early decades the Soviet Republics were in many respects weaker than their capitalist encirclement.

Without a proper understanding of the general regularities of social development, and with refusal to accept their very existence, many leading personalities of the capitalist world were inclined to regard the victory of the October Revolution as an unfortunate accident, an anomaly which would soon be dispensed with, and international affairs would resume their proper course. The more zealous imperialist politicians tried to hasten the process by military intervention and economic blockade designed to stifle the world's first socialist revolution. Reformist and revisionist theorists were at pains to prove that proletarian revolution in such a backward country as Russia was impossible and, consequently, illegitimate. And this type of argument, contrary to all the facts of history and elementary logic, is still to be heard in the malicious chorus of socialism's overt and covert ill-wishers.

As for the periodisation of history, bourgeois, reformist and revisionist-nationalist historiography adamantly refuses to acknowledge that the Great October Socialist Revolution was a watershed in world history, that it opened a new epoch and laid the beginnings of modern or contemporary history. The problem of periodisation has more than purely scientific implications, for it is closely associated with the general problem of perception of the world and with the ideological confrontation of the two socio-economic systems.

It is sometimes asked whether it is possible to construe an independent periodisation of certain aspects of social activity out of context with the general process of history (e.g., periodisation of the history of culture). Cultural and certain other processes can, of course, develop in accordance with their own internal laws. For instance, the Renaissance can legitimately be regarded as an independent complex of interrelated cultural phenomena, with its own periodisation. What should not be forgotten, however, is that the Renaissance was the product of a concrete period of world history.

In our schools, history is divided into ancient, mediaeval, modern and contemporary. This, of course, is necessary to give the pupil a compendium of knowledge. Ancient history, in this division, includes two formations, the primitive communal and slave-owning. Mediaeval history covers the feudal period. The modern history covers the period of the triumph of bourgeois social relations, and contemporary history begins, in Marxist and pro-Marxist historiography, with the first triumphant socialist revolution, October 1917

(in Western historiography, the boundaries between mediaeval, modern and contemporary history vary).

For all its practical advantages, this four-part division of world history has its shortcomings, both of a general and terminological character. "Ancient history" includes both pre-class relations ("very ancient" history) and the first antagonistic formation, though the former should, perhaps, be treated separately. The term "Middle Ages" applies only to Europe, for feudal relations in most Asian countries emerged much earlier than in the West and existed much longer. The term "new history" applies to Asia and Africa mainly in the sense that the rise and development of the European bourgeoisie was directly associated with colonial expansion in Afro-Asian countries and their enslavement. Consequently, this traditional division of history into ancient, mediaeval, modern and contemporary, based as it is on Europe, needs to be decoded to bring out its formational implications. This only re-emphasises the relative character of any periodisation of history.

In the theoretical sense, the relation between the scientific periodisation of history and the actual process of history accords with the dialectical interconnection between the logical and the historical. We cannot fully identify the two concepts, but it would be equally erroneous to counterpose them, for, in the final analysis, the logical is also historical.

NOTES

- ¹ Karl Marx and Frederick Engels, *Selected Works*, Moscow, 1969, Vol.1, pp. 503-504.
- ² Karl Marx, *Capital*, Moscow, 1969, Vol.1, p.21
- ³ K.Marx and F.Engels, *Complete Works*, Vol.19, pp.313 and 419 (in Russian).
- ⁴ V.I.Lenin, *Collected Works*, Moscow, Vol.21, p.145.
- ⁵ *Ibid.*, Vol.35, p.229.
- ⁶ *Ibid.*, Vol.23, p.80.
- ⁷ *Ibid.*, Vol.21, p.146.
- ⁸ *Ibidem.*
- ⁹ Karl Marx, *Capital*, Vol.1, p.19.
- ¹⁰ *Historism of Archaeology, Methodological Problems. Theses of Reports.* Department of History, USSR Academy of Sciences, Moscow, 1976, p. 18 (in Russian).
- ¹¹ N. I. Konrad, "The Middle Ages in the Science of History", *From the History of Socio-Political Ideas*, Moscow, 1955, p. 82 (in Russian).

Target-Oriented Planning and Management

NIKOLAI FEDORENKO

At the present stage, in the conditions of mature socialist society, the accomplishment of the basic tasks of the USSR's socio-economic development is effected in two main interconnected directions: the further acceleration of scientific and technological progress, and the improvement of the system of planning and management of the national economy and its individual branches. "We are now faced with the task of raising the level of planning and bringing it into conformity with the new scale and make-up of our economy, with the new requirements of the times," said L. I. Brezhnev at the 25th Congress of the CPSU.¹ Following the Congress decisions economic scientists and planners are doing their utmost to increase the efficiency of planning and management.

In improving the system of economic planning and management, four main components can be singled out: the improvement of centralised planning and management; the development of the system of economic incentives and instruments; the perfection of the organisational structure; the development of the material and technical basis of the planning and management system itself.

The improvement of centralised economic planning envisages comprehensive measures along the "science—production" line (from forecasting the development of fundamental scientific research to marketing and mastering the production of new commodities) and a fuller account of the interaction of production with socio-political and socio-demographic processes and the environment. Of special importance is the improvement of the

production and technological structure of the plan and the growing role in it of the factors of intensive economic management aimed at obtaining a greater efficiency of social production. All this requires an improvement in long-term planning and a greater range of planned targets and orients the planning bodies to working out, along with medium-range and short-term plans, long-term ones and incorporating a forecasting mechanism in the planning process. The transfer of long-term planning is connected with the further consolidation of the target-oriented planning principle, according to which the point of departure is the definition of the aims of social development and distribution of resources is subordinated to the achievement of these aims.

The second trend in the development of the planning and management system is linked with an improvement of the system of economic incentives and instruments designed to ensure the unity of interests of all economic ties in solving socio-economic tasks. They include, primarily, the problems of combining centralised planning and management with the economic initiative of enterprises, organisations and individual workers; incentives to the highest rates of scientific and technological progress; improvement of the entire economic mechanism.

The third trend leads to improving the organisational structure of economic management, which calls for a broad range of measures: from reducing the number of links in the structure of management and forming interbranch and interdepartmental complexes to introducing the latest organisational forms in the lower links of the national economy.

Finally, the fourth trend is connected with a stage-by-stage transfer of the economic planning and management system onto a new scientific and technical basis presupposing a broad and comprehensive utilisation of economic and mathematical methods and latest generation computers.

The methodology of target-oriented planning and management is used primarily for improving economic planning, and its implementation is directly connected with the development of the system of economic incentives and instruments and the structure and methods of economic management. Target-oriented methods are the basis for comprehensive activity designed to improve the entire system of economic planning and management.

The Soviet national economy has now advanced to a new stage. Along with a considerable growth of production and technological potential, deep-going qualitative changes in the productive forces have occurred. Under the impact of scientific and technological progress, the dynamism of the entire structure of reproduction and the interconnection and mobility of its elements have been considerably enhanced. Intensive factors are now becoming the

principal source of the growth of social production. This puts to the forefront the problems of raising quality of output and economic efficiency of production, optimisation of decision-making in all links of the economic system and their orienting to the ultimate economic aims.

In these conditions new, stricter demands are placed on the improvement of the economic planning and management system. It has now become more urgent to organise a unified complex of socio-economic planning based on an economic mechanism which optimally coordinates the administrative and economic instruments of the drawing up and implementation of a plan. Simultaneously with the transfer of planning and management into a new scientific and technical foundation due to a wide use of economic and mathematical methods and models, modern computers, and the means of transmitting, processing and storing information, the tasks are posed of comprehensively perfecting the methodological and organisational forms, methods and criteria of work in all links in the management system.

The basic features of the economic planning and management system now in operation were developed in the 1930s, when the country was being industrialised at a rapid pace and when large long-term capital investments were needed. The economy was comparatively easy to manage, which made it possible for the central bodies to handle resources directly. The country's development targets made it possible to assign priorities in building and advancing industries. With long-term, intricate economic interrelationship playing an insignificant role, the inertia of the economy was not great and it quickly reacted to the impact of planning, so that individual errors and drawbacks did not cause essential disproportions. In such conditions the resource-branch principle of economic management developed, which is in operation today, too. It is based on balanced planning of the output on a branch scale.

This approach has a number of merits: it is realistic in evaluating trends for a relatively short period, simple in analysing processes at different levels (in different branches, enterprises, regions), and independent of one another, to a certain extent; it also coordinates the scope of the proposed measures with the aggregation level of economic indices, etc.

The degree of realisation of all proposed measures is limited at each given moment insofar as the material and financial resources, personnel and production capacities are concerned. Hence the need to coordinate the planned development targets with economic possibilities. For this purpose, balances are drawn up on all incoming capital and expenditures for each financial and material flow, adjustments to plans and projects are made when

disbalances arise, checks and rechecks are conducted, etc. This sum total of repeated actions is an important feature of using the balance method in planning. It should be noted that big successes and the rapid rates of advancement of the Soviet economy are largely due to the application of precisely these methods of analysing the development trends and taking plan decisions.

Nevertheless, this method of economic and planning thinking can no longer satisfy us. The structure of the aims of socio-economic development and their interrelationships has become much more complex. The aims of social development, which dominate production aims, acquire an ever greater significance in this structure.

Socialist planning has always been connected with accomplishing definite social tasks and achieving desired result in the regular plan (mainly five-year) period. However, in the conditions of developed socialism, the social aspect of planning has an especially great significance in view of the fact that during that period a rise in the Soviet people's living standards acquires primary importance.

At the same time this specific feature necessitates a scientific elaboration of such concrete aims and tasks which, on the one hand, would accord with the general aims of man's allround development in the conditions of communist society, and on the other, would form an integral programme of the country's long-term development. The formation and realisation of this range of aims pose complex problems, requiring coordinated measures in many links of the social mechanism. This calls for intensifying the purposeful character of planning.

The target-oriented planning and management methods based on selecting the directions of scientific and technological progress and the structure of production in accordance with the range of the country's socio-economic aims, become an important instrument for improving the entire system of economic management. Just as in any developing field of science, in investigating and introducing target-oriented methods there are methodological and organisational problems which, if posed correctly, can be solved satisfactorily and the results can be rapidly implemented.

The target-oriented approach requires further development of the process of elaborating a uniform national economic plan, which is the determining link in the entire economic system. A variant scheme of planning has already been proposed, which combined the target and resource aspects of planning.² Without repeating it, we shall now emphasise its main premises relating to the target-oriented approach discussed here.

The target-oriented method is aimed at developing the following distinctive features of the state economic plan:

— broadening of the range of planning—by substantially enhancing the role of a long-term prospect (up to 15 years); elaborating and implementing a system of many-version forecasting of economic development (for more than 15 years); elaborating a long-term plan every five years, with the preservation of the leading role of the five-year plans of economic development as the stages of accomplishing the tasks of the long-term plan;

— purposefulness—by developing the target-oriented aspect of planning and its combination with branch and territorial planning;

— balanced and proportional character—with the help of coordinating the aims of development with the possibilities of their realisation, utilising better methods of distribution of all kinds of resources on the basis of national economic programmes and more effective use of economic levers;

— optimisation—on the basis of elaborating economic criteria of efficiency of various large-scale projects and a more precise evaluation of their social usefulness;

— general social purpose—by means of a fuller account of the social consequences of the planning and economic decisions being adopted.

A national economic plan should ensure such a production and distribution of resources that would contribute, to the greatest degree possible, to fulfilling the aims of the country's development. This task has always been the principal one for planning and management bodies, but at the given stage, with the present complex economic system, scope and rates of changes of social, economic and technological processes, the accomplishment of this task requires a further improvement of the methods of elaborating plan (especially at the stage of formulating the concept of the plan), as well as the elaboration of comprehensive national economic programmes and their inclusion in the plan.

A long-term plan defining the aims of the country's development and ways to achieve them, ensures the continuity and coordination of indices at all levels of the planned management of the socialist economy. The integrity of its essence is ensured by centralised planning, on a nationwide scale, of the development strategy of the national economy, in conjunction with the programme, functional, branch and territorial aspects.

A draft long-term plan is meant mainly to balance the comprehensive programmes selected when the concept of the plan was being evolved, and the part over and above the plan concerning resources and stages of its realisation. The detailing and balance coordination of the programme and summary indices for the immediate five-year period make it possible to create a draft of the basic trends of the five-year plan as part of a

long-term plan. From this general scheme follows a complex of programme indices, as well as procedures of coordinating the activities of the ministries, departments and units of planning bodies in drawing up the programme and other aspects of the plan.

At the target stage of the elaboration of a long-term plan its aims should be defined and compared with the trends of the development of the national economy, socio-political processes and scientific and technological progress, which indicate the possibility of the realisation of these aims.

The plan's aims are known to be formulated on the basis of the general aims set in the programme documents of the CPSU. Proceeding from integral features of the socio-economic system, the range of aims of a national economic plan emerges as demands comprising and coordinating the primary and secondary individual, collective and institutional requirements and interests. This complex can be represented as a "tree" or a system of aims.

The construction of a set of aims in the form of a "tree" raises no problems. It ensures coordination of the aims of a plan not only qualitatively, but also provides a possibility of evaluating their relative significance. Such an evaluation can be obtained in differentiating these aims. However, a strict structure of the "tree" presupposing simple subordination of each sub-aim to the single aim of a higher level, leads to an artificial rapture of many complex interrelationships of real processes when revealing and fixing the most essential connection. Therefore, in a number of cases in order to better understand these interactions it is necessary to formulate the various aspects of the interrelationships of the corresponding processes and the subsystems realising them in the form of individual sub-aims.

The formation of a set of aims is an indispensable element of target-oriented planning. The "tree" of the plan aims represents its framework which largely determines the structure of forecasts, programmes and sections of the plan and ensures the possibility of their comparison, evaluation and coordination. It orients the elaboration of a national economic plan as a whole and separate programmes as its "main links". In this lies the importance of the "tree" of aims as a methodological instrument of planning.

The target-oriented approach to planning presupposes the concentration and comprehensive utilisation of resources for achieving the key aims of the national economic plan with the help of comprehensive programmes. Each of these programmes is a directive coordinating resources, executors and deadlines for the fulfilment of a whole range of socio-economic, production, research, organisational, economic and other measures aimed at

solving the most essential economic problems and attaining the long-term objectives of economic development.

The basic distinctive features of programmes can be defined as follows:

- programmes are elaborated in order to achieve such aims whose realisation before the set deadlines requires essential changes in the trends and proportions of the corresponding links of the national economy;

- they are oriented to fulfilling a definite socially necessary function formulated as an aim (or a set of aims) of a plan;

- in their elaboration, the social factors of society's development and social consequences of their implementation are considered on a par with economic, production and technological changes;

- programmes can have individual deadlines, which should not necessarily coincide with the accepted planning periods;

- they are characterised by the clearly defined end results—sets of programme indices;

- the structure of programmes is a hierarchic construction formed by sub-programmes of various levels and the elements, strictly coordinating the aims with resources and reflecting the qualitative and quantitative transformation of the initial resources at each stage of the achievement of end results of programmes;

- programmes in their essence are of an interbranch and interdepartmental character, therefore the process of their elaboration and realisation can be connected with a definite change in the existing organisational structure of management.

The many aspects of the problems of economic development requiring solution within the framework of a programme make it possible to speak about a multitude of types of the programmes that are distinguished by their composition, time characteristics, management levels and the scope of the economic resources involved. The long-term target-oriented programmes of interstate nature worked out jointly by CMEA member countries represent a special group.

Programmes should become major links of a long-term plan. In elaborating long-term interbranch programmes, their evaluation and selection, the main trends of the impact of scientific and technological progress on the proportions of the national-economic plan are determined, and the basic principles of the distribution of capital investments and structural changes and assessments of the social consequences of their realisation are revealed. The drawing up of programmes is not aimed at replacing territorial and branch aspects of planning; the programmes play the role of an additional frame reinforcing those parts of the "edifice" of the economy which are under the heaviest loads,

they require special attention due to their technical novelty or social significance and promise an especially high efficiency through serious changes in the structure of production, etc.

Consequently, what we have in mind is the coordinated joint development of both the territorial-branch scheme of planning and the programme aspect of a plan. The principal aspect in the elaboration and coordination of various programmes in the process of national economic planning is to define a system of target indices reflecting the main national economic trend of the essential measures and making it possible to assess their efficiency.

The target forms of managing the solution of major state problems have been a distinguishing feature of socialist planning in our country from its very inception. The GOELRO Plan, which was the beginning of the young socialist state's planning, the plans for industrialisation, the creation of industrially developed zones, the second coal and metallurgical base in the country's East, the development of the virgin and long-fallow lands in Kazakhstan and Siberia, the commissioning of the world's first atomic power station, space exploration—those were milestones in promoting the target-oriented methods of management. All these historically unprecedented comprehensive solutions of major problems can be regarded as analogous to programmes as we now understand them. It is they that created requisites for the broad application of target-oriented planning and management.

These problems have been elaborated as comprehensive ones and then taken into account in the plans of branches, territories and individual enterprises and solved in parts by ministries, departments and enterprises. Each of them could be divided into small, relatively isolated parts which allow individual control over their realisation.

In the conditions of the scientific and technological revolution essential changes have occurred in the national economy. The interbranch character of the majority of tasks that arise in planning has intensified, their scope has broadened, and now their solution can be tackled not by one but by several ministries or departments. For example, in order to solve the problem of satisfying the requirements of the national economy in power, combined work of practically all ministries dealing with the production sphere and the majority of ministries and departments of the non-production sphere of the country is required.

The number of problems going beyond the traditional territorial boundaries has sharply increased. The tasks of the development of the rich oil and gas deposits in Western Siberia, the diverting of the waters of northern rivers to Central Asia, etc., cannot be tackled on a regional or territorial scale. For instance, in the development of agriculture in the Non-Black-Earth Zone, 29

regions and autonomous republics are taking part. This makes it imperative to improve the instruments of central interbranch and interregional planning and work out the mechanism of programme planning and management.

The elaboration and realisation of a number of major economic programmes of national importance have begun: the development of agriculture in the Non-Black-Earth Zone of the RSFSR, the West-Siberian territorial-production complex, etc. During the last five-year plan period, an attempt was made, for the first time in the practice of economic planning in the Union republics, to work out and implement a number of target-oriented comprehensive programmes simultaneously. A positive experience has been gained in applying a target-oriented approach in Latvia, for example.

Large-scale economic programmes presuppose simultaneous solution of a wide range of tasks, have an interbranch and interdepartmental character and, as a rule, are long-term and call for large capital investments. Therefore, the need of allround study and speedy solution of methodological and organisational problems of the target-oriented approach is of primary importance.

Though the significance of target-oriented management is universally recognised, there are many unsolved problems in its methodology and organisational aspects. The initial premises have not yet been duly evolved for formulating and utilising a set of social development aims in planning, there is no unequivocal interpretation of the place and role of programmes in the system of management, a uniform idea about economic criteria of evaluating social usefulness and the end results of programmes is lacking, a number of questions of including programmes in national economic plans have not been solved, and the mechanism of control over their implementation is not clear enough. Many scientists, research teams and economists both in the USSR and other socialist countries are working on these problems.

Some experts suggest that planning should be transferred to a programme basis, interpreting a plan as a sum total of programmes. This, they claim, can ensure the realisation of all aims of social development, solve all problems pertaining to branches and territories and eliminate the difficulties of introducing scientific and technical achievements in production. We cannot agree with this concept. Apparently, the authors of these proposals do not fully realise the importance of having all sections of the plan properly balanced for normal economic development, whereas an instrument for interprogramme balancing has not yet been created.

It should be noted that the so-called problems of "junctions of branches" arise due to the complicated nature of distributing the limited resources. Inasmuch as the total volume of initial resources, when switching over to "complete" programme planning, does not increase, such a transfer can lead to lower than optional rates of the implementation of programmes, and to decreasing the role of programmes as instruments of priority development of individual spheres of the economy. If individual targets are reached at the expense of others lagging behind, problems arise at the "junctions of programmes".

It is therefore necessary, in our opinion, to strictly limit, at least at the initial stages, the total number of programmes being simultaneously implemented. Thus, a new problem arises of the choice of comprehensive national economic programmes for priority realisation.

The elaboration of a list of programmes to be implemented in the forthcoming plan period entails some difficulties. There is no ready mechanism as yet of compiling such a list. Not because there are few problems, but because it is difficult to compare them and select the most important ones, and also to ascertain the total volume of the resources earmarked for their solution. In choosing programmes, in addition to their importance, it is also necessary to take into account the volume of the resources to be mustered and the need to ensure normal reproduction in all links of the national economy and the possibility of a planning manoeuvre in the future with due regard for the emergence of new tasks. Consequently, the resources defined by the national economic plan as a whole should only in part be channelled to implementing the adopted programmes.

The inclusion of programmes in a uniform national economic plan, within the only framework in which they can be realised, presents a separate problem.

The compiling and practical realisation of programmes and their actual inclusion in the national economic plan presupposes an accurate distribution (among interbranch complexes, regions, branches, etc.), with due account of time, of all kinds of needed resources (financial, material, labour, etc.) and strictly established responsibility at all levels and stages of the elaboration and fulfilment of these programmes.

The problems connected with the realisation of programmes are to be dealt with separately. L. I. Brezhnev noted at the 25th Congress of the CPSU that "it is important that in each case there should be specific bodies and concrete persons bearing the full measure of responsibility and coordinating all the efforts within the framework of one programme or another."⁸ Though considerable experience has been gained by the system of management

of the socialist economy in accomplishing major tasks of economic development and creating huge industrial projects, the problems of the organisation of management of programmes require further study. The improvement of the economic mechanism should, in our view, be coordinated with organisational and legal questions, the creation of modern information and technical means of management; the economic and administrative methods of management should complement each other.

Of great importance for the practical utilisation of the methods of programme target-oriented planning and management is the elaboration and introduction of effective economic incentives and instruments ensuring the unity of interests of all links of the national economy in the drawing up and implementation of comprehensive development programmes.

Target-oriented planning has lately been attracting the attention of leading scientific teams at the Central Economico-Mathematical Institute of the USSR Academy of Sciences, where Methodological Recommendations have been prepared for elaborating comprehensive economic programmes, approved by the Council for the Study of Major Social and Economic Problems under the USSR State Planning Committee. As shown by an all-Union conference held in December 1977, the programme target-oriented methods find application in many industries and spheres of life for solving most varied problems. Questions have been discussed of elaborating programmes at republican (Latvian SSR) and regional levels of management (the economic development of the Baikal-Amur Railway Zone, the development of the agrarian-industrial complex of the Non-Black-Earth Zone of the RSFSR), programmes of a scientific and production character (the "Ocean" Programme).

Major economic programmes concentrating efforts on the decisive spheres of socio-economic development are becoming a most important feature of the present-day advancement of the productive forces. In these conditions, scientists are to investigate the characteristic features of the methods of target-oriented planning, elaborate and introduce them, in cooperation with planners, in the day-to-day practice of planning and management.

NOTES

- ¹ L. I. Brezhnev, *Report of the CPSU Central Committee and the Immediate Tasks of the Party in Home and Foreign Policy. 25th Congress of the CPSU*, Moscow, 1976, p. 102.
- ² *Comprehensive National Economic Planning-(Posing of the Problem and Approach to Its Solution)*, Moscow, 1974 (in Russian); N. P. Fedorenko, "Questions of Comprehensive Improvement of Planning and Management", *Ekonomika i matematicheskiye metody*, 1976, Vol.XII, Issue 2.
- ³ L. I. Brezhnev, *op.cit.*, p.106.

On Reading Einstein

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Albert Einstein was not only a great scientist, of the kind that appears once in a thousand years; he was also an element of a definite period. He was probably the finest representative of Western culture at the turn of the century. What he did for science, his philosophy of life, and the very example set by his none too easy life—all these were like a ray of sunshine in the troubled history of mankind.

His titanic rethinking of the fundamental problems of the physical world was effected with such seemingly effortless harmony and entered the life of mankind with such impressive assurance that it reminds one of the great thinkers of antiquity.

It is such thoughts that will surely come to the reader's mind when he gets acquainted with the collection of his scientific writings published in the USSR over ten years ago.¹ To this day, this publication remains unique in literature: it was only in 1922 that a translation of his works was brought out in Japan, but even then it was incomplete. Einstein was yet to live and work for another thirty-three years, and no other publications of his complete works were ever undertaken.

Despite the passage of time, these volumes, in their glossy black jackets, still hold a powerful attraction. His lucid, precise and terse language, which reveals not the least tension; and the loftiness and rich content of the author's thoughts grip the attention no less than the opportunity of entering the spiritual world of a genius. It is, of course, regrettable that the layman cannot derive from a reading of Einstein's scientific writings the enjoyment it gives the expert. Yet the final volume, in which his opinions and statements

on the history and philosophy of science, the biographical and autobiographical articles, his forewords to other books, his notes, letters and the like present no difficulty to the general reader.

Even if one is acquainted with the essence of Einstein's work, a re-reading of his writings is instructive, providing an insight into the course of his research, the way he correlates hypothesis and logical judgement, appraises an experiment, when he considers this particular experiment sufficient for the establishment of a new postulate, and when he decides that he can be satisfied with a created theory.

We also see a model of the scientist's ethics in the difficult area of his relations with other scientists, the general public and its thirst for information, and also with himself with his errors and his failure to understand certain things. Last, these volumes are the finest of all the memoirs a scientist of genius is able to leave behind him, memoirs free of the least trace of pedestrian drabness of the kind that provides a certain kind of reader with food for his idle curiosity.

In these *Collected Scientific Works* lies that part of his life which is enclosed between two well-known photographs—one of a young man confident of himself and with a calm and deep gaze of his eyes; the other that of a sage whose wrinkles and eyes reveal that he has seen and partaken of all the sorrows of mankind.

Let us open these heavy volumes, the first two of which contain his writings on the theory of relativity, the third his works on quantum physics and other questions, and the fourth his opinions on the general problems of science, as we have already mentioned. Within each volume the contents are arranged in chronological order, which of course does not reflect the general sequence of their appearance. That is why, if we would follow them up as the history of his creative work, like diaries or memoirs, we shall have to give up the idea of reading the volumes in succession but arrange them before us, altogether, the first two volumes below, Volume III above them, and Volume IV on top of that, and we shall go through them at one and the same time, turning the leaves like the score of a single grand work.

Let us begin with Volume III. In the four years following 1901, when the twenty-two-year-old graduate from the Zurich Polytechnic published his first work, his research did not deal in any way with what was to become the main theme of his life. At first it was capillary phenomena, the thermodynamics of solutions that lay in his purview, but with every new article the scope of his thinking and the stature of his interest grew apace. These two were now followed by writings on the fundamentals of thermodynamics—statistical mechanics. There is nothing surprising in his attention being drawn to this powerful theory: the general

theory of the states and transformations of macroscopic bodies as deduced from the microscopic structure. Later, in his *Autobiographical Notes* (1945) Einstein made the following confession: "Not acquainted with the earlier investigations of Boltzmann and Gibbs, which had appeared earlier and actually exhausted the subject, I developed the statistical mechanics and the molecular-kinetic theory of thermodynamics."² These words should not, of course, be taken in their literal sense. Einstein quotes from Boltzmann's general lectures, but he did discover anew the fundamental propositions contained in Gibbs' outstanding theory. It should, however, be taken into consideration that the works of the taciturn and laconic Gibbs, which were couched in difficult language, were, in general, accepted and appreciated much later. However, the subsequent events go to show that during those years, when he held the modest post of expert at the Berne Bureau of Patents, Einstein was engaged in much deep thinking whose outcome was soon to amaze the world.

In the course of 1905 alone, which was fantastic in the history of science, Einstein published three works in quite different areas of physics, each of these being sufficient for his name to remain in the textbooks. Two of them radically changed the face of science.

In the first place, Einstein's research on thermodynamics and kinetic theory led to the publication of his doctoral thesis, which contained the theory of Brownian movement (the reference is to the microscopically observable constant and chaotic movement of any particle suspended in a liquid and many times greater than atoms. The nature of that movement was a mystery). At the time he did not seem to be aware that the phenomenon itself had been experimentally known for almost eighty years, so that the term "Brownian movement" did not appear in the article. He arrived at a "forecast" of this phenomenon in the course of his thinking on the deep-lying link between macroscopic thermodynamic theory and its microscopic, atomic and statistical-kinetic foundation (and explained the dancing movement of heavy particles as a consequence of impulses chaotically received by them from the invisible atoms of an environment in thermal movement). That was a time when the existence of atoms was not yet universally recognised. Many researchers, including such a major scientist as Ostwald, considered that, in principle, atoms could not be observed so that they would always remain an ancillary and non-obligatory mental construction explanatory of the link between overall thermodynamic relations. Einstein's theory showed that atomic movement could be discerned directly, this leading to the experiments of Perrin and other physicists: in the course of several years the existence of atoms and molecules was proved objectively, the complete coincidence between the results of these experiments and

Einstein's theory eliminating all objections from the sceptics. Despite what the latter thought, the atomic world was now within reach of understanding, and tangible. Secondly, Einstein published in the same year his bold hypothesis of the quantum structure of light, to the effect that a light field is made up of elementary fields which arise, exist and can be absorbed independently of one another (these are now known as photons). This hypothesis ushered in one of Einstein's triumphs, which was later to cause him much distress. Here, as well as in researches over the next seventeen years, the scientist laid the foundation of the present-day quantum theory of light, a theory of necessity statistical already in its elementary aspect, in its very foundation (while, in the classical statistics which he himself developed, the movement of every atom can in principle be unambiguous, causally traceable and foretellable); his extraordinary intuition led Einstein to an understanding of the fundamental importance of such an interpretation of these phenomena. However, it clashed with the classical clarity of his own ideas of the simplest causality in the objective world. In this, his first publication, he called the concept he advanced "a heuristic viewpoint", seeing in it merely an approximate and leading approach which would yield place to a "genuine" and unambiguous theory free of any superficial statistical element. This was a stand he maintained throughout his life, while continuing to create new departments of quantum theory. A coherent and consistent theory (which he himself recognised as such⁴), namely quantum mechanics, was created by other scientists twenty years later, taking the place of his "heuristic" approach. However, it fully retained its statistical-probability foundation, which had so oppressed Einstein but which he had anticipated with such genius. Until his death after so many years of steadfast thinking and stubborn argument, he was not satisfied with the theory which had developed from his concept of light as a phenomenon that was simultaneously statistically corpuscular and a wave phenomenon.

The way Einstein arrived at the idea of the quantum structure of light is most interesting. Of course, he grounded himself on Planck's celebrated work on the quantum nature of the process of light emission. But that was not enough. As we retrace his thinking, we see that he stood on the foundation of those very profound ideas on statistical phenomena and thermodynamics (fluctuations, in this case, in a light field) which at the same time led him, without any hypothesis and quite rigorously, to the theory of Brownian movement. Today, that kind of approach to the quantum structure of light is most unusual. Of course, no student who in his standard textbook reads the plain unvarnished sentence that Einstein presumed that light is made of separate quanta will

never realise that his was the thermodynamic approach, nor will he be aware of the courage, insight and audacity in respect of the principles of science Einstein adhered to stood behind the word "presumed". However, during the ensuing years Einstein showed that this hypothesis was highly productive. With its aid he explained many things that had not been understood previously, such as the patterns of photo effect on metals (the ejection of electrons from metal when it is lit up), the chemical action of light and so on; it may well be thought that this success also induced him to employ ideas that were so distressing to him.

But then came something far more vast and impressive: in that very year he published his special theory of relativity. It first appears in Volume I of his *Works*, ushering in a new theme—the principal theme of all his scientific endeavours and all his life. There is no need to speak here of the significance of this theory to physics at the time and today. As one reads the article modestly entitled "On the Aerodynamics of Bodies in Motion"⁵ and the following additional note formulating the conclusion that the mass of a body depends on its energy, one is again amazed by the thoroughness and clarity of his thinking, the consistency and, finally, the fearlessness displayed in the extraordinarily paradoxical conclusions drawn here in the new theory of space and time. Today, too, this is one of the finest expositions of the theory, even for school purposes. Already here, among the other dispassionately presented amazing conclusions there is contained what is now known as the paradox of twins: the statement that a clock sent travelling at a high speed will prove to have fallen behind on its return as against a clock which has remained at the same place. As is common knowledge, this conclusion has an overall significance: any process must slow down in movement, that including, in particular, biological movement as far as can be judged; this latter result did not at once draw attention, perhaps because it was set forth in such unassuming tones, on half a page, and among many other conclusions.⁶ Later it was to arouse extraordinary interest, not only among scientists but, so to say, in the fashionable drawing-rooms. Besides, there were many philosophers, and strangely enough, physicists who saw in it an error or a slip forgivable in a genius. Einstein himself had to explain the misunderstandings that had arisen.

On the whole, the sensational and a lack of understanding accompanied him on many occasions. The philistine assertion that "as old Einstein has proved, everything in the world is relative", lives on to this day, sad to say. It is true, of course, that Einstein revealed the relativity and the conventionality of many patterns, notions, and characteristics of bodies and phenomena. It emerged that the relative simultaneity of events, the length of a body, and

the duration of a process, which had previously been considered absolute and fixed for all time were relative, and further that they depend on the speed of the movement of the instruments registering the phenomenon in question, the rapidity of the system of reference, the velocity of the "observer". However, to replace these—and that is the main thing—Einstein found other characteristics, patterns and measurements of movement, which, in this sense, are absolute, non-relative, "invariant", these comprising the backbone of his theory. Proceeding from this absolute and non-relative characteristics of processes and patterns, the theory forecasts with precision just how relative characteristics (the length and the duration of a process and the like) change together with the movement of the system of reference. L. Mandelstam, our outstanding scientist, once said that perhaps the very name of "the theory of relativity" was not very felicitous; it should have been called "the theory of absoluteness".

Yet, however far removed from one another are the themes of his three researches of 1905, these were in no way unconnected. They also interested Einstein as parts of a single whole. He drew upon the quantum concept of light in his examination of the link between energy and mass as called for by the theory of relativity.⁷ As already mentioned, thermodynamics and statistics provide the basis for the quantum hypothesis, the formulas of the theory of relativity being employed when light quanta are examined. All these taken together comprised the material for Einstein's indefatigable thinking on a single picture of the physical world. This amazing counterpoint, which can be followed up through the volumes in question, is adorned with a rare variety of episodic themes, ranging from his fundamental work on the quantum theory of specific heat in crystals (1912)⁸ to his article "The Cause of the Formation of Meanders in the Courses of Rivers and of the So-Called Baer's Law" (1926)⁹. He discussed the "experimental definition of the size of channels in filters" (1923)¹⁰ and himself took part in experiments (1) proving the existence of Ampere's molecular currents (1915).¹¹

Already in his 1907 research into the theory of relativity, Einstein set about developing a vast generalisation of that theory, the gist of the matter consisting in an extension of the theory's fundamental principle to any system of reference, and not only to such in uniform motion. In this he based himself on the physical indistinguishableness of mechanical processes taking place, on the one hand, when a system is in uniformly accelerated motion and, on the other, when an appropriately selected gravitation field is superimposed. That is why the former phenomenon can be eliminated through the introduction of the latter. (Indeed, a body cannot be weighed, for instance, in an imagined freely falling

lift—fortunately lifts do not actually behave in that way. But even in an actual lift one can feel that one's weight does not press on the floor during the accelerated movement at the beginning of a descent.) The equivalence between gravity and acceleration in a broad class of phenomena, which is expressed in the rigorous proportionality of inertia and weight, was developed by Einstein into the fundamental law of equivalence. The problems in the initial theory of relativity as a theory of space and time merged indissolubly with the problem of mass and gravity. Einstein created a generalising theory which mutually conditioned the properties of space and time, on the one hand, and those of matter and gravitation, on the other. That theory is called the *general* theory of relativity; it is known at the same time as a theory of gravitation which takes into account the principle of relativity.

While the special theory of relativity was created at once in its entirety, and was later merely developed and explained in its conclusions, the construction of the general theory took almost ten years. It often seemed to Einstein that he had found the necessary formulation but this was soon followed by disappointment. Thus, the scientist published for the first time, in 1913, together with M. Grossmann a full-scale theory of "A Project of a Generalised Theory of Relativity and a Theory of Gravitation",¹² which summed up in a consistent form all these previous attempts. Even today, this article can serve as an introduction to a study of theory. However, as is emphasised in the editor's comment, Einstein was as yet still unable to find a true equation of gravitation. Although he began his 1913 article with the words "the *theory* advanced here [*italics mine.*—*Y.F.*]", he already spoke a year later, in his article "The Formal Foundations of a General Theory of Relativity", of his former work only as of seekings which, besides a miscellany of physical and mathematical demands, also made use of auxiliary heuristic means.¹³ He now promised to arrive at the formula for gravitation exclusively through considerations of co-variance, i.e., from the demand for a specifically coordinated transformation of all physical magnitudes in a transition to another system of reference. In such a transformation, all the laws of Nature must have the same form in any system of reference, and not only in one that is in uniform motion. Only then will it be said that the generalised principle of relativity is met. A year later, however, he began a new article by saying that in recent years he had been trying to construct a general theory of relativity, adding that he had thought he had indeed found the only law of gravitation. However, additional analysis had shown that absolutely nothing could be proved along the road proposed; what had seemed already achieved had been grounded in error, for which reason he had completely lost all trust in the results he had arrived at.¹⁴ He

now returned to a consistent implementation of the principle of co-variance and already in the preface to his new writing he could not conceal his joy at what had been achieved, pointing out that the attractiveness of the theory could hardly fail to reveal itself to one who really understood it.¹⁵ Here, too, the theory was not yet ready, for it proved that Einstein had excessively narrowed the form of co-variance required, so that, as we know today, the equation was not yet finally true. But in that selfsame 1915, a note of exceptional importance appeared, in which the correct gravitational formula was introduced¹⁶, and finally, 1916 saw the publication of his fundamental *Die Grundlage der Allgemeinen Relativitätstheorie*¹⁷, in which the entire theory was set forth in its final shape. Only now was Einstein satisfied.

He was so confident that his theory was correct that when, in 1919, its prediction of the deflection of a beam of light in the solar gravitation field was borne out by Eddington's observations, this making the headlines in the entire press, he was not even surprised. "In fact, I would have been astonished had it turned out otherwise," he wrote.¹⁸ Later, as his friend and collaborator Infeld was to recall, Einstein agreed with the latter's opinion that a special theory of relativity would have been created without any great delay even had he not created it, but things were different in respect of the general theory of relativity. It would hardly have been known twenty-five years after its publication.¹⁹

Indeed, when Einstein was creating his special theory of relativity, physics was faced with an acute problem which had arisen almost twenty years previously as a result of the Michelson experiment, which sharply contradicted the predominant system of physics. Attempts were made to remove this contradiction by means of a particular hypothesis (that of Fitzgerald and Lorentz on the compression of an electron in motion), there existing a belief in the existence of an all-pervading ether, which provided the "main" physically distinguished system of reference; yet there existed no ability to reconcile that ether with the principle of relativity, which was confirmed by the Michelson experiment. True, there is no trustworthy evidence that Einstein was aware of the Michelson experiment. Thus, he makes no reference to it in his first articles on the theory of relativity.²⁰

In this sense, the situation was completely different ten years later when Einstein was agonisingly creating his general theory of relativity. Here there were no sensational experiments and no insistent efforts on the part of leading minds to resolve the contradiction. True, there did exist a question that had previously been discussed by Mach, and there was also Einstein's dissatisfaction with the existing theory with its absence of wholeness and completeness. There was also the accepted coincidence, which was

surprising to nobody' since Newton's times, between the mass of a body as a measure of its inertness, and mass as determining the force with which that body was attracted to the Earth and, in general, to another body. This was sufficient for Einstein to undertake a gigantic labour, whose results continue to amaze us to this day. He had all the time been motivated by nothing but an inner consciousness, a sense of the imperfection of the existing theory. He always attached tremendous importance to that kind of sensation. Though it was a time of many outstanding physicists and mathematicians, no one had discerned an acute and vital problem in this area, and one cannot even imagine that anyone but Einstein could have created that theory.

Yet, returning to the special theory of relativity, as created in 1905, it should be noted that less than a year after Einstein's publication there was published, in another and less known journal, another work coming from a leading mathematician, a genius in his field, namely Henri Poincaré, the publication appearing a month later than Einstein's work. Poincaré had long been working on the problem set by the Michelson experiment and had written numerous articles on the subject. Developing the work done by Lorentz (which was also important to Einstein), Poincaré did very much in the formal mathematical sense of what was also carried out by Einstein. Judging by his other works, an understanding of the link between geometrical notions and the measurement procedure was also close to his interests, yet there can be no doubt that his understanding of the physical content of the problem was undoubtedly much narrower than Einstein's. Poincaré regarded the Lorentz hypothesis of the deformation of the electron as a concrete process allowing the existing system of physical views to be saved. Like Lorentz, he understood that that could be achieved only if all other forces, besides the electromagnetic, change in the same way when a body is in motion. In particular, he understood that gravitation should then also spread with the velocity of light and, with bodies in motion, undergo change in agreement with the Lorentz transformations as deduced for electromagnetic forces. The dilemma was seen by Poincaré who wrote: "Either everything that exists in the world is of electromagnetic origin, or else it is a property which, so to say, is common to all physical phenomena and is nothing but an external semblance, something linked with the methods of our measurements."²¹

Thanks to Einstein, we know that neither is true. Indeed, all forces are transformed in agreement with the Lorentz transformations, but not because "everything is of electromagnetic origin" but because such are the properties of space and time, which are the same for all phenomena. The second possibility mentioned by

Poincaré is very close to the truth. What was needed was another effort of the mind. It had to be understood that there *do not exist* any length of a body or duration of a process besides those determined in respect of a definite system of reference; it had to be understood that this was not an "external semblance" but the very essence, which called for a decisive change in the accepted ideas of space and time. On the one hand, Poincaré did not advance any interpretation of the numerous physical facts, which seemed contradictory; he had indeed closely approached the all-embracing principle. As so well put by Y. Smorodinsky: "In this sense, Einstein was the first to look at the world from the viewpoint of 20th-century physics, while Poincaré was the last to do so from the positions of 19th-century physics."²² The idea of relativity was in the air, but it was only a genius who could breathe that air.

There never arose any argument over priority between Einstein and Poincaré, who died in 1912. Such friction never arises between such people, though there have been authors who have raised this question. What is interesting, however, is that Einstein, who once voiced his profound respect for the personality of Poincaré and his views²³, never seemed, even on a single occasion, to have discussed the latter's work on the theory of relativity; he never even mentioned it either in his *An Outline of the Development of the Theory of Relativity* nor in his lectures on the fundamental ideas and problems of the theory of relativity²⁴.

I would not like to come out with any judgement on the reasons. It may have been that he was apprehensive that, should he speak out and point to the distinction in principle in their work, he would be unable to do it in such a way as not to be misunderstood. After all, this was the very Einstein who always wrote with such warmth, generosity and admiration, not only of Poincaré but also of many outstanding physicists, especially of his immediate predecessors. His highly intelligent, refined and always individualised statements on Planck, Lorentz, Mach, Langevin and Smoluchowski, as well as many others, constitute one of the most attractive elements in Volume IV.

It would be mistaken to think that the general theory of relativity, which was created in a search after perfection, remained a doctrine of lofty material, and useless to concrete physical problems. Such is never the case in physics. In this instance, a particular application of theory was in keeping in scale with its epistemological significance. This "particular" application consisted in nothing more or less than the creation of a completely new picture of the structure of the Universe. It was here that the equations of theory made themselves felt with particular force, Einstein laying the foundations of present-day relativist cosmology,

the science of the structure of the Universe. Soon afterwards R. Fridman found a feature in Einstein's equations which the author himself had not noticed. It appeared that the framework of the Einsteinian theory provided for the possibility of a dynamically developing system of the world—an expanding Universe. After a brief period of doubt of the solution found by Fridman Einstein acknowledged its correctness.²⁵ Then when the astronomers' observations confirmed that expanding galaxies are a fact, there was revealed a completely new world in which, it appeared, we are living. That was something never even surmised either by the authors of the Bible, or by Newton or Laplace. The rapid development of the means of observation at the disposal of present-day astronomy, especially radio astronomy, over the past few decades, and the deep probes into areas of the Universe situated at fantastic distances from us in terms of time and space have made the general theory of relativity an essential instrument of research, without which nothing can be understood in present-day astronomy.

Even the work done by Einstein in preparation for the final theory lives on. As recently as 1967, observations conducted on celestial objects known as quasars revived interest in a variant of his theory—equations with a cosmological member, which the author himself had rejected.

We know that the 1920s witnessed a marked expansion of Einstein's public and political activities, which are inseparable from his personality. It is to be regretted that the four-volume edition does not contain documents bearing upon those activities. His correspondence is also insufficiently represented, this being a cause for regret since what we have before us is a collection of *scientific* writings. It is to be hoped that supplementary volumes will appear at some time.

Einstein's final constructive works on quantum theory refer to the early 1920s, his further scientific activities developing along three lines: a unified field theory, the significance and place of quantum mechanics in a general picture of the world, and the philosophy of science.

In the first place, he wanted to create a unified field theory, so to speak, a super-general theory of relativity that would unite the principle of relativity, not only with the field of gravitation forces, as is the case in the general theory of relativity, but also with an electromagnetic field, the reference being to a geometrisation of an electromagnetic field. In the general theory of relativity, gravitation operates as a distortion of space-time geometry, as a curvature of a four-dimensional world. Einstein held that a similar role should be played by electromagnetic forces in an inseparable unity with gravitation, a problem his writings, right down to the

last years were devoted to, these forming part of Volume 2 of his *Works* and testifying to his immense will-power, intellect and capacity for hard work.

A unified field theory seemed essential to him because he considered that, without it, the main purpose of his life could not be consummated, an aim which he was unable to achieve. Most physicists considered that these intentions of his held out no prospects. They still continue to think so. The simplest argument is that an electromagnetic field does not stand out so much and is not so distinctive from many fields that are known to us today (but which were not known until 1932) for them to be considered on a par with gravitation, which is inherent in all matter.

Electromagnetic interaction is not a general property of matter: there exist particles that are uncharged. The fact that the quanta of an electromagnetic field, like the quanta of a gravitational field, have no stationary mass is not a sufficient argument: neutrinos do not possess that mass either. Consequently, if the matter lay in an absence of stationary mass then, together with gravitation and an electromagnetic field, a unified field theory should have to take into account a neutrino field as well. In general, it is hardly possible to consider such an interaction between many fields unless quantum theory is drawn upon.

Even then it was hard to believe that Einstein's ideas and work on a unified field theory would not affect the future development of theoretical physics, or that it was the same kind of hobby or error on the part of a genius as Newton's work on the divine essence of the Trinity, a question he dedicated himself to at the age of fifty. It is quite possible that Einstein's concrete researches will present interest only from the viewpoint of method, but their overall direction has preserved their significance. Moreover, the idea of a unified theory for all forces and fields has actively re-emerged over the last decade on a new foundation, of which the quantum properties of matter are an inherent part. The so-called calibrating field theory has also made possible the creation of a theory which blends electromagnetic and weak "neutrino" interactions (Weinberg and Salam). Variants of theories have appeared which unite these interactions with strong (or, more simply, "nuclear") interactions. Finally, the unification of all these interactions with gravitation in what is known as super-gravitation has given rise to a spate of new hopes. It is now understood why Einstein was unable to unite gravitation with an electromagnetic field, something which becomes possible if they are also linked up with fields of particles of half-integral spin. It is quite possible that we are approaching (perhaps very closely) to a realisation of Einstein's dream. The second line of that period is Einstein's already-mentioned dissatisfaction with that very quan-

tum theory in whose appearance and establishment he played so important a part. Yet, he was unable to accept as final the quantum mechanics formulated in 1924-1926. Much here is simply amazing. That very Einstein, who, proceeding from a few clear axioms, created a consistent and rigorous theory of relativity, displayed, in his work on quantum theory, an amazing inventiveness and boldness in building separate models of elements of the problem, each time running risks and building bold hypotheses. In his researches, the theory of relativity has become classical, his quantum theory being imbued with sheer romance.

It was not fortuitous that he said: "I believe in intuition and inspiration. Imagination is more important than knowledge. For knowledge is limited, whereas imagination embraces the whole world, stimulating progress."²⁶

Einstein's frank readiness to give support to intuitions coming from others is truly remarkable. Thus, he gave a warm reception to a bold idea expressed by Bose, a young physicist from Calcutta. In 1922, Einstein translated a manuscript the latter had sent him, supplied it with a friendly comment, had it published and then developed the idea much further, this producing the Bose-Einstein quantum statistics, which is one of the cornerstones of quantum theory. It provided new and quite unexpected rules for the statistical calculations of the distribution of particles in a system, without which there can be no understanding either of the properties of light—"gas of photons" or of the reaction of high-energy elementary particles.

In 1924, the young French physicist Louis de Broglie developed, in his dissertation, a wild idea on waves of matter, Einstein being among the very few who immediately gave it appraisal and support.²⁷ However, when a concrete theory—quantum mechanics—arose on that basis, Einstein was among those very few who insistently tried to show that it was insufficient and incomplete.

In particular, quantum mechanics shows that the trajectory of particles in the micro-world has only a probability meaning, so that causality acquires a new and also probability form. However, the elevation of the probability course of processes to the rank of a fundamental law was alien to Einstein's worldview. "I cannot yet believe," he wrote to Professor Fritz Reiche, "that the Lord plays dice."²⁸

It should be emphasised, however, that it was not a simple change in the concept of causality that in itself repelled Einstein. He was broad-minded enough to accept it. "And I do not understand," he wrote, "why so much bother ought to be made if the principle of causation should undergo a restriction in modern physics, for this is not a new situation at all." But he went on to

express his agreement with Planck, whose point of view he expressed as follows: "He admits the impossibility of applying the causal principle [the reference is to causality in the classical sense—*E.F.*] to the inner processes of atomic physics under the present state of affairs; but he has set himself definitely against the thesis that from this *Unrauchbarkeit* or inapplicability we are to conclude that the process of causation does not exist in eternal reality."²⁹

Einstein seemed to have discerned the falseness of quantum mechanics in the phenomena it foretells in which the probability element displays itself, not within atoms but at big distances, for instance, when particles which previously interacted have long separated to a considerable distance.

His discussion on the matter, in the main with Bohr, is a magnificent episode in 20th-century science: it lasted for several decades. Each time Einstein produced an objection to quantum mechanics and cited a concrete physical example, the objection was profound and highly intelligent. The reader will find them in Volume III (Articles 69, 70, 76, 77, 78). In reply, Bohr would produce an explanation. The outstanding integrity and nobility of the discussion are best shown by the fact that Bohr wrote, for the big volume of articles³⁰ brought out in honour of Einstein's seventieth birthday, a detailed exposition of their arguments, each time proving that Einstein was wrong. In his turn, Einstein defended his point of view in the article concluding the volume: "I have expressed myself ...rather sharply...." he wrote in the concluding lines. "One can really quarrel only with one's brothers or close friends; others are too alien for that."³¹ However, Bohr was right when, in the article just mentioned and in his spoken addresses, he emphasised the benefit brought by Einstein to the development of quantum mechanics by advancing his objections and how much had come to light thanks to the discussion he had held on these refined problems.

It has been said that the errors made by great people are no less instructive than their achievements. This applies fully to the argument between Einstein and Bohr.

Here we come up against a highly interesting fact. As we have seen, Einstein was in error in two most important questions of physics, spending years on intense work along doubtful lines. Such is the universal, or almost universal, opinion. How then could it have been that those physicists who condemned him looked upon him as almost a god, on a par with Newton and some very few others?

If, indeed, Einstein was a god, then he was not the almighty and infallible god of the monotheistic religions, but a god of antiquity, with a right to be mistaken. Those who stood opposed to

him were very much of the same calibre, their prestige laying no claim to authority, their veneration containing no fawning, the admiration without any kowtowing, and their respect in no way slackening—even for a moment their critical perception of everything emanating from that god. This was probably an ideal of relations between a genius and ordinary people.

That god could feel anger and have his own shortcomings; he could experience passions, but not such that could humiliate him. He could be angry and could condemn evil very resolutely, actively and sharply, but one cannot even imagine him being coarse or immoderate. This was a democratic god, with a restrained appraisal even of himself.

Another similar god, to wit Newton, once said: "I do not know what I may appear to the world, but to myself I seem to have been only a boy playing on the seashore and diverting himself in now and then finding a smoother pebble or a prettier shell than ordinary, while the great ocean of truth lay all undiscovered before me."³² It would be naive and unfair to see assumed modesty in these words. From the altitude of their knowledge, these people could discern the boundlessness of the yet unknown and the infinity of the joyous road of discovery.

Einstein's philosophy of science was the third and ever expanding theme of the same period, which included his understanding of the role of the scientist in science and in society, and also his understanding of religion, the latter question being exhaustively explained in the published material and presenting considerable interest. He said that a belief and existence of the world about us irrespective of the percipient subject lies at the foundation of all national science. "...our notions of physical reality," he wrote, "can never be final. We must always be ready to change these notions—that is to say, the axiomatic basis of physics—in order to do justice to perceived facts in the most perfect way logically."³³

"I cannot prove that scientific truth must be conceived as the truth that is valid independent of humanity; but I believe it firmly."³⁴

Thus, the objectivity of the world and the existence of law-governed patterns in it can neither be proved nor explained in terms of logic. To Einstein belongs an excellent aphorism: "The most incomprehensible thing about the world is that it is comprehensible."³⁵ To his belief in these two propositions he gave the name of religious feeling. Scientific work is grounded in the conviction that the world is an orderly and cognisable essence.³⁶ "In every naturalist there must be a kind of religious feeling; but he cannot imagine that the connections into which he sees have been thought of by him for the first time. He rather has the

feeling of a child, over whom a grown-up person rules." ³⁷ By that "grown-up person" is meant the objectively existing and real world.

Einstein distinguishes three stages in the development of religious feeling in general, beginning with the primitive in which it is grounded in a fear of the unknown laws of Nature, a feeling which grows weaker with the advance in man's knowledge in the world about him. Then comes the more developed stage, in which religious feeling is the foundation of moral norms, but this too loses its significance with the advance of society as the sum of developed and conscious individuals. Finally comes the stage described above in his own understanding of "religion", which he calls "cosmic religious feeling...which can give rise to no definite notion of a god and no theology". ³⁸ As we can see, this is not very precise wording: with no god but with a sole dogma which declares that the world objectively exists outside of the percipient subject and that this world is orderly, cognisable, and possesses a law-governed pattern.

This, however, may be viewed in a different way. In reality, there exists in epistemology the notion of synthetic judgement that emerges from the framework of formal logic, in other words, intuitive judgement, which is an inbuilt element of formal logic. ³⁹ The judgement of the existence of the objective, cognisable world of things that is independent of the observer is a judgement of this type, whose assumptiveness and necessity are grounded only in positivism. Throughout his life Einstein fought constantly against these negations of intuitive judgement.

Thus, what Einstein called "cosmic religious feeling" may be regarded as synthetic and intuitive judgement. Perhaps one should take note of his words: "I have found no better expression than 'religious' for a faith in the rational nature of a reality which is, at least in a certain measure, accessible to human reason." ⁴⁰

We can also find in Einstein the following amazingly precise thought: "Above all a man of science requires inward freedom, for he must endeavour to free himself from prejudices and must constantly convince himself anew, when new facts emerge, that what has established, however authoritatively, is still valid. Intellectual independence is thus a primary necessity for the scientific inquirer." ⁴¹ What he needs is "...freedom of the spirit which consists in the independence of thought from the restrictions of authoritarian and social prejudices as well as from unphilosophical routinising and habit in general". ⁴²

This is a volume that should be read, re-read and digested. It should be close to hand on the bookshelf, to be consulted as often as possible.

Einstein was a remarkable aphorist, his aphorisms being

marked by superb preciseness. His literary style in general was marked by preciseness, simplicity and an effortless impact. It was such terseness and brevity that Pushkin considered the chief quality of genuine prose.

In scientific writings such a style can be appreciated only by those who are capable of sensing the perspicuity, the wealth of associations, and the inner significance of what has been said. There is nothing surprising, for instance, in Einstein writing of Newton that the latter combined in a single person the experimenter, the theorist, and the master—in no less measure—the artist of style. Newton stands before us, Einstein wrote, as a strong but solitary man confident in his powers, his creative joy and superb preciseness are manifested in every drawing and every word.⁴³

Einstein's own style was of that kind, and a reflection of his soul. His statements on any questions are a blend of absolute integrity and, at the same time, tact. Scientific writings of his time were still marked by the use of the first person singular: "I have found", "I have calculated", "I have arrived at the conclusion", etc., instead of the present-day use—apparently more unassuming—of the first person plural: "We shall assume", "We arrive at the conclusion", and alike. Yet Einstein's use of the first person singular was a reflection of his unassumingness and of a sense of responsibility for what has been said. He would never shift part of the responsibility on to other shoulders: "We shall assume...".

Einstein was a most kindly and mild man. However, it was not only in scientific polemics that his inflexibility and principledness revealed themselves. It is sufficient to read his letters to the Berlin and Munich Academies following their nazification to realise what is meant by genuine firmness that does not descend to rudeness or spite.⁴⁴ When, in 1920, a shameful campaign with anti-Semitic undertones was launched in Germany against the theory of relativity, and an "Anti-relativist Society" was even organised, Einstein's friends insisted that he should come out with a single reply; it displayed his unassuming—and therefore all the more impressive—sense of dignity.⁴⁵

He disliked his sensational fame. "Why popular fancy," he wrote, "should seize upon me, a scientist dealing in abstract things and happy if left alone, is one of those manifestations of mass psychology that are beyond me. I think it is terrible that this should be so and I suffer more than anybody can imagine."⁴⁶ There can be no doubt of the truthfulness of his words or, in general, of everything that Einstein said.

He was capable of banter as well. In his *Dialogue* the critic says that he is not of so high an opinion of himself to come out as a superintelligent creature with superhuman insight and confidence

(like the newspaper reviewer of scientific literature or even the theatrical critic).⁴⁷

The readiness with which he wrote on science in the mass press was remarkable indeed. We might refer here to his notes in *The New York Times*, the *Berliner Tageblatt*, and *The Times* of London,⁴⁸ as well as his conversations with various interviewers, which were also marked by resourcefulness, wit and aptness.

Einstein's collected works are not a memorial carved in marble. Perhaps to many his ideas have become textbook truths, which are learned by heart without any thrill or thought. That may be so but we have before us the foundation of their majestic impressiveness: a collection of his works.

NOTES

- ¹ Albert Einstein, *Collected Scientific Works* (in four volumes), Ed. by E. Tamm, Y. Smorodinsky, and V. Kuznetsov, Moscow, 1965-1967: Vol. 1, 1965, 700 pp.; Vol. 2, 1966, 878 pp.; Vol. 3, 1966, 632 pp.; Vol. 4, 1967, 599 pp. (in Russian).
- ² *Albert Einstein: Philosopher-Scientist*, Ed. by P. A. Schilpp. Evanston, 1949, p. 47.
- ³ Albert Einstein, *Works*, Vol. 4, p. 276.
- ⁴ *Ibid.*, p. 185.
- ⁵ *Ibid.*, Vol. 1, Articles Nos. 1, 2, pp. 7-35, 36-38.
- ⁶ *Ibid.*, Article No. 1.
- ⁷ *Ibid.*, pp. 53-64.
- ⁸ *Ibid.*, Vol. 3, pp. 277-313.
- ⁹ *Ibid.*, Vol. 4, p. 74.
- ¹⁰ *Ibid.*, Vol. 3, p. 447.
- ¹¹ *Ibid.*, p. 359, p. 363.
- ¹² *Ibid.*, Vol. 1, Article No. 21, pp. 227-266.
- ¹³ *Ibid.*, p. 326.
- ¹⁴ *Ibid.*, Vol. 1, Article No. 34, pp. 425-434.
- ¹⁵ *Ibidem.*
- ¹⁶ *Ibid.*, Article No. 37, pp. 448-451.
- ¹⁷ *Ibid.*, Article No. 38, pp. 452-504.
- ¹⁸ *Ibid.*, Vol. 4, p. 142. See also Albert Einstein, *On Science. Cosmic Religion With Other Opinions and Aphorisms*, New York, 1931, pp. 97-103.
- ¹⁹ See the journal *Uspekhi fizicheskikh nauk*, Vol. 57, Moscow, 1955, p. 193.
- ²⁰ See, in this connection, Gerald Holton, *Thematic Origins of Scientific Thought*, Harvard University Press, Cambridge (USA), 1973, pp. 261-352.
- ²¹ *The Principle of Relativity. A Collection of Writings by the Classics of Relativism*. Moscow, ONTI Publishers, 1935, p. 56; see also: "Henri Poincaré sur la dynamique de l'électron", *Rendiconti del Circolo Matematico di Palermo*, XXI, 129 (1906).
- ²² Y. A. Smorodinsky, *Priroda*, No. 4, 1970, p. 67.
- ²³ Albert Einstein, *Works*, Vol. 2, p. 85; Vol. 4, p. 305. See also "Geometrie und Erfahrung", *Sitzungsberichte der Preussischen Akademie der Wissenschaften*, 1921, No. 1, pp. 123-130.

- ²⁴ Albert Einstein, *Works*, Articles Nos. 63, 64; See also *Albert Einstein: Philosopher-Scientist*, pp. 665, 688.
- ²⁵ Albert Einstein, *Works*, Article No. 69, p. 119.
- ²⁶ *Ibid.*, Vol. 4, p. 142, see also Gerald Holton, *The Thematic Origin of Scientific Thought*
- ²⁷ Albert Einstein, *Works*, Vol. 3, p. 496.
- ²⁸ Carl Seelig, *Albert Einstein. Leben und Werk eines Genies unserer Zeit*, Zürich, 1960, p. 326.
- ²⁹ Albert Einstein, *Works*, Vol. 4, p. 161.
- ³⁰ See *Albert Einstein: Philosopher-Scientist*.
- ³¹ Albert Einstein, *Works*, Vol. 4, p. 314; see also *Albert Einstein: Philosopher-Scientist*, p. 688.
- ³² Brewster's *Memoirs of Newton*, Vol. II, Ch. 27.
- ³³ Albert Einstein, *Works*, Vol. 4, p. 136.
- ³⁴ *Ibid.*, p. 131.
- ³⁵ Philip Frank, *Einstein. His Life and Times*, New York, 1947, p. V.
- ³⁶ Albert Einstein, *Works*, Vol. 4, p. 142.
- ³⁷ *Ibid.*, p. 143.
- ³⁸ *Ibid.*, Article 39, p. 127.
- ³⁹ For more details see E. Feinberg, "Art and Cognition", *Social Sciences*, No. 3, 1977.
- ⁴⁰ Albert Einstein, *Works*, Vol. 4, p. 564; see also *Les Lettres à Maurice Solovine*, Paris, 1956, pp. 102-103.
- ⁴¹ Albert Einstein, *Works*, Vol. 4, p. 239; see also *Freedom: Its Meaning*, Ed. by Ruth N. Anshem, New York, 1940, p. 38.
- ⁴² Albert Einstein, *Works*, Vol. 4, p. 241; see also *Freedom: Its Meaning*.
- ⁴³ Albert Einstein, *Works*, Vol. 4; see also "Foreword" to *Newton. Optics*, New York, 1931.
- ⁴⁴ See Albert Einstein, *Works*, Vol. 4, p. 177.
- ⁴⁵ *Ibid.*, Vol. 1, p. 693.
- ⁴⁶ *Ibid.*, Vol. 4, p. 146; see also Albert Einstein, *On Science. Cosmic Religion and Other Opinions and Aphorisms*.
- ⁴⁷ Albert Einstein, *Works*, Vol. 4, p. 616. See also *Naturwissenschaften*, 1918, No. 6, pp. 697-702.
- ⁴⁸ Albert Einstein, *Works*, Vol. 4, pp. 66, 464; Vol. 1, p. 677.

On the Concept of Communist Civilisation

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The ascertainment of the theoretical content, methodological significance and functions of the concept of civilisation presents considerable interest to science. A meaning new in principle was given to this concept by the triumph of the Great October Socialist Revolution, which established an historically new type of civilisation. As a result of the harmonious connection between the humane and the class character in the ideology and socio-political practice of the working class, the Revolution materialised the masses' aspirations to enjoy full access to the advantages of civilisation, advantages which it put at the disposal of the people, whose labour has created them. The socialist revolution greatly enriched the concept of civilisation in content, by giving it a new and practical line of development.

Indeed, let us recall that, in the last century, historical science saw civilisation as a stage in social development which had taken the place of barbarianism and was marked by the emergence of the monogamous family and the replacement of clan organisation by the political and the division of society into opposing classes. It was mainly in this sense that the term was used in Marxist literature as well. In his work *The Origin of the Family, Private Property and the State*, Frederick Engels emphasised the following idea: "... Civilisation is that stage of development of society at which division of labour, the resulting exchange between individuals, and commodity production, which combines the two, reach their complete unfoldment and revolutionise the whole hitherto existing society."¹

The elucidation of the antagonistic content of pre-socialist types of civilisation and the contradictory nature of their development stands to the credit of Marxist theory, which has provided a genuinely scientific method of their analysis. In revealing the achievements in the sphere of material and spiritual production in the march of human progress, the founders of scientific communism, Marx and Engels, showed that they were all realised in a concrete cultural and socio-class environment, i.e., in the conditions of various historical types of civilisation, all pre-socialist types of civilisation being marked by exploitation and class contradictions.

In dealing with various theoretical and practical problems, Marxist literature has examined the concept of civilisation in various meanings in varying historical conditions. Thus, already after the October Revolution, Lenin, in analysing the emergence of the communist socio-economic system, brought forward important considerations that shed new light on the content of the civilisation concept. Of course, even in the framework of his interpretation, the concept continued to express an historically advanced stage in the development of the economy, culture, democracy, the spread of education among the masses, their active participation in political life, and the like. In this sense, too, Lenin, in his study of the specific socio-geographical position in Russia, pointed out in the early 1920s that it stood "... on the border-line between the civilised countries and the countries which this war has for the first time definitely brought into the orbit of civilisation—all the Oriental, non-European countries."²

At the same time, Lenin spoke of civilisation in another sense, without linking it with commodity relations, political rule and the socio-political structure of the exploiter system. He considered the elimination of these factors a condition for the rapid development of civilisation itself. Substantiating the idea that the basic prerequisites of civilisation were yet to be laid down in Russia, where the further conditions of its advance differed substantially from those in the other European states, Lenin gave expression to the following profound idea: prerequisites of civilisation consist in "the expulsion of the landowners and the Russian capitalists",³ which would then make it possible to begin the advance towards socialism. This idea of the link between social transformations and the development of a new civilisation anticipated in many respects the understanding of that link that was later to assert itself in Marxist-Leninist science.

A careful analysis of CPSU documents will show that in them the following generalised characteristics of the new type of social progress are the most important components of the concept of communist civilisation: socialism's high level of material and

spiritual culture; the achievements of a social system free of exploitation and oppression; the advantages of that new system with all its qualitative and quantitative features. A correlation between those socio-class factors and features, and the material and spiritual advances made by mankind in the course of its history, in an elucidation of the place such advances hold in the overall progress of world history, convincingly reveals the humane nature of that new type of civilisation, which is creating the conditions for the allround afflorescence of personality and the progress of the working masses, nations and all mankind.

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A variety of criteria of various civilisations is to be met in world literature in an analysis of socio-cultural common features contained in the concept of civilisation, features that have existed in various times and various areas of the inhabited world and marked by fairly stable general features.

The features of any particular *region* or *continent* can be taken as a basis in specifying the forms of civilisation. This is probably one of the most widespread yardsticks, so that the present-day vocabulary, both scientific and everyday, abounds in such terms (i.e., the civilisations of the ancient Mediterranean and Europe, Oriental civilisations, and the like). In varying degree, such terms reflect actual features expressing a community of cultural and political destinies, historical conditions and so on. It should be pointed out, however, that the purely geographical approach may fail to convey (and may at times even play down) the existence, in a particular region, of various historical types and varying levels in the development of socio-cultural communities.

The yardstick of *religion* is often used in describing a particular civilisation. Almost all present-day literature (and not only the clerical), as well as the periodical press, speak of Christian, Moslem, Buddhist and other civilisations. Of course, religion's impact on art, literature, psychology, the ideas held by the masses, and all social life has been tremendous in various periods, and still remains so in some regions of the world. In Europe, in the Middle Ages, for example, when, as Engels wrote, "the sentiments of the masses were fed with religion to the exclusion of all else,"⁴ all spheres of social life paid tribute to the influence of Christianity. Without a knowledge of Christian dogmata, and Biblical images, personages and moral concepts, there can be no thorough understanding of European literature, pictorial art, architecture, philosophy and other spheres of social consciousness in the ensuing periods as well.

These really general attributes of European culture in the course of many centuries call for a materialistic scientific explanation, a revelation of their actual role and social function. One cannot but see that, in the interpretations of civilisation cited above, the significance of such attributes is often exaggerated, being employed for a mystical explanation of the historical process, and groundlessly advanced as something determinative and always positive.

Thus, in his book *La cultura tradita dagli intellettuali*, Cardinal J. Danielou, a leading Catholic theologian, insists on the predominant and decisive role of Christianity in the development of world civilisation, this despite all the evidence of history and the entirety of socio-cultural practice.⁵

Of late, it has become the vogue with Catholic ideologists to elaborate and publicise the concept of what they call "civilisation of love". The impulse for such activities was provided by Pope Paul VI who, speaking at a Vatican reception on January 21, 1976, claimed that "civilisation of love" must be based on "renovation" and "reconciliation".⁶ The former should include an up-dating and perfection, in keeping with the times, of church dogmata, ideology, and organisation; the reconciliation presupposes the establishment of peace in the souls of all men, and in the relations between peoples and classes.

The concept of "civilisation of love", as based on the idea of administration of social solace and class reconciliation, is now being actively propagated by church organisations in various countries. To support and develop this concept, the Sacra Congregatio Pro Episcopis of Italy adopted, in February 1976, a message to all believers and all men of good will, in which it speaks of the important contribution of the Christian faith to present-day civilisation, and calls for that civilisation to be imbued with religion, something that will foster the establishment of "civilisation of love".⁷

Also quite widespread is a hyper-exaggeration of certain *spiritual components* of culture in any civilisation, this being considered as their determinative criteria. One such interpretation is developed, for instance, in a book by Laloup and Nélis, who consider that such phenomena are determined by certain self-developing concepts which condition their specific features and indicate their main idea and meaning: "Let us compare a 16th-century Western painting (a Raphaël, a da Vinci, or a Botticelli) and a wash-tinted drawing of the Sung period (China, 10th-11th centuries): on the one hand, we have a concern for realism, a colour scheme, spatial perspective in still life, a clarity of drawing and form to the exclusion of any impressionism; on the other hand, a diffuse mist in which mountains and lakes are lost, a

deliberate imprecision..., on the one hand, the importance of man; on the other, the disappearance of human forms. These two kinds of paintings were inspired by opposing philosophies. This time, we are in the very bosom of civilisation, in the realm of *ideas* and the philosophical or moral *precepts* which inspire and orientate them.⁸

It should be noted that civilisations are often defined from *psychological positions* as well, for instance, through an analysis of the concept of happiness. Such an attempt was made by the French psychologist J. Cazeneuve, who spoke of two ideals of happiness and the two types of civilisation corresponding to them, the Apollonian and the Dionysian. Making use of these two categories, which were introduced by F. Schelling and have been extensively employed in Nietzschean literature (with the aid of which, Schelling, for instance, wished to express the essence of Apollo as the embodiment of form and order, enlightenment and harmony, as distinct from the stormy, elemental and form-destroying impulses of the God Dionysius), Cazeneuve developed the following lines of reasoning: the Dionysian ideal of happiness is marked by a striving towards either the future or the past, by tension and inner uneasiness, irrational impulses, a thirst for change, and aggressiveness. The Apollonian ideal, on the other hand, is marked by a striving to make full use of the present, and by rationality, orderliness, and by relative peacefulness and mildness.

On the basis of these socio-psychological postulates Cazeneuve makes very broad sociological generalisations. The Dionysian ideal of happiness is initial in the history of every people or community. It does exist in the time of wars, revolutions and formation of states. When the situation is being stabilised, the Apollonian ideal of happiness begins gradually to take shape.⁹

In respect of the history of the European peoples, the transition from the Dionysian to the Apollonian ideal was to be seen during the Renaissance, according to Cazeneuve's views. On the economic plane, the Dionysian type of civilisation is based on an acute shortage of various foodstuffs, whereas an Apollonian civilisation develops in conditions of relative plenty and mass production.

In extrapolating such judgements into the present-day ideological and political situation on our planet, Cazeneuve thinks that, for our days too, the gist of the questions consists in a struggle between the Dionysian and Apollonian types of civilisation. This basic contradiction drives into the background the actual and determinative oppositions between the socialist and the capitalist countries, since, he claims, the future and the policies of either of them, as well as of the developing countries of the Third World, depend on a blend of Dionysian and Apollonian elements. This

leads to a playing down of the fundamental significance of the two socio-political systems in the world of today and the two historical types of civilisation that are developing on their basis, viz., the bourgeois and the communist.

Mention was made above of a striving to single out and define a civilisation through a hypertrophy of its spiritual components. Present-day Western sociological literature has been marked by many attempts to express the reverse: an absolutisation of material and technological factors and a classification of a civilisation according to the *level of its technological and economic development*. Thus, for instance, despite all the distinctions between them, the concepts held by adherents of what is known as technological determinism—R. Aron, W. Rostow, J. K. Galbraith, A. Toffler, et al., all belong to this category. The variants of what is called “industrial” (“post-industrial”, “super-industrial”, “technotronic”, etc.) civilisation are overtly or covertly based on a number of common premises. The authors ultimately count on the autonomous development of science, technology, and technological organisation which, they assert, will help solve the entire range of problems long facing mankind, and do so without any change in the capitalist production relations. What is ignored here is that, far from eliminating the radical contradictions of capitalism, the scientific and technological revolution engenders an extended reproduction of social antagonisms.¹⁰

There have been instances of several features being used as a basis for the singling out of socio-cultural organisms. Thus, though he considered civilisation to be an integral sum of interlinked phenomena broader than any individual nation but less broad than humanity as a whole,¹¹ the British historian and sociologist Arnold Toynbee, in speaking, in the first ten volumes of his *A Study of History*, of the existence of 21 developing “local civilisations” in the world (besides the undeveloped or ossified) actually employs heterogeneous criteria in identifying civilisations: in some cases he applies the regional yardstick (e.g., the civilisations of the Far East); in others, the yardstick of religion (the Islamic civilisation); in respect of a number of civilisations he speaks of countries (Russia, Persia, China and so on). True, in dealing with the essence of civilisation, Toynbee uses the ultimate yardstick of religion.¹²

One cannot but see the one-sided treatment of all the above-mentioned features as used to distinguish between various civilisations; they cannot express the basic essence of any socio-cultural entity, though they do characterise its individual features in some measure, in expressing a certain specificity and the technological, economic, cultural and territorial features of a

given social organism, which need not necessarily be confined to a national framework.

These are actual phenomena from which the researcher cannot abstract himself, whether he is an ethnographer or archaeologist, sociologist or writer, psychologist or historian. True, instances are common in non-Marxist literature of authors failing to discern deep-lying processes and causes beyond the eye-catching external features of phenomena. This leads to seekings for analogies and the establishment of external similarity or dissimilarity taking the place of an analysis of the actual causes and conditions of the inception, development and disappearance of civilisations.

It is, on the whole, important to stress that, in all cases, any given concrete forms of civilisation—Sumerian or Ancient Greek, Arab or West European, and so on—can be described on the basis of external features or even real specific characteristics. However, a more profound analysis, one grounded in intellectual activities capable of abstraction and generalisation, is necessary to reveal the essential features of an historical type of civilisation as conditioned by qualitative distinctions in social relations, and to bring out the generic essence in the content of a social organism (e.g., slave-owning civilisation), varieties of which are presented by given concrete forms of a civilisation (e.g., the Ancient Egyptian, the Ancient Roman or other forms of a civilisation of the slave-owning type); otherwise, the individual features or even characteristic manifestation of a given form of civilisation will conceal the definitive content of a generic type of a civilisation.

For an allround and objective understanding of the deep-lying essence of any civilisation and of the causes of its inception, development and history, what has to be revealed is its links with material production and the historically conditioned mode of production, the existing socio-economic relations and the system of government produced by those relations. That approach will permit an understanding of the very nature of a cultural-historical system, and not merely of its individual elements, its technological, economic, social and spiritual characteristics.

An analysis of the inner law-governed pattern in the functioning of a civilisation and the various stages of its maturity presupposes due account of the impact of the objective factors underlying the life of society and conditioning the integrity, stability and consistency of the historical process. In this case, Marxist-Leninist social science proceeds from the important category of the socio-economic system, the concretely historical mode of material production, which ultimately conditions all other forms of men's social and individual activities, including the process of spiritual production. This idea, which is focal for a materialist understanding of history, was constantly developed in

the writings of the classics of Marxism when they set forth the fundamental propositions of materialism as affecting human society as a whole, and its history.

It is only this kind of historico-materialistic approach that can provide a broad understanding and explanation of the cultural, regional, technological, economic, religious and other features of any concrete socio-cultural entity, i.e., a given form of civilisation, something spoken of above and making that entity just what it is. If we are dealing, for instance, with a slave-owning type of civilisation, whether in Ancient Greece, Ancient Rome or elsewhere, the latter may be distinguished by features in their economic or extra-economic activities, differing pantheons, cultural, social and other features. However, all these are, in the long term, various manifestations of a single type of civilisation based on slave-ownership. Thus, it is only a specific blending of cultural, spiritual and material activities and definite social factors that creates a socio-cultural entity expressed in a concrete form of civilisation. Without due account of the intimate connection with the factors of the social system—the mode of production, the economic basis and the specific superstructure—one will find it hard to understand civilisation's motive forces, internal law-governed patterns, and contradictions, which create its history, stages of growth, and decline.

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At this point, it may be asked: if a firm scientific foundation for an examination of a concrete form of civilisation is ensured through an unbreakable link with the theory of socio-economic systems so well elaborated in Marxism-Leninism, then wherein lies the distinction and what particular content falls to the lot of the concept of civilisation as distinct from that of a socio-economic system? Are not these two concepts interchangeable or synonymous?

It should be recalled that one and the same social reality may be reflected in a number of concepts, each reflecting one and the same object from its own angle, singling out its own particular aspect, and being marked by its functional purpose. These concepts are distinct both in form and content, and possess different cognitive functions.

With all its variety of meanings, the concept of civilisation invariably focusses attention on the achievements in the social sphere, the cultural activities in a given community, their consistent development and enrichment, the degree of their distribution among the masses, as well as on the extent and degree of the masses' participation in historical creativity. The concept

permits a correlation between the results of the material and spiritual production achieved in a social community, the outcome of social activities, and values pertaining to all mankind, and their place in the historical advance.

Apart from the different functions of the concepts of civilisation and socio-economic system, one may also speak of their non-identity in scope. In a certain sense, the socio-economic system concept is broader than that of civilisation (the reference being to the relation between a given socio-economic system and the historical type of civilisation based on it); all the factors and manifestations of a civilisation exist within the framework of a socio-economic system, although the concept of civilisation involves, not all the phenomena examined by the theory of such systems but only those which purposefully reveal the features indicated above.

The concept of civilisation invariably includes the aspect of comparisons and appraisals; it implies a critical and polemic direction, and the superiority and advantages in a socio-cultural community; it emphasises the contribution it makes to human values on a worldwide scale. Let us recall that the founders of Marxism employed the concept of civilisation in contrast with barbarianism; the French Encyclopaedists—in contrast with mediaeval obscurantism; we contrapose the communist civilisation to the bourgeois.

When we speak of the specifics of civilisation and the incorrectness of identifying it with the socio-economic system on the basis and conditions of which it develops, we should also resort to the argument that certain features of a civilisation, especially its culture, human relations and the way people appreciate Nature, and the like, possess a considerable stability and are preserved even after a given people has gone over to a new stage of its historical development as registered in the concept of a socio-economic system.

Indeed, if we consider certain features, for instance, of the Japanese civilisation, we shall see that it has not been invariable in the different historical stages, since it has rested on the basis of both feudalism and capitalism throughout the current and the previous century. As a result, it has undergone substantial transformations, its type has changed (the feudal type yielding place to the bourgeois type of civilisation), but even in the ultra-modern Japan of today, just as in feudal Japan, there exist a definite imprint and individuality which have manifested themselves always and in everything. This is to be seen in the areas of work, the family, everyday life, culture, morals, and so on and so forth. Thus, there has been a constancy in the way Japanese culture has modelled itself on Nature, in the understanding of the

essence of art and the beautiful, an attitude of always addressing oneself to Nature as an inexhaustible treasure-house. In the same way, there has always been a continuity in the understanding of ethical norms and the demands of etiquette, in the tradition of addressing others, in a respect for one's elders and superiors (a son's strength of character revealing itself, in the Japanese view, not in resisting the will of his parents but in bowing to it, despite his feelings or desires), in patience, industry, conscientiousness at one's job and the bringing up of children, and in the very concept of the moulding of personality.

In support of the above-expressed distinction between the concepts of social system and civilisation, reference may also be made to the fact that various civilisations have emerged and existed on the basis of a single social system, while remaining fundamentally of one and the same type. This is linked with considerable features in the emergence of a social system, as well as with the forms of its manifestations in various countries and regions.

As is common knowledge, the idea that a number of varieties may exist on the basis of a single social system and that, despite all their distinctions, they are manifestations of one and the same mode of production were developed by Karl Marx and Frederick Engels in respect both of feudalism and the capitalist mode of production. In his analysis of the variegated but essentially single process of the establishment of bourgeois relations, Marx, basing himself on a study of a considerable corpus of concrete historical material, pointed out that the emergence of capitalism "assumes different aspects, and runs through its various phases in different orders of succession, and at different periods".¹³

The specific features of a socio-economic system as manifested in various regions and countries and exerting a corresponding impact on the civilisations that have developed on its basis are linked with a series of circumstances, for instance, the existence or absence of survivals of the preceding order, differences in the interrelations between industries (manufacturing or agrarian), in the social structure, the traditions of political government, and so on. Here, the existence of a number of civilisations of a single type and grounded in one and the same socio-economic system hinges on a unique blend of cultural forms, ethnic and national features, religious distinctions, and specific socio-political, aesthetic, legal and ethical views and institutions.

The progressive development of socio-cultural communities means a consistent realisation of the possibilities and the potentialities of man's mind, his culture, and the advance of social organisation. Of course, there have been instances of mankind losing much of what it has achieved, this as a result of foreign

conquest and the impact of other social, and sometimes natural, disasters (for instance, there is a hypothesis that the Minoan civilisation of ancient Crete perished as a result of a volcanic eruption or an earthquake); this meant a return to square one and a repetition of the road once already travelled in the harnessing of Nature, improving the social organisation, developing machinery and industrial processes, creating a new system of writing, musical notation, etc.

While every civilisation possesses its own and unique features, it at the same time contributes values and achievements of its own to the common treasure-house of human experience. It marks a definite stage in the socio-cultural development of a given section of the habitat, one linked with a definite level of social achievements and material and spiritual production. The very emergence and evolution of a civilisation are achieved at a stage of time at which it is able to create values that comprise its contribution to the advance of mankind and leave a trace in the history of society. For instance, describing the Sumerian civilisation, we make reference, first and foremost, to its achievements: the invention and application of cuneiform writing, the plough, the wheel, and so on. The concept of civilisation is hardly applicable to the primitive community system because man's cultural practice was in its very initial stages.

The way civilisations interlink and enrich one another provides an important area of research, the sphere of spiritual production being an example. The civilisations that developed in various epochs and the latter themselves expressed their understanding of the world in their own individual manner. This is an indisputable fact, but at the same time, art, literature and other spheres of spiritual life, though most individual and specific in the cultural and historical practice of the peoples, raised and tackled problems of human life that were similar in many respects and were of concern to all people always and everywhere. These were questions of the rational organisation of society, of good and evil, beauty, love and motherhood, care for the young, an interest in the meaning of life in the cognition of the forces and laws of the universe, and so on. This unity of problems, of concern to generations of people and tackled in the culture of various peoples, regions and times, obviously emphasises the unity and integrity of the socio-historical process in the world.

It was to this proposition that the well-known Soviet Oriental scholar N. Konrad drew attention in his book *West and East*. On the basis of a single group of problems posed by the history of world literature, he analysed the mutual influences of various ideas and concepts in the philosophy, art and the various departments of spiritual production in a number of countries of

Europe and Asia, the West and the East, and substantiated the idea that the nature of historical phenomena in all its significance and fullness can be understood only in the context of world historical development.

The establishment and consolidation of mankind's historical unity have always been promoted by the mutual influence and mutual enrichment of cultures and the worldwide cultural links which appear at the early stages of the existence of civilisation and have been steadily developing, despite all the obstacles raised to them by an antagonistic society.

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In considering the various aspects of the manifold process of the consecutive development of types and forms of civilisations, their mutual influence and mutual enrichment, we would like to lay special emphasis on the part played by the masses' creativity, by progressive leaders of culture in all and any varieties of civilisation, irrespective of region or national and ethnic features.

With all its specific material foundations, socio-political and spiritual features and its contribution to mankind as a whole, any civilisation promotes the ascent of mankind to a higher rung in the advancement of the principles and foundations of men's joint existence and in expanding their ability to cognise their environment and themselves. In a class society, of course, any civilisation develops in the conditions of the class environment with all the due consequences, but those of its achievements that are linked with the needs and interests of mankind serve the cause of progress and constitute a universal value.

The content of any civilisation is determined by the creative and constructive work of the people, which is why the driving force in a civilisation has always come from the working people, the masses. In creating the values of civilisation, a definite role is played by the activities of various social classes and their representatives, but the activities of progressive classes and strata are of special importance.

In the various types of civilisations, the attitude of the masses towards the spiritual and material values has been different, this of course in keeping with the concretely historical nature of the creation of values, their distribution and consumption, all of which have been determined by the mode of material production inherent in a given social system. This has also been linked with the ability of a given community to cope with problems of concern to all mankind, and its orientation towards the creation and distribution of universal values.

In a society based on private ownership, the advantages of culture and civilisation are in many ways directed towards serving a comparatively narrow circle of the socially privileged, the masses, not only being deprived of such boons but having many achievements of culture and civilisation operating against them. Yet, the quantity of its material and spiritual achievements is not the only vital indicator of the progressive nature of any socio-cultural community. What is most important here is that the totality of such achievements affects the status of the individual, promotes the evolution of spiritual, intellectual and physical abilities, and determines the measure in which a man has a voice in the arrangement of his own life and the running of the life of a particular society.

Of course, when speaking of the vices of the pre-socialist types of civilisation, in particular, of bourgeois civilisation, and of the basic qualitative limitations to its values and foundations, no Marxist will deny the important successes achieved by that civilisation. In their well-grounded critique of the anti-humane qualities of antagonistic civilisation, the classics of Marxism-Leninism never regarded it as a reverse movement in history.

As a result of the socialist revolution and in the conditions of a social type of civilisation that is new in principle, it is not only the accessibility of the historically achieved boons of civilisation that changes; new values inherent only in socialism are created in keeping with the interests of the individual, the people and mankind. An instance is the problem of the way the creative potentials and the initiative of the masses are revealed, and how they participate directly in the numerous affairs of society and the state. The new economic and political conditions and the new social climate as a whole make it possible to involve the masses in historical creativity, and make for the unparalleled sweep, in areas hitherto unexplored, of the people's social and cultural action. In describing the new society in *The State and Revolution*, Lenin pointed out that, under socialism, "for the first time in the history of civilised society, the mass of the population will rise to taking an independent part, not only in voting and elections, but also in the everyday administration of the state."¹⁴

The various types of production relations (based on social or private ownership) also condition the various approaches to a solution of problems of concern to all mankind, as well as the possibility of various solutions of such problems. That is why the socio-cultural communities existing on that foundation differ in their fundamental characteristics and trends of development, a knowledge of which permits an understanding both of the nature of a particular type of civilisation, and the volume, nature and

essence of its contribution to the treasure-house of mankind's values, and to ensuring the interests of the peoples.

It is this relation between the material and spiritual values achieved by mankind as a whole, and the factors affecting socio-class systems that calls for a differentiated approach to the concept of civilisation, a need of special importance today, namely a principled line of demarcation between bourgeois civilisation, which is based on private ownership, and communist civilisation.

In its volume and its reflection of social reality, the concept of communist civilisation, which is developing together with the unfolding of the possibilities and advantages of the new society, is distinct from the concept of a communist social system, and has its own shades of meaning, in the same way as bourgeois civilisation and the capitalist social system do. The concept of communist civilisation attaches prime importance to the level of social progress and material and spiritual culture achieved in the new society, and correspondingly registers the results of the socio-cultural activities, which it correlates with the values held by all mankind. It reveals the place and role of specifically socialist values in the destinies of mankind, in the totality of its achievements and trends of development.

The superiority of communist civilisation becomes most tangible in connection with the establishment of the world system of socialism, the dynamic development of the world of socialism, and the establishment and perfecting of social, spiritual and cultural values that are the opposite of the bourgeois. Of particular importance in this respect is the construction of developed socialist society in the USSR, in the conditions of which the system of the new social order is acquiring an integrity, and all its components are developing on their own foundations and with the full supremacy of socialist social relations and the principles of collectivism. It is at this stage that the optimum conditions are created for the establishment and distribution of values and the potentialities of the new civilisation. Though each of the countries of the socialist community has its own national, historical and cultural features and traditions, the fundamental qualities of the new type of civilisation are common to them all. These qualities display themselves in the essence of the socialist type of social progress: the emancipation of labour, the fair distribution of the national wealth, the renaissance of dozens of nations large and small, the involvement of millions of people in the running of state and public affairs and their active participation in the advancement of culture, the endowment of every individual with a multitude of rights and guarantees ensured materially and legislatively, in the features of the new culture, the new way of life, and the traits of the socialist type of personality.

We now arrive at the most important feature of the new and communist civilisation, which we would like to play special emphasis on: while, within every preceding social system, the term "civilisation", has, as mentioned above, been applied to a fairly variegated number of socio-cultural communities, at times greatly differing in social organisation, technological and economic characteristics and the level of the development of culture, the new social system, which extensively involves all peoples in the material and spiritual culture of the world and ensures their allround and rapid progress, promotes the common features of their development thanks to the internationalisation and integration of the basic spheres of the material and spiritual activities of the socialist societies.

Of course, an important role has been played here by the tremendous development of communications and transport, and by the intensive exchanges of information and achievements in the fields of science, technology, industrial processes, and the like. These are the favourable prerequisites created by the present-day scientific, technological, economic and political development throughout the world. The trend towards internationalisation in world history was well revealed by Lenin, who wrote that "... all economic, political and spiritual life is becoming more and more international. Socialism will make it completely international."¹⁵

The main and definitive reason for the civilisation of a new type having no national or regional limits lies in the nature of the new system which is drawing the independent and sovereign fraternal countries ever closer together, and is working for a common upsurge in all spheres of social life through mutual support and close allround cooperation. This definitive and law-governed pattern was revealed by the 25th Congress of the CPSU: in the following terms: "The ties between socialist states are becoming ever closer with the flowering of each socialist nation and the strengthening of their sovereignty, and elements of community are increasing in their policy, economy, and social life. There is a gradual levelling up of their development."¹⁶ In keeping with the gradual drawing together of the fraternal countries, the new civilisation will reflect the totality of the achievements scored by the world system of socialism, which it will correlate with mankind's entire cultural stock and the trends of its development.

The contribution made by the new civilisation to historical progress can be analysed on two planes: the internal, from the viewpoint of the establishment of a social organisation that is new in principle, the ensuring of the people's material and cultural welfare, and the conditions for the allround development of the individual; and the external, from the viewpoint of the new

civilisation's significance to progressive changes on the international scene. Focal in an understanding of the essence of the new civilisation are, of course, social problems. Those which have been a stumbling-block to bourgeois civilisation are solved in the new society, such solutions becoming a contribution made by that society to mankind's overall progress. The coincidence of the interests of the working class, and the theory and practice of socialism, and those of all mankind has been instrumental in the new civilisation becoming the lawful inheritor of the values amassed by all previous historical development, while the new values it has engendered are in full keeping with the fundamental needs of mankind's development. That civilisation is an essential condition and vital need for mankind's further progress.

NOTES

- ¹ K. Marx and F. Engels, *Selected Works*, Vol. III, Moscow, 1970, p. 330.
- ² V. I. Lenin, *Collected Works*, Moscow, Vol. 33, p. 477.
- ³ *Ibid.*, p. 480.
- ⁴ K. Marx and F. Engels, *Selected Works*, Vol. III, p. 373.
- ⁵ J. Danielou, *La cultura tradita dagli intellettuali*, Milano, 1974, p. 94.
- ⁶ *L'Osservatore romano*, January 22, 1976.
- ⁷ *La Civiltà Cattolica*, November 21, 1976, p. 321.
- ⁸ J. Laloup et J. Nélis, *Culture et civilisation. Initiation à l'humanisme historique*, Tournai-Paris, 1956, pp. 21-22.
- ⁹ J. Cazeneuve, *Bonheur et civilisation*, Paris, Gallimard, 1966, p. 102.
- ¹⁰ A detailed critique of technological determinism is contained in an extensive literature, in the form of monographs or articles in journals published in the USSR.
- ¹¹ We shall quote a typical arguments used by Toynbee in distinguishing "local civilisation": "These limits of time and space give us the intelligible unit of social life of which the United States or Great Britain or France or Holland is a part: call it Western Christendom, Western civilisation, Western society, the Western world" (Arnold Toynbee, *Civilisation on Trial*, Cleveland, 1963, pp. 195-196).
- ¹² G. D. Chesnokov, "The Problems of Civilisation in Arnold Toynbee's Philosophy of History", *Voprosy filosofii*, No. 10, 1966, pp. 69-70.
- ¹³ Karl Marx, *Capital*, Vol. 1, Moscow, 1969, pp. 669-670.
- ¹⁴ V. I. Lenin, *Collected Works*, Vol. 25, pp. 487-488.
- ¹⁵ V. I. Lenin, *Collected Works*, Vol. 19, p. 246. Incidentally, these trends towards internationalisation, which began under capitalism, have ensured a certain integrity of bourgeois civilisation and reduced the possibility of the existence of highly "local" civilisations characteristic of slave-owning system and feudalism.
- ¹⁶ L. I. Brezhnev, *Report of the CPSU Central Committee and the Immediate Tasks of the Party in Home and Foreign Policy. 25th Congress of the CPSU*, Moscow, 1976, p. 9.

Linguistics, Psychology, Psycholinguistics

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Each time when, on the borderline between different sciences, a new science emerges following the pattern: "the name of one science+the name of another", society naturally reacts by dropping a component of the new name so as to reduce the unknown to what is familiar. For instance, what is mathematical linguistics? Is it linguistics or mathematics? The generation the author of this article belongs to, had to voice their opinions on this score on many an occasion. It is noteworthy that the reply to this question given some twenty years ago is not quite correct today: mathematical linguistics was then understood as the study of language with the aid of mathematical methods (in the broadest sense of the word). Today definite lines of research have taken shape within the scope of mathematical linguistics, some of which (e.g., the theory of formal grammars) are regarded as part of mathematics, while others (e.g., computational linguistics) have acquired a clearer contours.

Yet some particular investigation is no longer regarded as pertaining to mathematical linguistics only because it contains quantitative data or because elementary methods of mathematical linguistics have been used for an analysis of the results. In the same way it is no longer feasible today to ask what psycholinguistics is: linguistics or psychology? Yet an ascertainment of the status of psycholinguistics as a scientific discipline is highly important.

Acknowledgement of discipline as a separate area of knowledge presupposes, as a minimum, that this particular discipline, in the first place, has its own subject, i.e., in simpler terms, it can answer

the question of what comprises its competence; and, second, that it possesses definite methods of research adequate to the specific character of that subject.

The status of linguistics in this sense is sufficiently clear: it has natural language as its subject. This statement is so obvious that, it might seem, there is no need to think of disclosing its content. We shall formulate several fundamental questions relevant to the study of language:

1) In what terms can the process of the realisation of thought in words be described?

2) How is the process of reading organised?

3) Is the process of speech perception symmetrical to the process of speech production?

4) Why damage to some parts of the brain leads to disintegration of speech in one particular way and not in another?

It is fairly obvious that these problems are not easily divided into "purely linguistic" vs. "purely psychological": to develop them one must know both linguistics and psychology, as well as the physiology of speech, psychoacoustics, neurophysiology and much more. The kind of linguistics whose subject is language, regarded primarily as a sign system *sui generis* ("langue") does not concern itself with these questions. A psychologist not familiar with the specificity of language organisation would also feel his incompetence here. We believe that problems of this nature should be regarded as psycholinguistic. In addition, the following points should be kept in mind: firstly, none of the questions mentioned above has been given a satisfactory answer today; secondly (and this is rather surprising), the very formulation of the questions needs considerable specification.

How does a science with no answer to such vital questions "survive" then? What about its self-image and self-respect?

It is well known that there arises from time to time a sharp need in science to suspend all routine work and to contemplate whether we address Nature with the right sort of questions.

Generally speaking, scientific self-realisation always follows the two lines simultaneously: (1) what should be studied to understand the given object; that is precisely what we have in mind when we speak of questions addressed to Nature; (2) what methods should be employed to achieve the desired ends. In what follows we shall discuss how the lines (1) and (2) interact in the study of language regarded as a phenomenon which exists above all in the real being and communication of speakers. We leave the choice of label for this field of knowledge to the reader. Thus: linguistics, psychology, psycholinguistics.

Let us note that in the sphere of "high science" questions addressed to Nature appear to be formulated with a considerable degree of clarity: for example, the title of the well-known article by Ch. Osgood "Where do the Sentences Come From?"¹ or the work by W.S. McCulloch "Why the Mind Is in the Brain."² These would be "superproblems", so to speak.

As a rule, however, the more "transparent" the formulation of a superproblem, the less apparent even the most general approaches to its solution are. To make at least one step on the way to the solution of a superproblem, an attempt should be made, first of all, to reduce it to problems proper, i.e., the sort of problems one can actually work on. Solving problems derived from the superproblems is precisely the task of concrete scientific activity. The transition from the formulation of a superproblem to the breaking up of the work into a number of stages which would at least outline in principle the possible ways to the solution is a most difficult task usually undertaken by the leaders of the major scientific trends. Actually the existing scientific trends are in fact different and sometimes competing attempts to realise the numerous suggestions for the ways of transition from the superproblem to problems and further to workable hypotheses.

The number of steps separating the formulation of a superproblem from the formulation of a workable hypothesis is very great. This is particularly true in studies where one can observe only the *behaviour* of the system whereas one's main concern is what is not directly observable in principle, i.e., its *mechanisms*. Indeed, what we want to know is how the mechanism providing a high degree of reliability of the perception of speech signal works. And here is how one of the best studies related to this "superproblem" is entitled: "Analysis of Perceptual Confusions among Some English Consonants".³ Let us suppose that this and many other problems similarly analysed have been solved. What further steps should be made?

At this point there happens something which scientists often talk about among themselves but by a kind of a tacit agreement never write about. In having obtained a considerable amount of factual data, we seem to be unable to get back to the superproblem nor to establish whether the accumulated material has taken us any nearer to its solution.

Starting on our work, we assume, as it were, that we have constructed a hierarchical tree for the solution of the superproblem. Still when we have a large corpus of facts at our disposal this assumption of having a reasonably constructed tree for whose top we can reach disappears and what we have instead is the feeling of

being lost in a maze with very dubious prospects of getting out. In a rather simplistic way this situation can be described like this: the facts obtained as a result of the analysis will not combine into a whole by synthesis. Another metaphor suggests itself, one which seems to capture the subjective feeling of the researcher: having completed all required calculations he has cut out another stone for the edifice of science; but it turns out that where the stone should be placed is not quite clear, for the work has not been completed here, there and everywhere. What is more, after a number of tests he discovers that in some cases the stone fits in well with the others while in other cases it does not fit at all. Since scientific pursuits are never taken subjectively as a sort of "glass bead game" (*Glasperlenspiel* by H. Hesse), the scientist is forced to ask himself this question: Doesn't this mean that we set ourselves problems for the solution of which science has as yet no means?

Such a tendency, however, exists at any stage in the development of any science: no demonstrations are needed to make one see that it is the desire to comprehend the nature of phenomena which science cannot as yet describe adequately that serves as a powerful impetus to its internal development.

Thus, the conflict between the superproblems and the methods is not something that happens in linguistics and psychology only; still it plays such a dominant role at the present stage of these branches of knowledge that it would be useful to consider its origin.

* * *

Among the prerequisites of any scientific endeavour are usually included the belief in the meaningfulness and productivity of the researcher's work. The enthusiasm of the trail-blazers in science is kept alive by a measure of "naive realism", which is not pre-scientific common sense, but a store of theoretical and empirical knowledge that makes the approach to research within a chosen field of study intrinsically natural both in its personal and social aspects.

In particular, the achievements of the late 1950s and early 1960s in the field of machine translation were largely due to a certain degree of "naive realism", although that necessitated nothing short of a reconsideration of the entire state and basic concepts of classical linguistics, which by that time was a highly developed discipline. This is also true of the achievements in the field of automatic pattern recognition at about the same time and in many other domains of knowledge—some of them very remote from both linguistics and psychology.

Leaving out the details, one may say that many incontestable scientific triumphs were based on such manifestations of "naive realism" as its faith in the omnipotence of analysis. This epistemological attitude assumes that any complex object is in principle divisible into simpler components, the latter in their turn being divisible into still more elementary parts and so on. This process will result, then, in gradual transition from lack of understanding to knowledge, since no matter how complex the object under study might be, there is always a way of breaking it up into simple components accessible to our cognition while the complex object cognised in this way is "the same" as the one with which we started out.

Another manifestation of "naive realism" is the belief (usually implicit) that the knowledge obtained is in a sense "ultimate". A scientist always hopes that he is putting another stone in the edifice of his science and that the coming generations will build on it—with important corrections, perhaps, but at least the edifice won't be pulled down and started anew from scratch. A consequence of this is a certain attitude to the theories influential at any given state in the development of a scientific discipline: they are sometimes accepted as self-evident not for reasons of conservatism of some persons but because science cannot exist without certain statements which are taken for granted at this period, as unquestionable dogmas. That is the way in which any normal science functions.

The above-mentioned features of "naive realism" produce in the scholar a subjective belief in the meaningfulness of scientific activity—a belief which makes scientific progress possible. The scientist hopes to go beyond mere Appearance and to get at the Essence working on the conviction that the Wisdom of the Researcher is superior to the Complexity of the Object.

The "naïveté" of naive realism becomes apparent only on the threshold of the next stage in the development of science. Within the science this situation is perceived as a crisis. The change in the attitudes of scientists towards functional models of behaviour in general and speech behaviour in particular may serve as an example.

From the epistemological point of view, verbal behaviour is an especial kind of behaviour. Only acts of behaviour, and respectively, acts of speech behaviour, are directly observable. However, speech behaviours in themselves are not the goal of scientific study. Our chief interest lies with the mechanisms governing speech behaviour. These mechanisms can be only investigated with the help of the "black box" techniques, i.e., through developing functional models which lay no claims other than to similarity with the object under study at the level of observed behaviour, i.e., at

the output. Therefore, the problem of "mechanisms", for example, the mechanisms for the speech production, can be stated only in the form of hypotheses compatible with the empirical data, while the conclusions necessarily take the form of one of the possible representations of the process.⁴

Thus, we look for the essence, but what we have to deal with is the appearance. We find considerable satisfaction from results which prove to be in accordance with our hypotheses about the essence, but the next step is limited by the ordering of possible interpretations according to the degree of their plausibility. Doubts arise as to the cognitive value of functional models.

At a certain point the researcher is weighed down with the plurality of possible interpretations. The Himalayas of empirical data cannot be squeezed within the framework of the theory. Science is no longer regarded by its architects as a system, but as a kind of mosaic, and a desire to "reconstruct" it, to re-order from within, arises.

What has been said above can be applied both to psychology and linguistics though with certain restrictions. If we analyse the state of psychology and linguistics in the past 25 years we shall notice that the epistemological reflection in these fields of knowledge has differed considerably. The desire to make psychology a more mature science (in Th. Kuhn's sense of the word) motivated the tendency to "organise" it in a way similar to physics, whereas the same idea in linguistics was until recently responsible for the desire to "organise" linguistics on the model of mathematics.

In psychology, more and more attention has been paid to the problems of psychophysics and psychometrics, while the principal concern of linguistics has been the possibility of axiomatic introduction of the basic concepts.

One would expect that a clash between the two above-mentioned tendencies was inevitable in psycholinguistics or at least that they would have been realised as such. But nothing of the kind has happened up till now. Why?

We believe that, to a considerable extent, this can be explained by the role of experiment in linguistics and psychology. The question about the status of experiment in psychology was, in principle, decided in the days of W. Wundt. As for linguistics, even in its field which is respectively called "experimental phonetics" as late as 1957, B. Malmberg⁵ deemed it necessary to explain the difference between registration of speech parameters with the aid of special devices, on the one hand, and experimentation as a scientific method, on the other.

The development of linguistics went in a direction where experiment was not adopted as its principal method of research.

And this is both explainable and understandable. Language has many facets to it, and the approach to the study of language as a behavioural phenomenon can by no means claim an exclusive status. Language should also be studied as a cultural and historical phenomenon.⁶ Language should also be studied as a sign system occupying a special place among other sign systems. In the course of historical development the achievements of linguistics in the past decades have been closely bound up exactly with the analysis of language as a sign system. This explains the fact that in the 1950s, that were marked by a powerful influence of cybernetics on linguistics and other behavioural sciences, it was linguistic phenomenology that was most prepared to reveal some non-trivial mathematical structures linked with the description of the intrinsic properties of language.⁷

Over a long period this branch of linguistics was regarded, with good reason, as the most fruitful. But gradually linguists were becoming more and more aware that, paradoxically, questions of the kind listed above remained unresolved. It was becoming apparent that other branches of the "tree of linguistics" had to be cultivated.

Methodological reflection concerning problems of the study of language—the most complex living system which should be studied as a sign system, as a phenomenon of the speakers' minds and as an object taken in its cultural and historical context—was growing more and more sophisticated.

In the following we shall restrict ourselves to the analysis of the study of language as a behavioural phenomenon. Two points deserve a special mention in this respect:

(1) For a long time (as has been noted above) there was no dissatisfaction over the study of speech mechanisms with the help of the "black box" method, nor were there any doubts expressed over the cognitive value of the purely functional models.

(2) Only recently has the fact come to be fully realised that the study of language as a living system brings the scholar into a sphere of phenomenology of quite a different nature.⁸ By way of an illustration clarifying the meaning of (1) and (2) we thought it useful to analyse and compare the methodological clashes within two major trends of scientific inquiries. What we have in mind is the work done on machine translation of texts in natural languages, on the one hand, and the work on automatic speech recognition, on the other.

In what follows we shall assume that the reader has no special interest in the two problems indicated above; at the same time, to make our discussion more meaningful, we shall have to determine, first, how these problems were understood in the early stages of

their formulation and, second, we shall have to go at times into details which *prima facie* might appear irrelevant.

Let us begin with machine translation. The problem of machine translation was interpreted like this. The system has a written text in the source language A as the input. The text should be processed in such a way as to produce a grammatical text in the target language B, semantically equivalent to the text in language A, as the output. If this process can be fully formalised, it can be realised in the form of a computer algorithm. The task of the scientist is then to establish the kind of information needed about the two languages and the form in which it should be stored in the computer so that it would produce the desired result (in this case, the translation), without man's participation.

This kind of an algorithm, it should be observed, may well be regarded as a functional working model of man's intellectual activities in translation, that is, a model realised in a different substance, possibly operating in quite a dissimilar manner but producing the same end results.

The problem of automatic speech recognition may be formulated in the following way (we deliberately simplify the formulation proposed by L. Chistovich).⁹ At the input of the system we have oral speech, i.e., a certain acoustic signal. It should be processed in such a way as to produce a sequence of symbols at the output which could be decoded like this: what the system "heard" should be pronounced in the following way... If we managed to develop such a system we may claim to have developed a functional model of speech recognition.

It is easy to see that the solution of these problems would take us a long way to the attainment of the desired goal—the construction of a system employing natural language in the "man—machine" dialogue.

As is usual, scientists working on these problems turned to the knowledge already available, i.e., to the "literature on the subject".

But here they found themselves in quite different positions.

Linguists working on machine translation faced an enormous corpus of data accumulated both in traditional linguistics and in many schools of structuralism whose ideas had not yet become everyday currency in science. As has been indicated above, despite the fact that the major achievements in linguistics lay within the concept of language as a sign system, most of the notions and functions linguists worked with appeared to be too vague to be formalised for the purposes of developing machine translation algorithms.

Therefore, the first step in the work on machine translation necessarily was an overhaul of the linguistic conceptual apparatus and the search for the formal equivalents to the fundamental

linguistic notions. The generation of linguists who worked on these problems had to refute, first of all, A. Meillet's oft-quoted statement that there are as many linguists, as there are kinds of linguistics. A fresh reading of the classics of linguistics—F. Fortunatov, O. Jespersen, E. Sapir and many others—stimulated a rejuvenation of linguistics, and caused a real scientific revolution thereby facilitating progress in the work on machine translation.

Now let us turn to problems of automatic speech recognition. The "literature on the subject" here presents quite a different picture: scientists were faced, first of all, with a large collection of *experimental* data already generalised with the aid of more or less formalised theories. Whatever scientists dealing with speech sounds might think about the structure of language as a sign system, they simply could not explain how the speaker analyses an acoustical stream into phonemes—without recourse to the idea of language as a phenomenon existing principally in the speaker's mind. That is why even the most formalised theories were inevitably going to come to grips with the facts of speech.

A classic example of this sort of approach is N. Trubetzkoy's *Grundzüge der Phonologie*.¹⁰ Trubetzkoy's phonological system quite fully realised the general theoretical assumptions of the structural approach; though it was not devised by the scholar as pertaining to the natural sciences, it was tied up with empirical material closely enough to warrant formulation of empirically testable hypotheses.

It is well known that Trubetzkoy's fundamental breakthrough was his definition of the phoneme as a derivative of the universal notion of "distinctive feature". Every phoneme can thus be defined through a set of its distinctive features the number of which is much smaller than the number of phonemes in any language.

The rules for phoneme identification were particularly closely bound up with empirical level since they were based on acoustic-articulatory criteria. These close links with empirical data, with actually functioning speech, made quite natural the subsequent search for empirical analogues to the concepts suggested by Trubetzkoy, the concept of "distinctive feature" first and foremost.

As is known, a signal—including a speech signal—is defined in most general terms as a process carrying information about the state of the system which generated it. That is why it might appear, at first glance, equally promising to look for the key to the problem of finding the empirical analogue to the notion of distinctive feature both in the study of speech perception as well as in the study of speech production. In particular, it has been suggested; quite naturally, that the listener perceiving a speech

signal decides, as it were, what sort of motor commands should be sent to the organs of speech so as to obtain the given signal; as a result of this decision it is exactly the motor (i.e., *articulatory*) image of the signal that the man memorises.

The hypothesis about the mechanism of speech perception which was called "analysis through synthesis" brought on a great number of experimental studies considerably clarifying our understanding of the nature of speech production as well as of speech perception. One of the fundamental assumptions of this approach, however, has not been confirmed: it appears that motorically the same phoneme can be produced in considerably differing ways. It is therefore futile to look for empirical analogues to distinctive features in an articulatory movement on the level of motor commands analysis.

At the same time extensive experimental work on speech recognition was carried out in other fields, in particular, on the acoustic correlates of "what should be perceived". By that time scientists had the means to record objectively the acoustic parameters of speech signals—dynamic spectrography, a device known as "visible speech".

Still, investigations employing the "visible speech" method very soon exhausted their possibilities. The principal reason seems to be this. It was established that (1) the objectively recorded acoustic parameters of speech signal (reflected in R. Jakobson's and M. Halle's 12 binary features);¹¹ (2) the phonological features postulated by N. Trubetzkoy; and (3) the subjectively useful features of the speech signal actually utilised by the speakers (as can be judged from experiments where imitation and other methods were employed)—exhibit highly complicated mutual relations. For example (we are deliberately not using technical terminology here), some elements of (2) can be seen as (1), but not always; (3) varies considerably with the conditions of the experiment so that the elements of (2) are sometimes glued together, and sometimes split apart, and so on.

Still, if man is able to single out phonemes, in other words to perform phonemic analysis, he must have a special device in his brain which enables him to do this, and with a very high degree of reliability at that. And it is of minor importance that the psychologically relevant features which are fundamental for phonemic decision-making do not happen to be a simple function of acoustic features nor can they be reduced to articulatory features. This simply means that we must go on with our search.

Thus the linking up of a relatively formalised theory with the facts existing in the cognitive structures of speaking individuals (since it is the speakers who make meaningful distinctions with the help of the distinctive features) permitted the formulation of

experimentally testable hypotheses based on Trubetzkoy's theory.

In this way the experiment was introduced into linguistics where it had every right to be employed—and it is hardly a coincidence that this was brought about by joint efforts of physiologists, psycho-acousticians and the linguists of the Leningrad school where the experimental principle had been consistently applied in linguistic investigations by L. Shcherba as early as the 1930s.¹²

We have discussed research work on automatic speech recognition in such detail because it was here that the ends-and-means balance was most natural and most productive for the development of science. The goals of studying automatic speech recognition were frequently revised in accordance with the means and methods the scientists had at their disposal at the time. As is usual, problems of automatic speech recognition were approached with the methods then current and, for instance, the fact that the method of dynamic spectrograms and the Jakobson and Halle binary system did not live up to expectations, is not regarded today as a regrettable wrong turning, but as a natural stage in scientific development.

It follows from the above that the "bionic" approach viz. from the live prototype to the machine model became dominant very early in the work on automatic speech recognition. (There is also a "cybernetic approach" to the same problem developed, for example, in telephony, but it is not directly relevant for our discussion.) In discussing systems, the researchers belonging to the schools of L. Chistovich (USSR), H. Fant (Sweden), A. M. Lieberman (USA) and others have a living system in mind. The input of the system are the sounds presented to man (say, for imitation); the experimenter can manipulate the input properties (for instance, he can generate artificial speech-like sounds with given characteristics). The output of the system is the subject's reaction to the test: the subject imitates a sound, records a phoneme and so on. In order to explain the behaviour of the subject in similar experiments, a functional model is constructed which is expected to explain a large set of experimental data rather than particular results, as well as predict the results of other experiments. If the predictions of the model are compatible with the behaviour of the living system, it is reasonable to pass on to the construction of an automatic system where the relevant principles would be realised in a different substance.

Let us now return to the problem of machine translation. From the methodological point of view, the work here went along altogether different lines from the start; the approach taken here may be called "cybernetic" (in contrast to the "bionic" one discussed earlier). The first results in the field of machine

translation were felt to be major discoveries (possibly, revelations), not because the scientists believed to have developed a model of the "human" process of translation, but for quite different reasons.

Indeed what can be more vague than the notion of "language intuition"? Now all of a sudden it turns out that intuitive knowledge can be formalised and therefore presented in the form of an algorithm. And here we already have quite adequate if not of very high quality translations from Russian into English (The Georgetown experiment, 1954) and from French into Russian (Moscow, 1956). It was understood by most linguists in the late 1950s and the early 1960s that man analyses a phrase of the source language or generates it in the target language in a way different from the one recorded in the computer algorithm. Complete ignorance of relevant psychological processes accounts for the fact that workers in this field, figuratively speaking, set themselves the task of inventing the wheel rather than a "pedimotor" machine. This is probably why in the extensive literature on the subject we are unlikely to find one work whose authors would attempt to understand what man actually "does" when analysing (for instance, in terms of school grammar) a phrase like: "my brother's wife's mother".

The following question then deserves our consideration: what does the machine translation algorithm become a functioning model of? What is the correlation between man's language intuition, on the one hand—as manifested in our linguistic "competence", in particular, by our ability to express the meaning expressed in one natural language by means of another natural language—and the machine translation algorithm, on the other?

The machine translation algorithm will, of course, reflect the language intuition of its creator, but in a very special sense: an algorithm is constructed on the basis of formalised knowledge, which in its turn is the result of a highly complicated process of the formalisation of intuitive knowledge. The algorithm is not related to the process itself—it represents the result of the process: an algorithm cannot be written until what we are accustomed to call "language intuition" is no longer an insight but formalised knowledge. Thus a machine translation algorithm is neither a model of intuitive knowledge formalisation nor of human translation, and still it renders a text in one language into a meaningful and grammatical text in another.

What meaning then can a linguist or a psychologist ascribe to the computer experiments testing the effectiveness of machine translation algorithms? The computer in such experiments is usually presented with fairly complicated phrases to be analysed (or generated), the nature of the mistakes and their causes being

studied subsequently. It should be clear from this that such an experiment is a test of the completeness of the algorithm at most. But it is the analysis of the mistakes made by the machine that helps to appreciate the gap between what one has succeeded in formalising and what has remained intuitive knowledge. And this is of great importance indeed, as the history of work on machine translation has shown.¹⁵

The appreciation of the sort of problems (not the superproblems!) to be overcome in the attempt to formalise such a highly intricate intellectual process as translation, stimulated research in many other fields, in particular, as has been already mentioned, it was in this way that a new linguistics, or many new branches of mathematics, or numerous problems in the development of artificial intelligence appeared. So what if the computer cannot throw any light on what we do when we speak? At least this gradually helped to understand that our intelligence and, in particular, what we do when we translate, is very much unlike a translation algorithm! That is why problems of machine translation have always been regarded in the Soviet Union as primarily theoretical issues. And we will insist that it would be hard to find another task which would have stimulated theoretical research work as extensive.

It is thus clear that the computer does not reveal the properly human mode of transition from text to meaning or from meaning to text. Experiments in the field of automatic speech recognition have so far been of a different nature: within the framework of this trend, we are trying to establish experimentally what we actually do when we speak (and hear)—as yet, it should be noted, only at the level of speech sounds.

What prevents us then from applying this approach to levels of language other than the phonetic level? Absence of methods or inability to extract solvable problems from superproblems?

We believe that the answer to this question may be suggested by considering the state of modern psychology.

* * *

In the 1970s linguistics became a highly structured science. This would not be quite true of contemporary psychology: what it lacks is exactly some unified theories encompassing broad aspects of human behaviour. Modern psychology is patchy, with prevailing "mini-theories" generating a multitude of "mini-paradigms". The contrast between linguistics and psychology is particularly striking in what concerns language and verbal behaviour: since the turning-point prompted in linguistics by the ideas of cybernetics and the theory of

information, it lived through yet another upward spurt this time stimulated by the ideas of transformational grammars and generative semantics.

Psychology had nothing new to say about verbal behaviour. This is how a contemporary psychologist puts it: "Throughout the last decade, psycholinguistic research has consisted of borrowing the latest linguistic formulation for an area 'to experiment' upon it... Psycholinguistics has depended for its impetus and direction upon the more highly developed 'state of the art' in linguistics: linguistics has been de facto parent discipline."¹⁴ This quotation is taken from the final discussion at a conference where linguists, psychologists and psycholinguists (i. e., the psychologists "borrowing the latest linguistic formulation for..."—this is how W. Weimer introduces them)—got together in the hope of finding a common language. We quite agree that the word "to experiment" in the quotation should be used in quotes. American journals are indeed flooded with "psycholinguistic" papers, which consist of attempts to link the formulation of different types of transformational grammars with the observable facts of verbal behaviour. It is not that these experiments are incompetently carried out: it is just that they have no adequate conceptual basis. Let us make ourselves clear. Many modern linguistic theories (we are not going to discuss their value for the study of language as a sign system—our interests lie elsewhere) are developed as formal ones, as, for instance, calculus, etc. In theories like "generative grammar", "generative semantics", etc., the word "generative" denotes only the choice of a dynamic model for the representation of the object against a static one. This choice is understandable since, as is well known, the transition from the description of states to the description of processes is a characteristic feature of current scientific research. "Generation", "transformation", "deep structure" are but metaphors in the context of these theories. And it is pointless to look for empirical analogues of these notions: these highly formalised and consistent theories do not correlate with empirical material in a straightforward way nor are they supposed to. But the authors of many psycholinguistic papers persist in ignoring the fact that experimental research work based on theories like transformational analysis and generative semantics turns the relationship between theory and experiment inside out.

Since psycholinguists have no rival theories of a similar scope at hand, "generative grammar", "generative semantics", etc., begin to be looked upon as possible ways of verbal behaviour analysis. The temptation of "pseudo-accessibility" is too great. Result: "generation" comes to be regarded as the creative act of producing a speech utterance, "deep structure", as something actually existing in the human mind—and so one can plan an

indefinite number of experiments "having to do" with these theories. Here we may observe a phenomenon opposite to the one we discussed in connection with the problem of the search for an empirical analogue to the phoneme: there the problem forced us to look for appropriate experimental paradigms; here the illusion of the existence of this paradigm seems to generate problems, as it were, and correspondingly a number of experiments essentially futile.

It is interesting to note that psychologists who employed the "black box" method all along, never suspected that they "have been talking prose", that is, developed purely functional models. The understanding of the fact that cognition in terms of functional models—appropriate to "physical cosmos"—will hardly change the epistemological status of psychology, was first attained by physicists and mathematicians.

A decade ago the Soviet physicist M. Bongard¹⁵ studying what seemed a very special problem—the problem of pattern recognition—managed to show that man is a system solving complex non-formalised problems in a way altogether different from that of a finite-automation. In contrast to the latter man does not use a complete description of the object (this principle still prevails in machine translation and it is not yet clear what is to be done about it) but employs a strategy of "degenerated descriptions" i. e., a method of opposite rejections of redundant information. It is possible, though yet to be clarified, that the typically human way to the invariant in the diversity of the world around us is precisely the rejection of everything we have no use for, and not the exhaustive analysis of everything to find the little something we can use. In what way man actually achieves this is irrelevant in this case; it is a "superproblem" for further researcher. What is important is that the faith in the omnipotence of analysis should find a counterweight in the teleological approach: it is goal-directed behaviour that defines the mode of arriving at "human" descriptions.

Another line of research fundamental for the study of language as a psychological phenomenon is the analysis of the communication process from the point of view of the conflict of thinking structures.¹⁶ A psychologist or a linguist studying the behaviour of another man may face an object equal if not superior to himself in complexity. That is why the "Observer-Object" relation becomes a symmetric relation between two researchers.

Researcher I has formulated a certain model of the Object. But the Object equal in complexity to Researcher I turns into a Researcher himself: let us call him Researcher II. In this new capacity Researcher II may regard Researcher I as an Object of a certain kind and can formulate his own model of Researcher I.

Then we have two Researchers each with a model of the other at his disposal. This situation is not unprecedented. For example, a dialectologist (Researcher I) is very much concerned about his informant (Object) becoming Researcher II. As soon as the informant becomes Researcher II, he has not only formed his own model of the dialectologist but can influence the latter's picture of himself, for example, by adjusting to his demands and speaking "properly". In this case the model of the Object which Researcher I will build, will be simply a function of the image which the Object—alias Researcher II—deliberately projects on Researcher I. The opposition "dialectologist—informant" is just a familiar example; but a similar conflict emerges in any experiment where both the experimentalist and the subject are thinking structures. The situation, as we say, is not new, but the approach in itself is original and timely.

This approach which accepts that the Researcher's wisdom is not necessarily superior to the complexity of the Object, takes us into the region of a "cosmology" other than the homely and familiar "physical" cosmos, into which we keep hopelessly trying to squeeze the phenomenon of language.

But this thesis calls for a discussion which falls beyond the scope of the present paper.

NOTES

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- ² W. S. McCulloch, "Why the Mind Is in the Brain", *Cerebral Mechanisms in Behaviour*, New York, 1951.
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- ⁵ B. Malmberg, "Questions de méthode en phonétique synchronique", *Studia linguistica*, 1956, Vol. 10, No. 1.
- ⁶ See, for example, A. Ya. Gurevich, "The Language of a Historical Source and Social Reality: Mediaeval Bilingualism", *Semiotics. Papers on Sign Systems*, Tartu, 1975 (in Russian).
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- ⁸ Ya. A. Schreider, "Complex Systems and Cosmological Principles", *Systems Studies*, 1975, Moscow, 1976, pp. 149-170 (in Russian).
- ⁹ L. A. Chistovich, A. V. Ventsov, et al., *The Physiology of Speech. The Reception of Speech by Man*, Leningrad, 1976 (in Russian).
- ¹⁰ N. S. Trubetzkoy, *Grundzüge der Phonologie*, Travaux du Cercle Linguistique de Prague, VII, 1939.

- ¹¹ R. Jakobson, G. Fant, M. Halle, *Preliminaries to Speech Analysis. The Distinctive Features and Their Correlates*, M. I. T. Acoust. Lab. Techn. Rep., No. 13, 1955.
- ¹² L. V. Shcherba, "On the Three Aspects of Language Phenomena and the Experiment in Linguistics (1931)", *Language System and Speech Activities*, Leningrad, 1974, pp. 24-39 (in Russian).
- ¹³ See, for example, O. S. Kulagina, "The History and Current State of Machine Translation", *Kibernetika*, Kiev, 1976, No. 6, pp. 124-131 (in Russian); B. Vauquios, *La traduction automatique à Grenoble*, Grenoble, Dumond, 1975; P. L. Garvin, "Machine Translation in the Seventies", *Papers in Computational Linguistics*, Budapest, 1976, pp. 445-459.
- ¹⁴ *Cognition and Symbolic Processes*, ed. by W. Weimer and D. Palermo, Hellsdale, 1974, p. 424.
- ¹⁵ M. M. Bongard, *The Problem of Recognition*, Moscow, 1967 (in Russian).
- ¹⁶ See, for example, A. A. Toom, "Non-Symmetric Communication, Focalisation and Control in Games", *Semiotics and Informatics*, No. 7, 1976, pp. 112-127 (in Russian).

French Structuralism: Methodological Notes

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Methodological problems or, in other terms, the scientific analysis of scientific knowledge itself, the singling out of the norms for elaborating new knowledge and for its application, are naturally believed to be the prime task of science, of cognising the objective world, for the effectiveness of science in attaining practical cognitive results depends to a large extent on the level of development of methodological self-consciousness of science. Although the development of science and the process of its reflecting upon itself proceed simultaneously and along parallel lines, yet the second, "self-substantiating" function of science assumes special significance at critical stages of this process, when the very foundations of scientific cognition, its conceptual apparatus are revised and reinterpreted, not merely its separate procedures and methods. It becomes particularly clear at such periods that the task of self-cognition and self-reflection of science has a definite socio-cultural and world-outlook significance going beyond the narrow bounds of science as such.

At the turn of the century the natural sciences went through a period of methodological upheavals caused by a crisis in the traditional conceptions and the emergent need for elaborating new philosophical-methodological and world-outlook foundations of scientific knowledge. In the modern age of the scientific and technological revolution the process of restructuring involves the domain of the humanities as well, where a transition is effected from the empirical descriptive level to the theoretical one, at which abstract relational structures are studied, some procedures of formalisation and mathematisation applied, etc.

That is why the tendency towards methodological reflection is becoming more and more apparent in the humanities. This results in a kind of splitting of scholarly vision during research: along with the internal tasks of science proper, the scholar reflects on the criteria of the theoretical development of science, its goals, possibilities, and the conditions for their realisation. Of course, this tendency should not be treated as absolute, although it does dominate the scene. In the new problem situation, there emerges a noticeable interest for philosophical reflection.

However, the general trend towards a deeper methodological reflection is realised in various forms which may even seem mutually exclusive. Thus, on the one hand, one may observe certain manifestations of a kind of "inferiority complex" in a number of humanities—a tendency to borrow scientific criteria from outside, from the natural and mathematical sciences or, to be more precise, a tendency to reduce the search for self-determination to reflection on application of ready-made instruments and techniques of investigation. On the other hand, however, some of the fields of the humanities evince a tendency towards a search for rigorousness and objectiveness irreducible to natural-scientific criteria and not identical with them. Characteristic in this respect are the widespread hopes for methodological help from linguistics: linguistics was the first of the humanities to carry out formalisation and mathematisation in some of its fields, and it has achieved quite tangible results in this direction, remaining nevertheless one of the humanities, a science oriented at cognition of language—one of the most important results, means, and, at the same time, premises of human culture.

French structuralism furnishes interesting material for tracing these trends in the development of the humanities.¹ The whole complex of controversial and constructive problems which it shifted into the foreground bears testimony to the fact that the question of method is just as acute for the structuralists as it was at the time of Descartes or Kant, at the outset or in the heyday of European rationalism, precisely because they consider it against a comprehensive philosophical background—as the problem of substantiating knowledge and criteria for its attainment.

* * *

Just as structuralism as a whole, French structuralism does not present either ideological or organisational or chronological unity. Its representatives (and we mean here only those scholars whom the critics most indisputably count as structuralists: C. Lévi-Strauss, J. Lacan, R. Barthes, and M. Foucault) are men of different generations, scholarly traditions, and philosophical bias.

(True, only one of them calls himself "a structuralist" right out—the world-famous ethnologist Lévi-Strauss.) Therefore, an attempt to elucidate the specificity of French structuralism must apparently begin with the consideration of the sources of structural analysis in the humanities and of its historical stages on the whole: it must be stressed that this is an international, not only interdisciplinary, phenomenon.

During the first stage of structuralism (1930s and 1940s), methods of language study were evolved in the various schools of American and European structuralism. Its most significant and dominant feature is the study of language as a system, exactness of analysis being attained through disregarding the "external" factors—historical, geographic, social, etc. Those studies that are now referred to as the first generalisations of the problems of structuralism (such as Ferdinand de Saussure's *Cours de la linguistique générale*, works of the "formal school" of Russian literary criticism, of German Gestaltpsychologists) appeared in the 1910s and 1920s. However, the principal works of representatives of linguistic structuralism, in which the method was developed that later became current in the other domains of the humanities, fall within the 1930s and 1940s.

In the 1950s and 1960s (the second stage), structuralism became rooted in the French soil; the classical representative of this period is Lévi-Strauss. The most significant and dominant feature of his work is the search for new methods in ethnology and the attendant attempt to apply some procedures of structural linguistics (primarily phonology) to this field, and to present various social mechanisms as sign systems.

The third stage (mainly the 1960s) involved a wider spreading and simultaneously a certain erosion of linguistic methodology. On the one hand, this stage inherits the goals of the previous one—transference of the methods of language study to other cultural domains—the history of science (Foucault), literary criticism and mass culture (Barthes). On the other hand, this period witnesses further estrangement from the original methodological models—in the case of Lévi-Strauss from the structural phonology of Nikolai Trubetzkoy and Roman Jakobson.

The fourth stage (the late 1960s and the 1970s) is the period of criticism and self-criticism of structuralism, its appearance on the social scene (in later Foucault and the *Tel quel* group, on the political scene) and in the wider spheres of the history of culture (the conception of J. Derrida). Thus French structuralism is just one of the stages in the history of structuralist movement in the 20th century.

There are different structuralist interpretations of the linguistic sign as the basic communication unit in culture corresponding to these stages. We shall later take a closer look at the role played by this problem in their constructions. Suffice it to note here that Lévi-Strauss' analysis proceeds from the sign as a stable integral formation; for him, language is method. Lacan and Foucault split the sign into meaning and form and stress the latter ("*discours*" in Foucault, "*le signifiant*" in Lacan); for them, language is metaphor. In the criticism and self-criticism, language reality, its social (the *Tel quel* group) and cultural (Derrida) significance are given an ontological interpretation. We thus observe an extremely characteristic evolution taking language back to the fold of social problems which linguistic structuralism once gave up on principle.

* * *

Of course, a scholar's view of himself taken as such is not a proper basis for ascribing him to one or another trend of scientific thought, but in this case such facts are extremely indicative. They show that the notion of French structuralism as a certain unity emerges from without, not from within, and that it is fraught with the danger of subjectivist interpretations as a scientific trend and as a methodological system. To escape this danger, let us reconstruct the object of structuralist criticism, as there is much more unity among its representatives here.

Indeed, ignoring the particulars and pursuing the main goal, we shall see that Eurocentricism was the primary objective of criticism for the ethnologist Lévi-Strauss; evolutionist progressivism, for the historian of culture Foucault; ratiocentricism, for the psychologist Lacan; achronism, alleged independence of aesthetic tastes and ideals from time, for the literary critic R. Barthes. Due to the fact that French structuralism emerged at a time of crisis of the psychological, anthropocentric conceptions of man, structuralist criticism was levelled at subjectivist, existentialist, and personalist conceptions, on the one hand, and at the classical rationalist conception, on the other. The specificity of French structuralism, as distinct from other European "structuralisms" which developed in greater isolation, may be due to this situation of having to fight on two fronts, and to the need for self-determination with regard to both these trends of thought.

It is the struggle against intuitivist and psychological interpretations of culture that explains the structuralist treatment of the subject, his conscious motivations and drives, his consciousness and self-consciousness as a secondary formation based on non-conscious functioning of sign-symbolic cultural systems, and not as a starting point in some frame of reference for scientific

explanation. Revealing these hidden internal structures is the core of structuralism. The main elements of common scientific interest that determine its range of problems are the primacy of relations over elements, the primacy of synchrony over diachrony, the goal of establishing the invariant of relations; etc. And what are the spiritual, ideological and world-outlook forces that conditioned the emergence and spreading of structuralism in France in the 1960s?

"In our days everything seems pregnant with its contrary," wrote Marx in the middle of the last century. "Machinery, gifted with the wonderful power of shortening and fructifying human labour, we behold starving and overworking it... The victories of art seem bought by the loss of character. At the same pace that mankind masters nature, man seems to become enslaved to other men or to his own infamy. Even the pure light of science seems unable to shine but on the dark background of ignorance. All our invention and progress seem to result in endowing material forces with intellectual life, and in stultifying human life into a material force... this antagonism between the productive powers, and the social relations of our epoch is fact, palpable, overwhelming, and not to be controverted."²

This general characteristic of the 19th century is applicable, we believe, to the 1960s as well, if we add certain concrete specific features.

The world-view of a considerable number of European intellectuals in the 1960s was affected by the vague feeling that man in Western society is dehumanised, this feeling acting as a latent dominant or inner formative core. At the level of everyday consciousness the situation of dehumanisation and alienation evoked similar attitudes in many groups of intellectuals despite professional, cultural, and age differences between them.

The direct cause of these attitudes was the contradiction between the traditional ideals of the liberal-bourgeois freedoms on which university education was based and the actual role of members of the "liberal professions" as mere cogs in the machine of social coercion. The conditions in a developed capitalist state with its increased tendency towards rigid bureaucratic regulation at all levels of social hierarchy were felt to be a tangible embodiment of the alienation of man's inner spiritual world from the technocratic structure of the "consumer society". Paradoxical as it may seem (in actual fact this is nothing but a natural manifestation of social dialectics), the situation of stabilisation of the "late bourgeois" society shook the traditional forms of mass ideological consciousness in no lesser degree than downright crises once did. This situation seemed to render meaningless both the protest against the prevailing state of things and the adherence to the traditional humanist ideals, which had either been undermined

by the social development itself or proved to be unattainable in reality.

In this atmosphere of depression and dejection, one of the formative factors of the socio-psychological and world-outlook climate proved to be the conflict of two myths about science in everyday consciousness: the myth of scientism, building up science as a panacea against all social troubles and a force capable of organising rationally both the material conditions of man's life and his spiritual world, and the myth of antisocialism ascribing to science indifference or even animosity towards the genuinely human values. The pungency and relative novelty of the positivist vs. antipositivist controversy in France was in our view due to the fact that the third stage in the development of positivism did not make itself felt in France at all (although France was the birthplace of positivism) and neither did the attendant discussions of the social role of science that had been going on for quite some time in the English-speaking countries. Structuralism took its stand in this ideological situation. Owing to the circumstances outlined above, mass consciousness had an image of structuralism as "the realm of formulae" allegedly deadly to man.

We lay no claims to an overall coverage of the entire social, political, economic, and psychological situation in France, or to a detailed analysis of such components of this situation as class struggle, changes in the position and structure of the working class and other social groups, their role in the various political trends, the specific features of France's national economy, etc.; we shall merely point out some of the factors which conditioned, in our opinion, the emergence of structuralist problems. These factors are linked, first, with certain phenomena of philosophical consciousness (the evolution of the existentialist scheme of philosophising), second, with certain phenomena in mass consciousness (the image of "the third world" in mass consciousness) and, finally, with the appearance of fairly broad strata of society on the scene of social and political action, the latter factor indirectly reflecting the first and second (events of May 1968).

1. One of the basic ideological and socio-political facts which explain the specificity of the structuralist approach were, perhaps, the exhausted possibilities of existentialism which, at the time of occupation and Resistance, had concentrated on the individual and, first and foremost, moral responsibility of man before his own genuine humanity. As is known, this moral imperative was philosophically substantiated for existentialists by the breakthrough into the pre-reflective strata of consciousness realised by the phenomenological procedures of its reduction and analysis. These procedures were to reveal in the individual consciousness those strata of the pre-reflective *cogito* which are beyond the

control of both the inner motives of human intellect and the external constraints of propaganda and clichés of mass consciousness. Eliminating the pressure of past and future determination, human existence, according to the conceptions of existentialists, is concentrated in the stress of the present moment and the need for choosing one's self. There is no middle ground, as the "man in the world" situation described by existentialists actually assumes: man either chooses one's self thereby realising his genuine existence, or gives up the choice and, thereby, his human essence.

From the very outset, the criteria of existentialist philosophising had a personalist orientation—an orientation at the individual salvation by man of man in himself in the inhuman situation into which fascism plunged occupied France. True existence being thus linked with the pre-reflective level of consciousness, all extraindividual determination of consciousness was essentially identified with the stock phrases of language and mental clichés of propaganda, with the irresponsibility of the mass, with gregariousness fatal for genuine human impulses.

In the postwar situation, the experience of collective being and open collective action revealed a different meaning of the problem of extraindividual determination of human being and consciousness. This caused a radical shift in the theoretical positions of existentialism as witnessed, e.g., by Jean-Paul Sartre's book *Critique de la raison dialectique* (1960). However, attempts to translate traditional existentialist problems into a language appropriate in the changed conditions or to express the new pressing problems of social reality in the language of existentialist philosophising proved unavailing. In other words, existentialism faces the apparently insoluble task (insoluble, at any rate, within the Sartrean platform) of supplying a different set of coordinates for man in culture, of giving up man's personalist and subjective nature as the self-obvious basis for theoretical thinking: of giving a new interpretation of the interrelation between man and the world, man and society; of perceiving the system unity of the social, natural, and human reality in its entirety. It was structuralism that realised this need and gave its own answer to these questions.

2. The second of the constituent parts of the world-view climate of the 1960s has to do with mass everyday consciousness, not philosophical consciousness, namely with one of its objects of interest particularly characteristic of France. The point here is that the spiritual vacuum which appeared following the loss of socio-psychological attractiveness by the prevailing existentialist ideal of moral stoicism was in a measure filled by "imported" spiritual values from the "Third World".

At no time throughout the history of West European culture did the exotic non-European customs, thought processes, and language fail to attract the attention of scholars. But, whatever period we choose, be it 18th century Enlightenment, or 19th century Romanticism, or early 20th century, this sort of interest has always been the privilege of a small group of scholars and artists. Besides, this interest has always gone hand in hand with the unshakeable conviction that European culture has the right to represent all other cultures, unifying them by being their model and measure.

The crisis of capitalist civilisation and of the corresponding schemes of consciousness revealed, already at the beginning of the 20th century, the multifirmity of types of civilisations and primitive societies—first at the level of special ethnographic studies (e.g., by V. Malinowski or F. Boas) and later, after the Second World War, at the level of mass consciousness too. Thus, while in the 19th century the interest for exotic objects and other cultures was an ornamental part of the European spiritual world which seemed to have a rigid and immutable structure, this interest now becomes part and parcel of the intellectuals' search for new foundations on which to build their spiritual world.

It was this situation of devaluating values that brought back to life the renovated myths of the free, emotionally fulfilled being of man in communion with nature, of the "natural man" untouched by the vices of capitalist civilisation. True, these myths now become part of the new socio-psychological context expressing not so much an Enlightener's feeling of envy of the "savage's" purity and freedom from depravity as the feeling of one's own sinfulness and guilt before the savage both because he has remained a savage for such a long time and because he is going to cease being a savage on being drawn into the orbit of "economic" civilisation.

The idealisation of a coloured man free from the complexes was not the only socio-psychological emotion here either. However, the very ambiguity of this emotion and its non-elite nature supported and justified the study of the life and thought processes of primitive peoples as a definite socio-cultural task, not only as a purely scientific one, which it was early in this century. In this sense structuralism, in which ethnographic studies constituted one of the programmatic and methodologically significant elements, satisfied a certain social need.

3. The third element of the ideological situation in the 1960s, which determined the specificity of the structuralist approach, belongs to the sphere of socio-political action. Those were the events of May 1968. They proved to be a kind of test for the revolutionary spirit of Left radical consciousness comprising elements of existentialist ideology and images of the "Third

World". Apart from a number of socio-critical elements that the events of May 1968 had in common with other actions by the "New Left" in Europe and America, the prime ideological impulse here was the search for a "new" man, the practical liberation of those resources of human being that find no outlet in everyday life with its routine and inertia. The emotional dominant of the students' movement in May 1968 was the desire to find in the revolution a new soul not yet formed for a new body quite well-formed, an attempt at practical assimilation of the new forms and levels of the supraindividual and preindividual human being and consciousness lying outside the self-reflecting personality. This search relied on the emancipation of new levels of sensuality, on the myth of the possibility of going back to the simple and solid natural foundation of life.

Although the connection between these events and the philosophical problems was mediated by the general placing of the classes and the laws of the functioning of ideology, one may still say that, from the point of view of the problems that are here of interest to us, these events occasioned much significant thinking and raised many important problems, for all their all-negative and paradoxical form. What is the line that divides and simultaneously unifies within a single whole, man as an intimate private being and man as the subject of socio-political action? How is the universal natural aspect of human being linked with its social incarnation? Are there any means for conceptualising this transition or is it only attainable in an extatic transport? And so on.

* * *

It is thus apparent that the ideal project of structuralist study was not carried out in a vacuum but under the overlapping influences of the most varied factors including rationalist trends in modern Western philosophy in which the main problem is that of substantiating knowledge—Neo-Kantianism, neopositivism, and partially phenomenology. Structuralists' attitude towards classical rationalism, which in France has a very long tradition behind it, from Descartes to Bachelard, is contradictory. While rejecting some of its tenets (first and foremost, the raising to an absolute of the European criteria of rationality as the universal and necessary ones; the thesis of the identity of being and thinking), they reproduce others—in the first place, the orientation itself at substantiating the possibility of knowledge—in this case, of knowledge in the humanities. In other words, they keep up the previous tradition in many respects. This contradictoriness demonstrates the complicated nature of the development of neorationalist conceptions in modern scientific and philosophical cognition.

The rejection of the old basic propositions does not here imply the rejection of rationalist principles as such but the desire (though not always adequately realised but usually sufficiently clearly expressed) to consolidate those foundations of scientific cognition which were overturned by modern social experiences and scientific practice.

But how is one to achieve this solidification, where is one to find the necessary fulcrum?

Classical rationalism relied on the self-obvious entities of consciousness, on the thinking Ego; existentialism, on the self-evident entities of the prereflective level. In their studies and in recording the new experiences of consciousness and work with consciousness, French structuralists rely on language and language-like sign-symbolic mechanisms of culture. What is most important for them is purifying the objective of the subjective and not vice versa, as was the case with phenomenology and existentialism. In Husserl's terminology, this would be *epoché* inverted. (In particular, Lévi-Strauss explains the task of purifying the objective of the subjective by referring to table manners which show that the European is afraid of dirtying himself by contact with his environment, while the primitive man, on the contrary, is 'afraid to dirty the environment by his person'.³)

It was precisely the extraindividual nature of language that was supposed to be the basis for the self-estrangement that is so difficult to attain from the point of view of methodology and world-outlook. Language as a primordially social entity seems to be more "objective" than consciousness, therefore structuralists believe that it may be used for rationalising extra-rational and irrational content, that it holds promise for a more successful struggle against the prejudices of one's own culture, for more reliable ego-to-ego transitions and, moreover, culture-to-culture transitions, too. Thus the methodological goal of structuralism consists in getting an objective image of the various cultural phenomena by applying the measuring rod of language to them. This "applied" work proceeds in different ways in the various objective and conceptual domains.

Thus, the prime goal of Lévi-Strauss' ethnological conception is the search for deep regularities, the search for a new rationalism (or "superrationalism") which would re-establish the unity of the sensual and rational lost long since by the man of Western civilisation. This drive towards unity and harmony of the human spirit imbues all the conceptual links of Lévi-Strauss' system. In all the manifestations of primitive culture that he studies (systems of marriage and kinship, myths, rituals, totemism, masks), he searches for the universal combinatorial relations of the human spirit creating a bond between the "primitive" man and the

modern civilised European. The world-view basis of this study consists in the romantic criticism of modern civilisation from the point of view of an observer remote both spatially (South American Indians) and temporally (Neolithic man). Its methodological basis is the high value set on the logic of the senses, the logic of the sensual qualities which, according to Lévi-Strauss, determined, already in the neolithic Age, the possibility of the present-day scientific and technological civilisation. As we have already indicated, the means for elucidating this common rational basis in any manifestation of human culture is linguistic methodology. Structural linguistics influenced the work of Lévi-Strauss in two different ways: in the more narrow sense, through direct application of some of its methods (particularly phonological ones) in the study of ethnological objects; in the broader sense, in representing all ethnological objects as means of social communication (in the final analysis, this similarity serves as the basis for the transference of linguistic methods to the study of other cultural objects). These methodological fundamentals are applied to different types of ethnological material in practically all of Lévi-Strauss' work—in *Les structures élémentaires de parenté*, *Anthropologie structurale*, *Le totemisme aujourd'hui*, *La pensée sauvage*, *Anthropologie structurale deux*, *Mythologiques*, *La voie des masques*.

The methods applied by Lévi-Strauss to primitive cultures are adapted by Barthes to the study of modern society. Since any product of human activity, says he, is mediated by reason, and the structures and forms of the latter are fundamentally the same for any man—primitive or civilised, ancient or modern, practically any product of culture may be the object of structural analysis, as it is oriented precisely at establishing these forms.⁴ In his works, Barthes attempted to deduce the special or applied semiotics from the general idea of semiotic theory in an axiomatic way (which he later himself called naive): these are, apart from the semiotics of literature (a constant theme with Barthes, which he develops in *Le degré zéro de l'écriture*, *Essais critiques*, *Critique et vérité*, *S/Z*, and other works) the semiotics of dress (*Système de la mode*), journalism (*Essais critiques*), the various phenomena of everyday culture—eating, housing, leisure, town structure—in a satirical, as in the *Mythologies*, or Utopian vein, as in *L'Empire des signes*.

Lacan's structural psychoanalysis results from uniting two lines of criticism: on the one hand, the critique of the traditional associative approach which dissolves the specificity of psychological reality in elementary physiological reactions; on the other hand, the critique of introspectionism which overestimates the uniqueness of the human psyche and is sceptical of the possibilities of its scientific cognition. For Lacan, it is precisely the use of language as the instrument of rationalising the subconscious which serves as

the means of revealing the specificity of psychological reality without reducing it either to biology or physiology (in contrast to associative psychology), and of rationally ordering this reality in a certain way (in contrast to introspectionism). The object (the subconscious) and the method (language) merge in Lacan's conception in a paradoxical unity: the subconscious is language, the subconscious is structured as language.

This equating of the subconscious with language, an attempt at a synthesis of two problem lines, the psychoanalytical (Freudian) and linguistic (Saussurian), seems meaningless at first glance. Closer inspection shows, however, that Lacan's interpretation of language and the subconscious is such that neither correlating nor equating them contain any paradox. Thus, Lacan identifies the subconscious with the symbolic, that is, regards it as accessible to consciousness in principle, while language is treated not as a sign—meaning unity, or signifier—signified unity, but as a structured chain of the signifier free of any links with content. Thus language and the subconscious meet where the subconscious is in a significant measure culturised and debiologised, while language is on the contrary deculturised and desemiotised, since the sign itself as a relatively stable unit of communication is split.

Foucault's studies also deal with materials that have to be interpreted from the standpoint of *époque* inverted mentioned earlier: from the standpoint of purifying the object of the subject and of establishing the intrinsic structure of historical events. With this aim in view he called his studies "archeology of knowledge", not history (this is the subtitle of three of his large works of the 1960s: *Naissance de la clinique: une archéologie du regard médicale. Les mots et les choses: une archéologie des sciences humaines. L'Archéologie du savoir*). Foucault uses the word "archeology" to stress a greater depth of analysis; a more tangible objectiveness of results than those obtained at the level of opinion; independence of research from subjective habits conditioned by the type of historical consciousness, whose very "naturalness" makes them undetectable. Archeology removes the deep layers of the historical soil of culture from the continuous stream of historical formation: hence Foucault's bias for static structures (particularly in *Les mots et les choses*) which occasioned so much criticism. This mode of studying historical material naturally has limitations (the development of Foucault's thinking provides evidence for that) but it is quite justified from the point of view of the tasks outlined above—both critical tasks (estrangement from the tradition) and positive ones (discovering in the past that which our contemporary cannot or will not see). The level of Foucault's analysis changes continuously and rather consistently: his *Les mots et les choses* studies the semiotic layer of European culture of modern times, while *L'Archéologie du*

savoir investigates presemiotic laws of cognition and culture or, in his words, "discursive practices" (*pratiques discursives*); the subject of his recent works are the social relations between "power" and "knowledge" or, in other terms, the genealogy of power as the condition for knowledge and culture.

Even this very brief outline of concrete structuralist work makes it clear that this work inevitably leads to the formulation of a number of philosophical and methodological problems. These problems are raised by the logic of socio-historical and scientific development itself, not by subjective arbitrary decisions of scholars. Thus it becomes clear that French structuralism emerged at the intersection point of two different trends, a social and a scientific one, and is therefore an excellent illustration of the range of problems raised in the modern controversy about the influence of extra-scientific socio-cultural factors on the development of science.

The general philosophical and world-outlook significance of the social and cognitive tasks being solved by structuralism is in the *renovation of the image of science and the image of man* to which European consciousness has grown accustomed since the Renaissance. To arrive at their solution, it appears to be necessary to find "a breach" in oneself, in one's own symbolic systems (as Barthes writes, e.g., in *L'Empire des signes*); to "shake" the common image of man (as is done, in a somewhat shocking form, by Foucault in his *Les mots et les choses*) in order to find in oneself (Lacan's psychical exoticism of the language of the subconscious) and in social reality (the exoticism of the alien types of thinking and social organisation of primitive tribes in Lévi-Strauss' work) that which earlier went unnoticed, and if noticed, was not an active force in human life and a decisive factor in thinking.

As for the methodological significance of the intrascientific goals of structuralism, it lies in the liberation of science from psychologism, elementarism (atomistic conceptions of man and society), substantialism, introspectionism, which have long been and not infrequently still are an obstacle in the way of scientific cognition and of the social and world-outlook tasks outlined above; it also lies in the study of the various domains of man's being in the light of social interactions, the most important of which are linguistic interactions, according to structuralism.

As has already been emphasised, structuralists view all problems (those of man and of substantiating knowledge first and foremost) in the light of the problem of language at all of its levels and in all aspects. Abstraction from the subject in considering the former of these problems is a fully justifiable and even necessary principle in the study of those levels of the object where subjectivity in its integral expression is not and cannot be given

(e.g., in revealing the universal combinatorial relations by Lévi-Strauss or of the pre-conceptual discursive conditions of the possibility of knowledge in Foucault); however, under other circumstances this abstraction is no longer justifiable, becoming an arbitrary reductionist procedure. This is precisely what takes place when the two-stage reduction of the object is realised in the more or less disguised form, when structuralists single out only language-layer in man and form-layer in language.

We observe something of the sort in the treatment of the problem of substantiating knowledge. Here again a kind of circle is formed of links with the language which appears now in the role of object (for only those cross-sections and levels are singled out in social material which display a similarity with the linguistic systems of signification), now in the role of an instrument of cognition (in the form of direct borrowing of linguistic methods or of indirect metaphoric modes of describing material which is taken to be similar to linguistic material and is appropriately analysed), now, in a certain measure, as the result of cognition (for the study results in singling out in the object its similarity to language, i.e., that which is grasped and rationalised by language means). Thus language in French structuralist conceptions is simultaneously material, instrument, and result of research.

Being thus functionally overloaded, it naturally loses its objective and conceptual definiteness: the more language is likened to the subconscious (that is, to the object that is to be rationally interpreted; for structuralists, these are primarily the sign-symbolic systems of culture), the less it looks like itself, like its own original proto-image, whose communicative nature requires the correlation of two levels in it, the formal and the meaningful. The study of the linguistic aspect in various cultural phenomena is thus both the forte and the foible of structuralist analysis. In our view, this research is unconditionally productive inasmuch as it rules out the basic notion of everyday consciousness, which assumes the bond between sign and meaning to be self-apparent and natural. Questioning this bond shows that structuralists are interested not only in the functioning of sign systems in the various domains of culture, but also (and perhaps primarily) in the very possibility of the bond between sign and meaning, the conditions themselves of generation of meaning and of determining meaning. This is borne out by all attempts at destruction of the sign in experimenting with it: in flattening it out along the dimensions of the subconscious, in divorcing the signified from the signifier, in the attempt to discern presemiotic discursive practices behind the "words" and the "things", these practices being the source of the subsequently emerging more stable and self-reliant linguistic and language-like cultural formations. The

weak point of this type of study is, unquestionably, the predominance of the analytical impulse over the synthetic one: the splitting of existing wholes does not always result in the construction of new wholes, for in the split state the formal aspect is shifted into the foreground, assuming an appearance of self-sufficiency.

At the same time it can by no means be said that analysis of the linguistic component of culture is the ultimate goal of structuralist research, and a consciously pursued goal, at that. That is not so because, first, many conclusions formulated in the structuralist conceptions at the level of special sciences and particularly at the philosophical level go far beyond these modest claims. The second reason is that the structuralist research programme is much broader than that in its real essence—if one neglects the objective and conceptual limitations that are imposed on it. But the prime reason is that it is not language proper that is studied here but definite layers of culture, and the goal of study is not discovery of the layer that is similar to language but objective cognition of its laws, there being no research instruments available for cognition other than the linguistic ones, in the structuralist view. The vicious circle of links with the language is due to the fact that structuralist conceptions have paved the way from society, from culture, consciousness to language, they have found analytical means for singling out their linguistic projection, while the way in the opposite direction—from language to society, culture, consciousness—has hardly been travelled at all. This mental operation, which might enrich the fundamental abstract projection with concrete meanings, practically lies beyond structuralist interests.

The result is that the objective knowledge thus obtained (which is conditioned on and guaranteed by the objective nature of the functioning of linguistic mechanisms) is not imparted to the original objects which had to be freed from subjectivity. The linguistic constituent of the mechanisms and processes of culture is not a self-sufficient or closed-in-itself sphere of socio-cultural being (structuralists ascribe the property of self-sufficiency—and consequently of lack of objectivity—to the traditional conception of consciousness) but, in a certain measure, a transformation of other conscious processes and mechanisms—social, cultural, etc. We are not speaking here of the reduction of language mechanisms to the latter, of course, but of mutual enrichment of these fields through studying language as an independent phenomenon.

The confrontation of consciousness and language, of subjectivity of the former and objectivity of the latter, characteristic of French structuralism, is limited in its potential productivity, for both language and consciousness are separate cross-sections or fragments of social reality. However, this path naturally leads us

further towards the method of studying culture and consciousness which is developed by Marxist theoreticians and in which both language and consciousness are viewed as objective attributes or functions of an integral social system, as the necessary elements of its functioning and development.⁵

It is quite obvious that the proper theoretical interests of structuralism lie essentially in the sphere of converted cultural forms, of indirect objectifications of the content of consciousness inaccessible to direct analysis. The analysis of consciousness in its linguistic projection is that particular way of studying them which structuralists have discovered. But this trend towards objectivity is not brought to its logical consummation: firstly, language and language-like systems are not as reliable methodological weapons against subjectivity and anthropomorphism in the analysis of consciousness and culture as structuralists would have them, and secondly, language systems themselves are not given a sufficiently objective interpretation, being studied in a way as closed entities and not within a comprehensive integral context of social interactions generating them. Thus linguocentrism creeps in to take the place of anthropocentrism. The resultant distortion of theoretical perspectives is characteristic not only of structuralism of the French variety, and its consequences are revealed not only on the theoretical plane—but that goes beyond the framework of structuralism already.

Thus the structuralist answer to the social need for creating a new image of science and a new image of man is essentially limited by the conceptual means at its disposal. We have no right, of course, to expect detailed philosophical constructions from scientific reflection. Philosophical interpretation of this material, of the new social practice in its full scope is not the task of one particular scientific discipline—this is the general task of all materialistically and dialectically oriented thinking in these days.

Indeed, a special scientific discipline—even one possessing a well-developed methodological self-consciousness (at the level of general problems), one that goes deep into its own sources and foundations and attempts to determine its own criteria for the quality of scientific results, to comprehend the specificity of the subject-object relations in the structure of its research operations—cannot produce the same results as a properly philosophical interpretation of the same problematic situation. And that is not because the special scientific disciplines, having posed or indicated these essentially philosophical problems, quite frequently prove to be completely incapable of solving them (as was the case with the turn-of-the-century physics which lost its object in the “subjective” operations of cognition, or as is the case with the humanities oriented at structuralism which are, in contrast, losing

the subject in the "objective" operations of cognition). Experience shows that in these and similar situations dialectical-materialist thinking may provide a timely reminder that we are here dealing with some unusual new, fine, flexible, varied, and as yet elusive relation between the cognisant subject and the cognised object and not at all with disappearance of one or the other of the elements of these relations. The point here is that dialectically oriented thinking is "by birthright" capable of taking a deeper and broader view than any concrete science (although of course it cannot replace this science). Independence of any narrow concrete meaning, a wide range of world-view interests enable it to absorb and rationally elucidate the integral whole, the entire scope of the problems of life and cognition, and that is the only standpoint from which to determine the range of the possibilities of special sciences at the given stage in their development. This orientation of philosophical thinking at an integral whole exerts a definite influence on the methodological well-being of the humanities.

The very emergence of structuralism breaks down the customary notions about the status of scientific knowledge, since it appears as the methodology of a number of special scientific research trends without attaining the degree of generality that is characteristic of philosophical knowledge. This is the frequent cause of inaccuracies, illusions and errors in its evaluation. With all this, however, it should be recognised that French structuralism has played a considerable role in realising the difficulties facing one on the path from language to society. Although structuralism itself failed to avoid many of the dangers on this path (including linguocentricism, treating one's scholarly standpoint as an absolute), it has worked through enormous layers of cognitive content in a rational manner and from a new angle. These are the factors that will apparently determine its place in history.

NOTES

¹ N. S. Avtonomova, *Philosophical Problems of Structural Analysis in the Humanities (Critical Essays in French Structuralist Conceptions)*, Moscow, 1977 (in Russian).

² K. Marx and F. Engels, *Selected Works*, Moscow, 1969, Vol. 1, pp. 500-501.

³ C. Lévi-Strauss, *Mythologiques*, Vol. 3, *Origine des manières de table*, Paris, 1968, p. 422.

⁴ R. Barthes, "A propos de deux ouvrages récents de Claude Lévi-Strauss: sociologie et socio-logique", *Informations sur les sciences sociales*, 1962, Vol. 1, No. 4.

⁵ The methodological principles of studying consciousness as an attribute of a socio-economic system are dealt with by the Soviet author M. K. Mamardashvili, "Analysis of Consciousness in the Works of Marx", *Voprosy filosofii*, No. 6, 1968; "Form Transformed", *Philosophical Encyclopedia*, Moscow, 1970, Vol. 5 (in Russian).



PROBLEMS OF WAR AND PEACE

Public Opinion and International Relations

OLEG BYKOV

Mass actions for peace are a comparatively new phenomena in the history of international relations. Although there have been various peace movements and groups, mainly pacifist, before, it is only after the Second World War that they became a weighty factor in international life. It is precisely in this period that they acquired a truly international, massive and effective character, left their visible imprint on world politics and especially on the cardinal problem of our time—the problem of war and peace.

Nowadays it is difficult indeed to imagine the development of world events without the most active participation of the broad public in them. International relations, which in the past were the domain exclusively of states and governments, today increasingly feel the impact of public opinion. Even more, public opinion is directly making its voice heard in “big politics” as a full and equal subject of contemporary international relations, is tangibly furthering the development of positive processes in them, and the consolidation of world peace and the security of nations.

The enhanced role of the peace forces in international affairs as noted above, reflects the objective laws of current social development, the profound changes in the correlation of world forces, the results of the scientific and technological revolution, including the qualitative changes in the military sphere, connected primarily with the appearance of weapons of mass destruction. Unlike the past, when the masses were involved in world politics only in times of war, today the omnipresent threat of a nuclear catastrophe is making international relations a vital concern of millions of people in all continents who want to see these relations

follow a course that would lessen and eventually completely remove this mortal threat. Never before have the destinies of entire countries and nations depended to such an extent on the state of world affairs, on the solution of the crucial issues of our time.

But it is not just a question of the passionate desire of people to avert a world war, nor of their determination to fight to achieve this noble goal. Over the centuries peoples dreamt of a lasting peace and nevertheless human history was engulfed in bloody wars, big and small, which broke out in different parts of the world. Neither the lessons of history, nor condemnation of wars by the peoples prevented their outbreak, for too great were the forces of war and the role of those who benefited from it.

In our epoch the situation has changed radically. Today the struggle against war has a reliable base—the might of world socialism and of all other progressive forces of our time. The USSR, together with its allies and friends, has barred the way to the imperialist policy of aggression and war, has achieved a turn in international relations from hostile confrontation to peaceful coexistence and mutually beneficial cooperation of states with different social systems. The profound positive changes in the world situation have been the decisive objective premises making for the effectiveness of the efforts of all people of goodwill. The mounting peace movements are acquiring real force because they organically tie in with the irreversible historical process, and restrict the very possibility of military solutions of international issues.

The correlation of world forces, a favourable one for international security, and one of the important components of which is the peace movement, raises its role in the fight for a lasting peace to a much higher stage, in fact, to a new one. It not only tangibly influences “from within” the shaping of this or that state's foreign policy; it directly participates in international affairs as an influential international force. The various mass movements and organisations that actively speak for peace have won broad international legal recognition. And although reactionary, militarist circles still persist in their attempts to block or ignore their activities the peace forces have already long since made their voice heard as full and equal participants in international relations.

The international character of the peace efforts is determined by the fact that they reflect the profound concern of the peoples of our planet to prevent a nuclear catastrophe, halt the arms race and normalise the international climate. This truly universal concern underlies the main content of the very broad platform on which the most diverse social movements standing for peace are cooperating.

This platform is consonant with the aims of the foreign policy of the USSR and other countries of the socialist community. This is only natural, for on the focal problems of our time, and especially on those of war and peace, socialist foreign policy, a class policy by its nature, expressed the vital interests not only of the working people but of the overwhelming majority of mankind.

During the cold war period imperialist propaganda launched a subversive campaign against the peace champions and tried to attach the label of "agents of Moscow" to them. Life has long since given the lie to these far-fetched fabrications. The peace forces have conclusively demonstrated by their activities that they are seeking to attain the noble goal of averting a new world war not on somebody's orders but in response to the aspirations of the broad masses in all parts of the world.

As regards the natural coincidence of the basic positions of the peace movements and socialist foreign policy on the issue of strengthening peace, such coincidence in the present conditions furthers their mutual consolidation, and, consequently, the general consolidation of the positions of peace forces. The CPSU's and Soviet state's foreign policy programme is meeting with a positive response throughout the world and is a powerful stimulus to peaceful international cooperation.

Indisputable evidence of the growing influence exerted by public opinion on the course of international affairs is the fact that leading political circles in the capitalist states now have to reckon with that influence more and more frequently. No important foreign policy decision can be taken today without due account of public opinion's possible reaction in their own countries as well as abroad. This applies particularly to decisions concerning the promotion of international detente and the cessation of the arms race. In those instances when public opinion is ignored, planned foreign policy measures, leave alone military ones, encounter serious difficulties. Suffice it to recall in this respect the powerful protest movement against the US aggressive war in Vietnam, which greatly conduced to the fact that its initiators found themselves virtually isolated politically both within the country and in the international arena.

The actions of the peace forces, the real content of which extends beyond the framework of a state's foreign policy, naturally, do not, in themselves, bring about radical changes in the structure of international relations that has evolved and which is conditioned, in the final analysis, by the social bipolarity in the modern world, by the coexistence, the battle of ideas and economic competition of world socialism and world capitalism. That notwithstanding, these actions leave a visible imprint on the

alignment of forces as regards such crucial world problems as those of war and peace.

The demarcation of political forces on these vital issues does not, as we know, necessarily coincide with their affiliation to different social systems. Thus, on the one hand, the Chinese leaders' subversive policy against peace dovetails with the policy of imperialism's most reactionary and militarist circles, on the other, realistically thinking politicians in the capitalist countries see peaceful coexistence as the only sensible basis for relations between states with different social systems.

The active stand taken by the partisans of peace is an important factor in the further polarisation of the forces opposing each other on the war and peace issue. While supporting the efforts of states and governments which designed to normalise the world situation, the various mass movements at the same time help to create an atmosphere of intolerance towards the policy of international tension and the arms race.

The role of public opinion as a kind of catalyst of the process of demarcation between the supporters and opponents of peaceful international cooperation acquires the greater importance the more complicated the struggle between these forces becomes. As international detente gains ground, the most diverse political circles, ranging from arch-reactionary, bellicose groups in the West to the Maoist leadership in China, are stepping up their openly bitter opposition to it. Concurrent with this, the forces who pay lip-service to detente but in reality try to make it a one-sided process and to derive maximum advantages from it in the political and, especially, in the military sphere, are resorting to more sophisticated methods to complicate this process.

All this gives new urgency to the need for actions that will not only isolate the avowed foes of detente but show the real face of those politicians who try to manipulate detente to suit their own ends and thus jeopardise it. Public opinion cannot accept the false thesis about a "middle course" between detente and confrontation. The question of detente is posed as the only alternative: either continued steady advance along the path of relaxation of tension or a sliding back to the cold war and nuclear brinkmanship. It is precisely such a principled approach to the international situation that mobilises public opinion to take decisive action against the enemies of detente, both overt and covert.

Various public circles are beginning to realise ever more clearly that at none of its stages of development is international detente an idyllic state of universal reconciliation. And not only because detente cannot and does not abolish the laws of the class struggle, including those of the ideological struggle. In the relations between states detente, like peaceful coexistence, is not simply

cooperation; it is an integral component of the sharp political and ideological struggle between socialism and capitalism in the international arena. And this struggle is becoming an ever more complicated and many-sided one. It entails overcoming the considerable opposition of those influential circles in capitalist countries who, though they admit that there is no other sensible alternative to detente, seek, in practice, to dictate the "rule of behaviour" to be followed in the conditions of detente. Thus, for instance, they demand under cover of the "human rights" crusade the right, allegedly in the name of "saving" detente, to interfere in the internal affairs of the socialist countries, or propose that no support should be given to the just, liberation struggle of the peoples of Africa, the Middle East and of other regions of the world.

The essence of these questions is well known to the world public. The socialist states do not have to justify themselves, all the more so that they have more than enough convincing arguments both as regards the "human rights" issue and that of the national liberation struggle. It is becoming increasingly clear to unbiased people that the attempts of Western politicians to make the deepening or for that matter the very existence of detente contingent on such issues is unvarnished blackmail. The assertion that detente "will perish" if the East does not make some kind of "payment" to the West, is directly linked with this.

The peace forces reject such an approach as unrealistic. The socialist countries will not make any concessions, of course on questions of principle. But this does not imply the end of detente. After all it is not only the countries of the socialist community who are interested in it. Detente is objectively advantageous also to the capitalist states. The only rational course, therefore, is not unilateral concessions but the working out of that mutually acceptable compromise balance of interests which can be the only basis for international detente.

It goes without saying that public opinion cannot rely only on the prudence and consistency of some leaders of capitalist states. The strong pressure brought to bear upon these leaders by various influential groups within the country is well known. Furthermore, in their policies they often tend to give priority to transient advantages rather than to long-term considerations. Hence those elements of vagueness in international relations which are characteristic of their present state when they are at a crossroads, as it were, leading either to a growth of trust and cooperation, or to a growth of mutual fears, suspicion and stockpiling of weapons... a crossroads leading, in the final count, either to a lasting peace or, at best, to balancing on the brink of war.

The deepening of international detente is a central task of the peace movement, a task that is realistic and feasible.

By helping to isolate the opponents of peaceful international cooperation, public opinion concurrently helps to extend the front of the forces acting in favour of detente and of ending the arms race. It is largely thanks to its influence that the movement to consolidate and deepen the positive changes in the world is winning ever new supporters. By its energetic actions public opinion stresses the need for continuous advance along the path of international detente and for investing it with concrete material content.

Here it is pertinent to note that the public's role in furthering detente is not always active enough. The thaw in the international political climate has generated in some public circles in the West a mood of complacency, the attitude that the pass to a lasting peace has been crossed and that the road ahead is now a smooth and straight one. The notion that detente has picked up enough momentum and can now develop by inertia, as it were, has a demobilising effect, as also the view, given wide currency, that the public's possibilities of influencing the course of international events are extremely limited since it is determined practically entirely by government policies.

The untenability of such views is convincingly proved by the practice of international life. By its energetic actions the public stimulates the deepening of the positive processes under way in the world arena. To it belongs the initiative of a number of crucial questions relating to detente and disarmament being brought into focus. It does credit for help to create a moral and political climate in international relations essential for building confidence between states and for reaching mutually acceptable decisions in the interests of world peace.

The positive role of the peace forces in international relations is particularly important, because it touches on their basic aspects—the political relations between states with different social systems. It is in this main sphere of present-day international life that the focal problems of war and peace are being decided, as also the problems of peaceful coexistence and peaceful cooperation among states of opposite social systems. It is in this sphere of international relations that the prerequisites for curbing the arms race and strengthening the security of peoples first appeared, that the process of relaxation of tensions first began. Naturally, practical realisation of the favourable possibilities this holds out calls for unremitting efforts by all the interested states. But the importance of public actions here can hardly be overestimated.

It is quite clear that the final settlement of global issues is possible only at summit level. But this usually involves a sharp

clash of interests. This is where public initiative and actions in support of constructive proposals by governments are extremely important. Such actions serve as a stimulus to reaching accords and agreements; they can also make for a climate conducive to such accords.

Energetic actions by the broad public are particularly imperative when the opponents of international cooperation are trying to block solution of the problems upon which further advance to a lasting peace depends considerably. Such actions can tangibly help to break existing deadlocks. Vocal public opinion can play a significant role in removing the obstacles hampering governments reaching political decisions in the interests of universal peace.

Particularly important is the contribution public opinion can make to the struggle to end the arms race and for military detente. Any other measures, including the deepening of political detente, cannot fully compensate for any lack of progress in the field of limiting and reducing arms. On the other hand, progress along the path of military detente can give a powerful impetus to the entire process of normalisation of the world situation.

It is therefore of enormous importance to explain comprehensively that the process of the stockpiling and qualitative improvement of weapons is not something that has been determined once for all, that it is not irreversible. It is impossible, of course, to halt the mechanism of the arms race, which has been uncoiling for many years, right away. Large-scale and long-term military programmes possess a great force of inertia. But the crux of the matter is not the impossibility of curbing military technology. The main thing is that the arms race is whipped up by influential forces who are out to derive the maximum political and economic benefits from it and consequently are opposed to military detente and disarmament.

The effectiveness of the mass actions to stop the arms race is due not only to the fact that they express the aspirations of the overwhelming majority of mankind, but that they glaringly show up those, who disregard these aspirations. The indignation of the peace champions is directed against the military-industrial complexes, against the imperialist politicians, ideologists and strategists who continue to blueprint ever new programmes of stockpiling weapons, to devise ever new ways of using military force in international relations. People of goodwill also condemn the inflammatory policy of the Chinese leaders, which is aimed at wrecking all measures to limit nuclear arms and achieve disarmament.

In the struggle for military detente and disarmament the peace forces today act not simply as spokesmen of the passionate desire for peace of millions upon millions of people, but as active

participants in the search for, and working out of mutually acceptable decisions with due account of the realities of present-day international relations. In their efforts to achieve the ultimate goal, general and complete disarmament, the most influential public movements are concentrating on those directions of the struggle for cessation of the arms race where propitious conditions for reaching agreements already obtained. They do not accept the maximalist slogan of "all or nothing", which in practice means, in the best of cases, inactivity and in the worst—complication of the already difficult process of curbing the arms race. The peace forces actively support and themselves advance constructive proposals designed to limit and reduce arms, nuclear and conventional, regarding such proposals as essential partial and intermediate measures on the way to the complete dismantling of military arsenals.

The approach of the peace forces to the problems of disarmament is determined by the degree of realism in assessing the alignment of forces in the contemporary world. They proceed from the fact that the military forces of the USSR and the USA, of the two opposing military organisations in Europe—the Warsaw Treaty Organisation and NATO—are approximately equally balanced. Such is one of the main realities of present-day international relations and progress towards general and complete disarmament must be continued with the emphasis on this reality and on strict observance of the principles of equal and undiminished security, of not prejudicing the security of either side.

It goes without saying that in conditions of disarmament military balance cannot serve as a substitution for international security. Still it is the only possible starting point for beginning the gradual, steady reduction of armed forces and arms until their final and total elimination.

The peace forces who regard the present balance of military forces as an absolute requisite to progress in the limitation and reduction of arms, oppose the attempts of the militarist circles to upset this balance on one or another pretext, and most often on the pretext of counteracting the so-called "Soviet threat". It is clear to the unbiased that this sort of argument has not got a leg to stand on.

The Soviet Union has never threatened anyone. Compelled in the conditions of the build-up of military power in the West and East to take measures to strengthen its defence potential it does not, in doing so, seek military superiority. Numerous facts go to show that the USSR proceeds from the strategic balance that has evolved and does not intend to upset it in its own favour. Soviet policy goes a step further in its striving to maintain this balance. Its aim is to achieve tangible headway in the curbing of the arms

race, the gradual lowering of the level of military confrontation and thus pave the way to disarmament. The concrete proposals of the Soviet Union and other socialist countries are designed to lessen substantially and eventually completely remove the threat of a nuclear war—the most terrible threat to mankind.

Broad sections of the world public see this constructive policy as an important premise for resolving the burning problem of halting the arms race. They see in it a concrete expression of the desire to deepen the trends towards detente, both political and military.

The peace movements play an invaluable role in helping to create a congenial atmosphere for the arms limitation and disarmament talks being conducted between governments, especially under the aegis of the United Nations. Even more. Their standpoint is often instrumental in shaping the positions of the participants directly involved in these talks. Gone are the times when the public opinion on disarmament issues was not seriously considered by Western governments on the grounds that this opinion was a purely emotional one and failed to take into account the state of world affairs and the specifics of the problems of the arms race. The peace movements have not only proved that the solution of the truly complicated problems of disarmament is of profound concern to them; they have also demonstrated their high competence in the matter. Prominent scientists, specialists in the most diverse branches of knowledge, participate in these movements. The public bases itself on the expert assessment of many authoritative international and national research centres and, therefore, has every right to express its weighty, competent opinion on problems of vital concern to mankind.

The broad public, naturally, cannot take the place of the diplomats conducting the disarmament talks, but it can and does decisively oppose the attempts of the military-industrial complex to impose its policy on the Western participants in these talks. These talks must not be allowed to be prejudiced by those circles which have a stake in continuing and intensifying the arms race.

Active participation in the struggle to deliver mankind from the threat of a nuclear catastrophe and the burden of armaments, which is the main direction of the actions of the peace forces, goes hand in hand with their activities related to various aspects of international relations.

In the 1970s, international relations entered a new phase of development when a kind of code regulating fair and just relations between countries was drawn up in Helsinki on the basis of the principles of peaceful coexistence, thus creating a legal and moral-political barrier in the path of those who are over-fond of military adventures. The first steps have been taken, true, as yet

modest ones, towards blocking the channels of the arms race. A series of agreements encompassing many fields of peaceful international cooperation have been concluded.

Welcoming the positive changes in international relations and recognising that they too have contributed their share of efforts towards this, the peace forces press for the irreversibility of detente, for the reshaping of the entire system of global relations. They have gained confidence in the real possibility not only of averting a destructive world war but of building a firm, just and democratic peace.

They actively advocate the strengthening of international security based on a carefully weighed balance of interests of the states.

Such a system of international security is taking realistic shape in Europe together with the prerequisites for its extension to Asia and other regions of the world.

Great importance attaches to public opinion's role in the struggle to eliminate the remaining hotbeds of war, especially in the Middle East, and particularly to prevent the outbreak of new international conflicts. A no less important task is to press for the universal renunciation of the use of force in international relations.

The main and most influential mass movements and public organisations are united in their determination to continue the struggle for the complete abolition of all remnants of the system of colonial oppression, and infringement on the equality and independence of peoples, of all the remaining seats of colonialism and racialism. They are determined to spare no efforts to attain the removal of artificial barriers and discrimination in international trade, the abolition of all manifestations of inequality, *diktat* and exploitation in economic relations.

It is quite understandable that the cooperation of the various peace movements and organisations in questions relating to the reshaping of international relations is not without its internal difficulties. The social and political heterogeneity of their participants accounts for the different approaches in determining what gets priority in their concrete actions. But for all that there is a large measure of coincidence in their positions, which makes possible joint actions on the common platform of the struggle for the preservation of peace, cessation of the arms race, for the continued consolidation and materialisation of the principles of peaceful coexistence in the relations between states with different social systems, for the expansion of mutually advantageous and equal cooperation between them and for the security of the freedom and independence of peoples.



Ethnic Processes in Present-Day Tropical Africa

Editor's Note: The concluding stage of the collapse of the colonial system in Africa and the formation of independent states on the greater part of the continent occurred in the first half of the 1970s. Now the complicated process of the delimitation of the class forces is going on in the liberated countries. In the specific conditions of the African continent, the socio-economic and political factors are closely intertwined with the ethnic processes which exert a profound influence on the economic, social and cultural development of the African peoples.

The question of ethnic processes in present-day Africa was discussed at a meeting of the Presidium of the USSR Academy of Sciences. R. Ismagilova, D. Sc. (Hist.), delivered a report "Ethnic Processes in Present-Day Tropical Africa". A summary of the report and the ensuing discussion follows below.

According to UN estimates, the total population of Africa is 400 million, Tropical Africa accounting for more than 290 million.

The ethno-linguistic structure of the continent is extremely complex. No one knows exactly how many nations and nationalities inhabit it. The American scholar G. Murdock, for example, puts their number at more than 7,000. The American linguist J. Greenberg included 730 languages of Africa in his classification.

North Africa, including the Maghreb, Egypt, Ethiopia and the Sudan, is inhabited by peoples of the Hamito-Semitic linguistic family which consists of the Semitic, Cushitic and Berber groups (33 per cent of the entire population of the continent). Approximately 27 per cent of the African population speak the Bantu languages. The Bantu peoples inhabit entire Central and South Africa. Especially complex is the ethnic composition of Western Sudan. There are an enormous number of linguistic families and linguistic groups. Some regions are so complicated in this respect that it is impossible to classify them. In the east of the continent—the south of the Sudan and in some regions of Kenya

and Uganda—there are peoples of the Nilotic linguistic family and in the arid steppes and deserts of South Africa—peoples of the Khoisan group which includes the Bushmen and Hottentots.

Each linguistic family and group, in turn, can be divided into a great many languages, the latter being subdivided into dialects.

The overwhelming majority of the above-mentioned linguistic families and groups belong to Tropical Africa. The exception is the Hamito-Semitic languages (though partially) of North Africa and the Khoisan languages in the south. True, there are the remaining groups of Bushmens and Hottentots in Tanzania, in the vicinity of Lake Eyasi.

But the most complicated state in its ethno-linguistic structure is Nigeria, whose population, according to some estimates, reaches 80 million people. They belong to seven linguistic families and groups. Even within groups the overwhelming majority of the languages are not mutually understandable. According to official figures, there are 200 nationalities in the country. However, some scholars believe that in just one district, Adamawa, there are 230 ethnic groups, and the so-called commission on minorities has registered 317 various nationalities in the district of Ogoja.

The numerical strength of some African peoples varies from several hundreds to several millions.

The complex and acute character of the ethnic structure and ethnic problems in the majority of countries in Tropical Africa result in the ethnic factor exerting a profound impact on the life of the African states. This factor plays an especially great role in political life: in the activities of the parties (there are still parties in a number of countries that have been organised on a narrow ethnic basis), in recruiting armies, appointing state officials, etc. The ethnic factor is often used by certain political circles in their interests. It is not accidental that it played a considerable role in many coups d'état.

The polyethnic structure and the acute character of ethnic problems in conjunction with the multi-structural economies and a great variety of socio-political structures cannot but tell on the ethnic processes now going on in Tropical Africa. (Soviet ethnographers include in ethnic processes changes in the basic distinctions of the ethnic community: language and culture, that is, first and foremost, those features that distinguish a given entity from others. The ethnic processes are usually divided into those of separation and unity. The latter include consolidation, assimilation and integration.)

Africa provides extremely rich material for studying ethnic processes, inasmuch as not only the most diverse types of them are represented, but also the various stages of consolidation, integra-

tion and assimilative processes, as well as the various forms of ethnic communities—from tribes to developed nations.

The ethnic processes in modern Africa are characterised not only by their complexity, but also by their extremely contradictory character. On the one hand, one can register a growth of national self-consciousness, eradication of tribal distinctions, creation of larger ethnic communities, renunciation of narrow tribal interests for the sake of general national ones; on the other, a growth of tribal self-consciousness, increasing importance of the role of the ethnic factor in political life, intensification of tribal separatism and particularism.

The researchers of the ethnic processes going on in Africa are unanimous in their view that everywhere in Tropical Africa (in some countries to a greater, in others to a lesser extent) one can observe degradation of tribal structure, national consolidation and integration.

However, certain concepts and views existing in the world today hamper both the investigation and solution of ethnic problems in African states. A study of foreign special literature by R. Ismagilova and her own observations in 17 African states show that the significance of socio-economic transformations for national integration is underestimated (and sometimes completely denied), that the roots of ethnic contradictions are being sought in the peculiar features of individual psychology, and that attempts are being made to reduce a broad range of ethnic problems to inter-tribal strife alone.

The view is still current that the cause of many negative phenomena (tribal discord, for one) lies only in colonialism and that after independence is won, tribalism and tribal strife will be abolished. However, in many independent African countries, ethnic conflicts, far from disappearing, have sharply aggravated recently. As we have already noted, the disintegration of communal-tribal structures and national consolidation and integration proceed in a very contradictory manner; along with them separatist and nationalist trends and sentiments are on the upgrade.

When explaining the difficulties of present-day Africa, emphasis is often placed on the artificial character of the existing frontiers created by the colonialists in their time, and on discrepancy between the ethnic borders and political ones. This, undoubtedly, has a certain significance, but the genuine foundation of many ethnic conflicts lies not so much in accidental frontiers, as in a complex conglomeration of socio-economic and political problems.

It would be incorrect, in our view, to look for the causes of inter-tribal and national strife only in the schemes of the

imperialist powers, disregarding the fact that the seeds of inter-tribal enmity, which are indeed sown by the imperialists, fall on already prepared soil.

Such an approach makes it difficult to properly understand the real roots of the existing ethnic contradictions and thereby hampers their swiftest elimination.

Some African statesmen and bourgeois scholars reduce all difficulties of integration to ethnic problems. They deny the existence of the class struggle and substitute inter-tribal struggle for it. Even such tangled developments as the Congolese and Nigerian crises are regarded only as an outcome of enmity between ethnic groups.

In a number of cases, these scholars exaggerate the rates of the formation of nations, as well as the level of detribalisation (the dying away of awareness of belonging to an ethnic group), believing that the development of industry and urbanisation inevitably lead to the destruction of the tribal structures and liquidation of tribal isolation. However, the study of concrete material shows that along with detribalisation, directly opposite phenomena are taking place, and that the growth of national self-consciousness can be combined with the growing feeling of affiliation to one's own tribe. For example, in Nigeria, where there are about 200 different tribes belonging to the Ibo people, during the 1952-1953 census all Ibo were registered as a single people. But during the civil war of 1966-1970, when Biafra attempted to secede, many of the Ibo took their old tribal names again. This can be explained, apparently, by the fact that, on the one hand, they were afraid to name themselves Ibo in the conflicting situation, and on the other, part of them did not want to identify themselves with the separatists and the Ojukwu regime. At present the overwhelming majority of the Ibo again call themselves Ibo; the former tribal names denote only their origin.

Some researchers interpret the influence of migration on ethnic development in a one-sided and simplistic way. The view is current nowadays that these phenomena always lead to complete detribalisation—refusal from tribal self-consciousness.

Undoubtedly, mass migrations of the population and common work of people of different ethnic affiliations at the same enterprises in towns contribute to the breaking up of traditional tribal structures and facilitate ethnic processes. But migrations, if we take the aspect connected with ethnic processes, should not be regarded only as a mechanical mixing of various tribes and a swift mutual assimilation. Everything depends on the concrete conditions and established traditions. It is one thing when a few people from one region come to work and earn money (as a rule, they quickly adapt themselves to another ethnic medium and in time

can assimilate completely), and it is quite another thing when such a group is large in numbers. In the latter case, as is shown by investigations in different countries of Africa, the migrants prefer to settle together and retain, to a certain extent, the ethnic features inherent in their way of life, in their homeland and definite features of their social organisation. In a number of cases, the migrants are forced to stick closely together due to a hostile attitude towards them on the part of the local population and the danger of the outbreak of a conflict. Such a situation, far from leading to detribalisation, on the contrary, enhances ethnic self-consciousness and the feeling of belonging to one's own people, and also strengthens ethnic prejudices. At the same time, favourable contacts with the local inhabitants will, apparently, produce more opportunities for both liquidating tribal isolationism and forming a broader outlook to accept new ideas and a new way of life.

Manifestations of reactionary nationalism do great harm to ethnic development and solution of the national question. Emphasising originality, admiring and lauding special traits and features typical of some one ethnic group, cultivating traditional customs and moral norms connected with the institutions of tribal society often engender the feeling of superiority of one's "own" over the "alien" and give rise to ethnic prejudices. Thus, tribal particularism and nationalist sentiments create a favourable ground for separatism.

The extant ethnic prejudices have a great impact on inter-ethnic relations. A definite stereotype has been evolved over the centuries with regard to this or that ethnic group. Negative emotions that sprang up due to unfavourable contacts with individuals assume the character of a general bias towards all members of a definite ethnic group.

Heated discussions are going on among scholars and African political and public leaders on the questions of accelerating integration of the ethnically heterogeneous population and doing away with disunity and ethnic discord which pose a great danger to political stability. Particularly acute are debates on the problem of realisation of ethnic affiliation. Here two diametrically opposed views clash. The adherents of one of them maintain that it is necessary to renounce ethnic autonyms. In their opinion, this would facilitate integration of different ethnic groups and result in national unity. In some countries it is even forbidden to use ethnonyms and people are urged to name themselves by the name of the state.

The supporters of the other view believe that one should not deny the fact of the existence of many ethnoes within the

framework of one state, for each man belongs to a definite ethnic group.

A definite understanding of the essence of integration, naturally, influences the elaboration of the principles of the nationalities policy, and consequently, the attitude to the problem of ethnic minorities; national languages, the programme of bridging the gap in the levels of economic, social and cultural advancement, questions of the administrative and territorial structure of the state, and a number of other important questions.

One of the main causes of friction between nationalities in African countries lies in unresolved socio-economic problems. Social conflicts here often emerge as ethnic ones, thus aggravating the national question. The clash of the interests of the exploiter elements belonging to different ethnic groups (for example, the struggle between the middle urban strata of Fanti and Ewe, on the one hand, and the Ashanti tribal nobility in Ghana on the other; the Ibo and Yoruba bourgeoisie against the feudals of the North in Nigeria; the feudal-patriarchal Baganda elements against the central government in Uganda) results in that the struggle, that is social in essence, takes the form of ethnic conflicts.

The roots of very complicated relations between some African peoples go deep into the past—to the period of the slave trade. Repercussions of those relations can be felt at the present time, too. One could cite as example relations between the Ashanti and the northern peoples in Ghana, between the Ibo and the peoples of Central Nigeria, between the peoples of southern and northern Dahomey, between the Efik people and the peoples living along the Cross River in south-eastern Nigeria, etc.

In many instances the reason for strained relations lies in the uneven character of socio-economic development. There are cases when peoples who created highly developed states a long time ago, look down upon less developed ethnic groups, inasmuch as these groups were subordinated to the rulers of their state in the past.

The multiformity of structures and modes of life in African society has a strong impact on both the level and rates of ethnic processes. Along with differences connected with the presence of various structures and types of social relations, a certain role is played by the traditional occupations of ethnic groups. Ethnic professionalisation is rooted in the specific features of the division of labour in the distant past. The existence of the castes of handicraftsmen in various countries of the African continent and the prevailing attitude to some types of occupation as something humiliating and despised provide an illustration.

Many African peoples retain to this day (in a greater or lesser degree) the survivals of the former social stratification. One such survival is the institution of domestic, or patriarchal, slavery. The

descendants of slaves are regarded in many African countries even today as "lower grade" people. This has an impact on both social and ethnic relations. In Senegal, for instance, the former caste of slaves stands at the lowest rung of the social ladder.

Ruanda provides a vivid example of an influence exerted by the caste system. The population of that country is divided into three groups distinguished by both ethnic features and the social and political status: Tutsi, Hutu and Twa. The Tutsi are Nilotic people by origin and cattle-breeders by occupation; they hold the domineering position in the country, although they account only for 15 to 20 per cent of the entire population.

Thus, apart from the existing classes and sections of the population, or those that are now taking shape, the social stratification of African society is rendered more complicated by the presence of traditional estates, castes, occupational and age groups, secret alliances, etc. All this retards the processes of integration and consolidation.

Ethnic particularism is developing also due to the practice of settling populations in towns and big villages established during the colonial epoch. In many African towns, settling by block and housing estates is of an ethnic character, that is, people of one ethnic group prefer to settle together.

The concrete historical conditions prevailing in African countries determine the various versions of ethnic development. In some states they may lead to the emergence of one ethnic community on the basis of various (all or the basic ones) ethnic components of the country, in others there can emerge, or are already taking shape, several different communities, including nations (as is the case of Nigeria).

The character of ethnic processes largely predetermines the nationalities policy of this or that African state. In turn, this policy can facilitate, or, on the contrary, hamper the development of ethnic processes.

The programme documents of many states of Tropical Africa proclaim the slogan of unity of the entire people of the given country, and measures are being taken to promote that unity. However, the single nation concept, whose proponents claim that there can be only one nation within the limits of one state, which played a positive role during the struggle for political independence in the new conditions, when internal economic and social problems were being solved, can in a number of cases lead to ignoring the interests of ethnic minorities.

Today, it is too early to speak about the possibility of the emergence of a single ethnic complex in many countries of Tropical Africa. It can be assumed that in due course of time the ethnic distinctions will gradually wither away. But, apparently, the

ethnic development of such countries as Ghana, Nigeria, Zaire, Kenya, and Uganda will proceed along the line of strengthening large ethnic communities and intensifying the process of assimilation by them of smaller ethnic groups.

Tanzania presents the most vivid example of the emergence of a single ethno-political complex, in which the 120 different ethnic groups are forming a single community on the basis of the Swahili language, which has been recognised as the official language of the country; in time this community may turn into the Tanzanian nation. Processes in Mali and Guinea are developing in a similar direction, but there is no common language as an important uniting factor.

The ethnic processes are most closely connected with the linguistic ones. Of great importance in the conditions of a complex linguistic situation in almost every state of Tropical Africa is the elaboration of a genuinely scientific linguistic policy. In Kenya, for example, where the national question is very acute, the population would not accept either the Kikuyu or the Luo language as the state language, whereas it has calmly accepted the introduction of Swahili as the state language, inasmuch as it is regarded as "nobody's" language. The same is true of Uganda, where it would have been impossible to introduce either the Luganda language or one of the Nilotic languages as the state language. In these two countries Swahili will not only intensify integration processes, it can also contribute to a gradual relaxation of the existing ethnic tension.

Depending on the chosen path of development the state can emerge in Africa as a powerful factor for uniting different ethnic groups into a large community.

A case in point is the countries that have taken the non-capitalist road of development. In these countries the implementation of progressive programmes aimed at liquidating the domination of foreign capital and against the internal reactionary forces, structural changes in the interest of the working people, broad general democratic measures, educational work among the masses create favourable conditions for the abolition of the exploitation of man by man, liquidation of the socio-economic roots of national contradictions and inter-tribal strife, and for the drawing closer together of people of different ethnic affiliation. A policy contributing to the drawing closer together of various ethnoses and the formation of a single ethno-political complex within the state boundaries creates requisites for the emergence of new nations on a revolutionary-democratic and, in the future, on a socialist basis. However, so far one can speak only about some of the positive requisites for solving ethnic problems.

To sum up, two basic tendencies of ethnic development can be observed in the African states at present: consolidation of individual ethnic communities and the transformation of some of them into nationalities and nations, and the intrastate inter-ethnic integration. The development of these trends and a change in their interrelationship depend on the concrete conditions prevailing in a country.

One thing is clear, however: the withering away of ethnic distinctions and drawing closer together of heterogeneous ethnolinguistic elements are an extremely long process. All attempts at speeding up this process artificially, without taking into account the real state of affairs, just as the attempts at consolidating ethnic isolation can only result in complicating inter-ethnic relations. A solution of ethnic problem is a component part of the struggle for social progress; it is impossible without carrying out radical socio-economic transformations.

Opening the discussion of the report **Anatoly Gromyko**, Director of the Institute of African Studies of the USSR Academy of Sciences, said that usually the subject of ethnography becomes narrower as it draws closer to our time, and in class societies ethnic specificity is predominantly concentrated around the traditional sphere of everyday life. The specific nature of Africa lies in the fact that its ethnic problems do not boil down to the traditional sphere of everyday life, but represent the real life of enormous regions.

The intensive process of class formation is now taking place in Africa. The working class has become a tangible force there: according to our estimates, there are almost 20 million workers on the continent. If the seasonal workers are not taken into account, the number of those employed at industrial enterprises alone is also quite impressive—10 million. The formation of classes on the continent is accompanied by the intensification of the class struggle. The class struggle in the international arena, the struggle between the two socio-economic systems, also has an impact on Africa. Even such a non-political institution as the development of ethnoses comes under a strong influence of political factors. **Anatoly Gromyko** cited concrete examples demonstrating the closest interconnection of ethnic and political problems in our day.

The processes going on in present-day Africa, said **Anatoly Gromyko** in conclusion, show that our ethnographic research should be directed not only into the past, but also deal with the present. This helps us to predict more correctly the future development of the peoples of that continent.

G. Starushenko spoke about the great influence which ethnic problems exert on the international situation. He emphasised that

Lenin's prediction that the developing countries would play an ever more important role in the international arena, is coming true. The report dwelt at length on the significance of the ethnic factor in the life and policies of these countries. The Soviet experience of solving the national question is undoubtedly of great interest to them.

Self-determination of peoples is the cornerstone of our nationalities policy. It is often claimed that the African peoples are not mature enough to apply the principle of self-determination, and consequently to utilise the Soviet experience in solving the national question. If one follows the Soviet path, our opponents maintain, it would be necessary to form about 7,000 African states. This is utterly erroneous. The self-determination principle suggests different ways for its realisation: the creation of a state on the principles of autonomy. Besides, the principle of self-determination is now understood not only as the right to choose a state system and the type of relations with other states, but also as the right to the independent determination of one's own social system. Article I of the UN Declaration of Human Rights states that all peoples have the right to self-determination; on the strength of this right they freely establish their political status and ensure their economic, social and cultural development.

The Soviet Union, G. Starushenko said in conclusion, has always consistently upheld in the international arena the right of the peoples to self-determination. This is our immutable principle. And we favour that form of self-determination which ensures the most favourable conditions for the advancement of the working classes.

A. Iskanderov devoted his statement to the need to step up the study of African languages in our country. He emphasised that the necessity of various contacts with representatives of the peoples of that continent in their own languages was growing with every passing year. Hence, an important task is to organise a broader and more intensive study of the principal African languages.

Academician Yu. Bromley noted that two interconnected dialectical trends were typical of the world historical process: ethnic differentiation and inter-ethnic integration. Their interrelationship substantially changes at different stages of the historical process. In the first postwar years, it seemed there was a tendency towards the weakening of ethnic processes. But reality disproved this, demonstrating the significance of ethnic processes in all corners of the globe. This is largely connected with the enormous changes in the political life of the whole world and with the scientific and technological revolution which makes differences in

the development levels particularly noticeable. The African continent is especially indicative in this respect.

The hierarchy of ethnic processes is characteristic of Africa. When we speak about ethnic formations as a result of national and ethnic processes, we usually place them in one row: tribe, nationality, nation. In actual fact, however, ethnic processes are much more complex. At one level, intra-tribal consolidation is going on, at another, inter-tribal consolidation within the framework of a nationality, and at the third level, consolidation or integration within the framework of the entire state (formation of a nation). Finally, there is inter-state, regional integration. All this multiformity should be taken into account. It is also very important to consider the factor of the growth of ethnic self-consciousness. There can be no nation without the autonym, and the latter is a major indicator of self-consciousness. Political factors considerably influence self-consciousness. In investigating the ethnic processes taking place in Africa it is necessary to consider the impact of the scientific and technological revolution in all its aspects on them, and especially the influence of the means of the mass media and mass communication. These factors exert an extremely strong influence on ethnic self-consciousness and lead to very complex entanglements of the most diverse ideas and trends in self-consciousness.

Academician P. Fedoseyev emphasised that in our day the majority of nations, nationalities and tribes live in multinational and polyethnic states. There are about 2,000 nations, nationalities, tribes and other ethnic groups in the world, and some 150 independent states. It is indicative that approximately one-third of these ethnic communities and states are in Africa. Hence a broad scope of the ethnic (national) problem which is closely intertwined there with social, political and cultural problems. All this is of great importance for science and practical activities. The question about the development prospects of ethnic formations is of a comprehensive character, and it is closely connected with the linguistic problem. Therefore the study of the linguistic, ethnic and national problems is especially urgent in our day. As is known, Lenin devoted much attention to the question of self-determination. He said, among other things, that it was necessary to make a clear distinction between the right of the peoples to self-determination and the forms of its implementation. Self-determination, Lenin stressed, includes a great variety of forms. In conclusion, P. Fedoseyev thanked R. Ismagilova for her interesting report.



The Urban Way of Life and Ecology

OLEG YANITSKY

An important place in the problem of the interaction between society and Nature belongs to the study of ways of life. The different forms arise from the mode of production and reproduction of the conditions for human existence, so they have a somewhat repetitive, stable structure. Becoming the accustomed mode of behaviour, they act as a force affecting the natural environment.

Under modern conditions, the range and intensity of Man's direct and mediated impact on the natural environment is increasing substantially: the size of the urban population and its concentration in urbanised regions are growing: spatial mobility is sharply increasing; the technical equipment used domestically and in other spheres of everyday life is becoming more and more sophisticated.

Although there are plenty of examples of conflict between Man and Nature, from the theoretical angle the concept of their direct interaction—Man vs. Nature—seems one-sided. In his interaction with Nature, Man acts as an organised individual, as a social system.

In the light of this, it is clear why it is towns that attract the constant attention of ecologists. The modern town is the dominant form of vital structure today both from the point of view of internal structure, and on the plane of the typical forms in which social Man is joined to the natural world around him. The large town is one of the key points in the problem of the environment. Without detracting at all from the importance of studying individual sources or processes of pollution, the significance should be stressed of comprehensive analysis of the interaction of the social organisms of such towns with Nature.

The terminological difficulties accompanying the establishment of any new scientific discipline must not give the false impression that two ecologies exist: the study of Man's interaction with the environment, and social ecology proper, also called the ecology of Man or social geography. The relationship between Man and Nature is inseparably linked with human interrelationships.

If, under certain historical conditions, Nature is seen primarily as a useful thing, material relations will predominate in human contacts, too, and all this will compound into the forms of the way of life and of the daily living structure. Marx wrote that "only under capitalism does Nature become merely a thing for Man, merely a useful thing; it is no longer recognised as a self-governing force, while the theoretical cognisance of its actual laws itself emerged as no more than a piece of cunning for the purpose of subjugating Nature to human needs, be it as an article of consumption or as a means of production. In accordance with this trend, capital overcomes national limits and national prejudices, the deification of Nature, the traditional satisfaction, smugly closed within certain limits, of existing needs, and the reproduction of the old way of life."¹

Under these conditions, Nature is not only universally used and utilised; it undergoes the increasingly destructive impact of the bourgeois way of life. Alienation as an integral and characteristic feature of this way of life appears equally in the setting of Man against Nature and man against man. In this society, Man is "seen as a source of labour power, while Nature as a source of raw materials, which must be taken by any method, as rapidly as possible and at minimum cost. In relation to the workers the system of 'squeezing out sweat' is applied, whereas in relation to Nature the doctrine of 'squeezing out resources' is natural. If, in its internal relations, society follows the principle of the domination of some classes over others, in relation to Nature the prevalent principle is that of domination and enslavement".²

In the final analysis, the way Man organises his own life, and the way he interacts with the natural world, are only different aspects of society's vital activities, determined by the mode of production and reproduction of the conditions necessary for its survival. "By thus acting on the external world and changing it, he at the same time changes his own nature."³ The mode of production, Marx notes, is "as much the relationship of individuals one to another, as their specific relationship with non-organic Nature".⁴ One of the reasons for describing current ecological problems as social ones is their inseparable link precisely with a specific type of production activity, and with a specific way of life.

Analysis of urbanisation in different periods provides grounds for suggesting that each type of socio-economic system has an

inherent specific type of combination of the social organism with the natural environment. It is methodologically important to take into account the fact that the modern capitalist town is a socio-ecological structure created by society, by history. In contrast to human communities in previous periods, it took shape primarily under the impact of historically created human needs.

One of the reasons for the sharp exacerbation of ecological problems in large towns in the West lies in the essence of capital, which drives "labour beyond the worker's naturally conditioned needs" and thus creates elements for the development of individuality of the type for which "the naturally conditioned need disappears in its direct form, for in the place of the naturally conditioned need comes that created by history".⁵ Together, these needs not only give rise to an expansion of production itself, and thus increase the pressure exerted by the town on the natural environment, but also presume the existence of an environment for the reproduction of these needs.

Why do we pick on the town when speaking of social reproduction as a methodological basis for studying the impact of the way of life on the environment? Because it is the large town, or rather the urbanised area as a socio-spatial entity that represents the vital natural habitat in which the extended reproduction of social and cultural potentials of an increasing number of people is carried out directly and daily, and in sufficient volume. Today the forms of the town and human settlement are increasingly determined by the needs and way of life of the various social strata of the population.

The growing division of social labour, the development of large-scale machine industry, the expansion of the system of international relations, the development and institutionalisation of science and education, and the changing nature and intensity of human relations have greatly altered the principles according to which towns function and develop. The town now functions primarily as an element of a system; in its activities society rests on a system of spatially separated elements. The stimuli to the growth of the industrial town come mainly from outside it, and the influence of these external factors is growing, as seen in the reorientation of the activities of the town's economic and social networks on more and more "remote" goals—the region, the nation, the world market. In contrast to the self-sufficiency of the town at the previous historical stage, the characteristic feature of the development of towns as social organisms today is their functional and territorial dynamism.⁶

Another aspect of no less importance is the concentrating impact of capital on production and the population. During the current historical stage, the town and the urban way of life thus

become the dominant forms of social organisation, which promote the development of its universal tendency towards a rise in efficiency through concentration of the growing variety of human activities. The presence of links between the efficiency of human production and its urban (concentrated) form is fixed by culture even in the early stages of the development of society, but only when the large-scale machine industry of capitalism appears does the principle of concentration turn from a randomly recognised goal into a consciously pursued one.

Here history provides another lesson, for attempts at direct generalisation of empirical material inevitably lead to dead ends. In actual fact, when the town was closely (economically and culturally) linked with rural life and Nature, it was divided from them by a stone wall; its structure was oriented inwards. Now that the town is becoming really and deeply separated from Nature, however, it is increasingly orienting its activities outwards. In reality this is a seeming paradox, for previously the town was the centre of the local community, within which it grew up. Now, however, the town is a network of interconnected elements of a qualitatively different, industrial Nature. Now it is not simply concentration, but a "concentration oriented outwards", a concentration the reverse side of which is, according to Marx, "the penetration of urban relations into the village".⁷

Another factor behind the change in the interaction between town and Nature was the new attitude of Man to time and the different rhythms of his way of life.

The emergence of the urban civilisation was a major precondition for the formation of the very attitude to Nature in culture and social consciousness. It was urban man who first began to correlate his movement in time with natural cycles and rhythms. Town walls once and for all isolated Man from unchangeable Nature, provided an impetus to the formation in the social consciousness of the concept of its historically finite existence. In the town, under the conditions of artisan labour, the way of life of its inhabitants acquired its own rhythm. "The need appeared for measurement of time, which began to be 'saved', 'wasted' or 'spent usefully'."⁸

It was only with the emergence of capitalism, however, that the attitude to time took shape (in other words, the type of social time inherent in the given socio-economic system) which, in our opinion, led to a cardinal change in the attitude to the natural environment. Time and again, capital tried to destroy "space by means of time".⁹ Nature, until recently an organic part of the urban organism, of the urban "community", as was correspondingly reflected in its culture and in many other ways simply connected with Man, the character of his production activities and

way of life, was now rapidly transformed into a sort of alienated space, a faceless territory. This space interested capital only because it had to be conquered if the productive effect is to be obtained.

It is historical paradox that it was precisely under the conditions of capitalism, where exploitation of natural riches assumed a gigantic scale and seemingly should have resulted in a deep understanding of Man's dependence on his natural environment, that the view of Nature as a sort of abstract space took shape. In their outwardly oriented practical activities capitalist towns were only interested in similar centres making up entire framework of capitalist society's production organism. In the dominant culture, the significance of this framework became hypertrophied and regarded as the absolute criterion. The natural environment located outside the town was at best considered as a territory on which deposits of resources were dispersed. Usually it was seen as a barrier entailing additional outlays and a higher cost of the end product.

The new understanding of time was connected primarily with the qualitatively new stage in the development of productive forces and their core—large-scale machine production. Its accelerating rate of functioning, differing sharply from the natural one, was in the final count one of the main reasons for the emergence of an attitude to time as a resource of human activity and thus of the two temporal co-ordinates of human life: the natural and the social, connected with the nature of these activities. Recognition of the fact that stable astronomic time might be compressed by these activities exerted a tremendous revolutionising effect on the development of all the links in the social organism. The professional concept in economic geography of the "inversion of space",¹⁰ meaning its distortion by means of communications (and, consequently, the inapplicability of Euclidean geometry to models of the productive and practical activities of modern Man) is a characteristic feature of the modern urban culture.

The constantly expanding nature of social production, the population growth and the extension of exchange and communication create the preconditions for interpreting their development as an expansion. The concept of progress itself is largely connected with overcoming the subordination of human activities to natural cycles, with the accelerated rhythms of technical systems and the corresponding rise in the subjective "price" of space and time as specific social resources for the given activities.

These and other social standards under capitalism naturally have a class character. The dominance of private property interest with its "time is money" catchphrase, rivalry, etc., rapidly led to the "materialised structures" of these activities being considered as

the absolute criterion, to the laws governing the functioning of socio-technical systems being separated from and counterposed to those governing natural ones. The emergence of "the abstraction of time in European culture was preceded by a stage at which time was thought of completely differently, and was not 'alienated' from Man and his life".¹¹ In our opinion, the alienation of time, internally connected with the "acquisitive" orientation of the bourgeois individual, to no small degree expedited the alienation from Nature. As a result, "acquisitiveness" became the quintessence of the ideology of utilitarianism, the ideological basis for the cult of the career, personal success, promotion and domination.

This connection must be noted, for bourgeois social philosophy often tries to explain the current ecological crisis in the West by purely cultural arguments, linking it to the Christian idea of Man's domination of Nature,¹² or psychological ones, considering it as a result of the vitality of the expansionist principles (with respect to the USA), allegedly surviving from the time when the West was colonised, when Nature was seen as an obstacle that had to be overcome.¹³ The connection between these aims of Western civilisation and the nature of capitalism is usually ignored.

Other aspects of the problem are directly linked with the urban way of life. The multifarious rhythms of life in the modern town have a clear common boundary—the alternation of working and leisure time. This division of the spheres of social and personal life, stimulating the separation of inhabited territory, has exerted a strong influence on the formation of the internal structure of the urban organism and on its development. The growth of the spatial mobility of the population (village to town, inter-town, commuting and other types of migration), the growing diversity of the links within town and inter-town communications, as well as the constant change and redistribution of the channels for these communications, the generally growing autonomy of the individual, and the diversity of the actions and forms of the satisfaction of needs—all acted to boost the development and increase the complexity of the urban structure. These and many other factors must be considered as a manifestation of a generalising trend—the development of the environment for social reproduction, the environment for reproduction of the physical and mental forces of the growing numbers of working people. Thus, a general pattern takes shape: development of material and mental production—a rise in the demands on the worker, his professional and general cultural potential—the development of the environment for reproduction. Each step in the development of social production requires a specific environment for the reproduction of its agents, which consists of material and cultural preconditions and the form of communication itself.

The objective tendency of the scientific and technological revolution implies a tremendous expansion of the sphere and social role of the environment for the reproduction of the individual.

During the scientific and technological revolution, towns retain their significance, for the intensification of material, and especially mental, production to a considerable extent still rests on urban concentration (though the forms of this are changing) and the socio-reproductive functions of the urban environment. Under these conditions, the expansion of the urbanised environment and the intensification of its impact on Nature take place even more rapidly than before. The former results from the population growth, especially in the towns; from the development of technology requiring more and more space; from the expansion of the forms of concentration, due to the revolution in means of information and communications. The latter is engendered by the overall spread of the urban way of life, above all the unprecedented growth in the spatial mobility of the population, resulting from both economic and other factors.

The space Man requires for his physical and intellectual improvement and for the extension of reproduction, is today growing much faster than the space needed for material production. Contemporary urbanised space is an illustration of the fact that the intensification of human vital activities implies an intensification of their impact on Nature. The acute situation in some regions is exacerbated by sporadic inflows of temporary populations from other countries, due to the uneven development of capitalism.

Under these conditions, the situation is made worse by the acute shortage that arises of natural spatial resources. Up to some particular moment, the "concentration—dispersal" of activities process took place in an apparently neutral environment: Nature was seen as physical space, i. e., as an obstacle to be overcome. Only in recent times has it been recognised that this resource is both limited and of tremendous value in the reproduction of the labour and cultural potential of the individual. Thus, previously, the natural spatial environment acted mainly as a condition and a resource; today it is increasingly seen as an independent value too.

In analysing the impact of the values of the bourgeois way of life on the urban environment, it should be noted that its critical state is a result, as already stated, of primarily private property aspirations, i. e., the individualistic psychology, orientation on promotion, and the cult of personal success. Among the greatest evils here is excess consumption, since a private home and its attributes constitute the main sphere for realising consumption and acquisitive aims. This phenomenon is, of course, a manifesta-

tion of the entire social essence of bourgeois social relations.¹⁴

Critically-minded Western sociologists are undoubtedly right to see the migration to the outskirts of towns as a search for a point of support and stability in an alien, bureaucratised world without humanity. "Suburbanism" is the way of life of the isolated and lonely cogs in a bureaucratised system. The oiled machine of bourgeois propaganda daily cultivates the myth of the autonomy of the family sphere, and increasingly more technical means are invented for making life increasingly private. It should be noted that, in addition, suburbanism also reveals the consumer attitude of the propertied class towards Nature as a free and natural boon, intended, as they see it, for use and providing pleasure.

The previous age created the local type of urbanistic thought when ideas of the optimal (ideal) town were based on purely local interests—optimisation of the contacts of the given society's members with Nature. This was, in essence, a modification of the values of rural life, adapted from the individualistic angle (how much land is needed not for production, but to maintain the bourgeois way of life). This angle of vision did not recognise Nature as a whole, its finite character, the need to reproduce it, or Nature as a part of human life. It was regarded as a boon existing outside Man, for Man's use. It is not by chance that recent surveys in the USA have revealed the desire of certain well-off social strata to obtain substantial plots of untamed Nature to provide for their isolation and satisfaction of their refined needs. Now the "American consciousness" seems to be going through a conflict of the values of life "in Nature" and the need to conserve it and use it in the national interests.

By finally splitting the town from the village, capitalism also creates a sort of one-sided view of Nature from the urban vantage point. In the fact that the town-dweller consumes the products of Nature, that Nature is, for him, a means for reproducing his forces, for emotional release, and relaxation, etc., there is nothing reprehensible, for this is one manifestation of the social division of labour. For the capitalist, however, it is also the sphere for cultivating private property aspirations and the consumer ethic. On the basis of the increased leisure time and the growing demands of the working class, including for diverse forms of contacts with Nature, bourgeois ideologists try to attach to them "an extremely naive and serious need, almost becoming a bourgeois habit". The words belong to Dostoyevsky, who went on to write that the prosperous bourgeois loves greatly "to merge with Nature", and that this merging is ten times sweeter on one's own land. Let the house and everything else "be even the most microscopic", the important thing is that this is "my tree", "my wall" and my own lawn before the house.¹⁵

In time the dominant ideology comes increasingly to consider this vital structure as a value that capitalist society tries to attain by social and technical means.

The more powerful these become, however, the further in the final analysis Man stands from Nature and the worse is his condition. It cannot be otherwise, for within the framework of existing social relations, the "old" value (merging with, nearness to Nature) cannot be simply added to the new (bourgeois) values. The dominant class effects its own contact with Nature at the expense of the other social strata in the direct and indirect sense.

This situation and conflict of values have other subjective sources, too. When, at a specific stage in his history, Man finds himself cut off from Nature and placed in an artificial urbanised environment, drawn into the urban way of life, he tries to regain certain elements of his former life. This desire is primarily psychological, for in the town Man acquires a relatively safer existence. He is oriented on this return to Nature culturally, too, since the merging with Nature throughout all previous history was immanent in his main values. In general, the realities of the Western suburban way of life probably contain as much a petty-bourgeois, peasant psychology, as a real need for relaxation and a striving towards at least a temporary release from organisational oppression.

Suburbanism as a form of "direct contact" with Nature is further evidence of the deep rift now existing in the capitalist world between comprehension of the seriousness of the ecological situation on the level of advanced science (which demands the society orient itself on "ecological imperatives") and the entire anti-ecological essence of the bourgeois way of life and the industry on which it is based, which cultivate individualistic and localistic forms for satisfying ecological requirements. Suburbanism is a type of mass consciousness completely at odds with the current ecological situation. It appeals to direct perception, to past experience, rather than modern scientific knowledge. Its conclusions are based on local conditions, on Man's natural right to clean air and green forests, on ideas of the infinite and inexhaustible character of Nature. It considers the town and any other artificial environment as no more than some obstacle that must be surmounted or avoided in order to get out into Nature. Being a result of private property aspirations, this consciousness fights for direct contact with Nature (i. e., possession of it), forgetting that Nature can be not only property or a sign of social position, but also a cultural value.

Being a locally restricted consciousness, it interprets the critical ecological situation in terms of some local centre, situated somewhere outside, while an understanding of the real reasons

and scale of the ecological threat requires deep-running changes in the way of thinking and the way of life of all suburban communities. Moreover, the most painful aspect is that this means changes not in general, but in those very individualistic habits and consumer stereotypes that have long been considered natural and integral attributes of the Western way of life.

Suburbanisation only supports the illusion that it is possible to avoid the ecological crisis by improving the structure and ecological distribution of the settlement pattern. Contemporary bourgeois concepts of the quality of the urban environment are a new version of the utopian idea of garden cities, the only difference being that it is proposed for oases to be established not on the periphery, but within the towns themselves.

No less of an obstacle to overcoming the ecological crisis in the towns are the social principle and psychological stereotype that have taken shape as a result of the random urban growth. Not only the layman, but experts too (urbanists and town administrators) are afflicted with a lack of confidence in the possibility of solving urban problems and pursue a policy of "small steps". For the "American consciousness", for example, the constant primary problems—poverty, the housing crisis, the crime rate, in which towns always occupy a prominent position, are problems that will never be solved:

Finally, the obstacle to resolving the contradiction between town and Nature is made up of those illusions that are nurtured by the further progress of those very means that once made urban concentration itself possible. Moving further and further away from derelict regions (thanks to the development of transport and long-distance communications), the population of the suburbs feels relatively safe. Meanwhile, the situation is approaching crisis, because the impact of Man on Nature, and, consequently, the results with which he has to deal, are now assuming a clearly non-linear character.

Up to now, the town-dweller has, on the basis of experience, perceived his environment in linear spatial-temporal terms. After all, the further from the centre of the town he went, all the characteristics of this environment gradually changed: the density of buildings, population, activity, public control forces decreased, while its Natural features increased correspondingly.

Now, however, the use of highly toxic and non-biodegradable substances, and the possibility of their being rapidly accumulated in certain links in the trophic chain or sucked into global biospherical processes are increasingly undermining this linear stereotype of mass consciousness. There are no more "islands" for waiting out the storm. Today ecological accidents occur in well-appointed rural locations too, for technical protection and

public control are much less effective here than in large towns. Moreover, for instance, in the USA "further from the town" in no way means "closer to Nature", because, for economic reasons, the territory on the periphery of agglomerations is settled today not by people, but by industrial enterprises.

Thus, the crisis of the capitalist town and the destruction of Nature it entails are interconnected manifestations of the anti-ecological essence of the bourgeois way of life, its hostility to Nature, and to the interests of Man in general. This crisis reflects the one-sidedness of aspirations when the environment is considered primarily and mainly from the point of view of its usefulness at this precise moment, the possibility of utilising it as a "component" and "resource".

From this angle, a synthesis of Nature and town also requires certain cultural preconditions and a victory over the limited nature of bourgeois cultural values, not only in the above sense, but also in the broader social context. In our understanding, globality and universality are not only features of reality, but also necessary qualities of a culture and level of thought. They constitute recognition of the comprehensive ties linking Man to his non-organic body—Nature.

In the more distant future, this level presumes the creation of cultural values that will organically combine the needs of production and reproduction, the present and the future, Man and Nature. In this sense, the town and Nature must also merge through culture. It is just as undesirable for the Nature to be deprived of the impact of developed urbanised culture, as for the town to be alienated from its natural preconditions. This organic unity of Man's social and natural environment presupposes a qualitatively different level of the organic and general nature of the life of society, universality of its goals and comprehensiveness of its development. To understand the local as a form of the global, the present as part of the future, production as reproduction of Man and Nature—it is obvious that these reference points are attainable only under socialism.

NOTES

¹ K. Marx, *Grundrisse der Kritik der politischen Ökonomie (Rohentwurf)*, 1857-1858, Berlin, 1953, p. 313.

² G. Volkov, "The Ecological Crisis and Socialist Utilisation of Nature", *Kommunist*, No. 12, 1976, p. 35.

³ K. Marx, F. Engels, *Werke*, Vol. 23, p. 192.

⁴ K. Marx, *Grundrisse ...*, p. 394.

⁵ *Ibid.*, p. 231.

⁶ For more details see O. N. Yanitsky, "Social Information Processes in Society and Urbanisation", *Urbanisation, the Scientific and Technological Revolution and the*

Working Class, Moscow, 1972; O. N. Yanitsky, *Urbanisation and the Social Contradictions of Capitalism. A Critique of American Bourgeois Sociology*, Moscow, 1975, p. 2.

- ⁷ K. Marx, *Grundrisse* ..., p. 382.
- ⁸ E. V. Sokolov, *Culture and the Individual*, Leningrad, 1972, p. 171 (in Russian).
- ⁹ K. Marx, *Grundrisse* ..., p. 438.
- ¹⁰ V. Bunge, *Theoretical Geography*, Moscow, 1967, p. 80 (in Russian).
- ¹¹ A. Ya. Gurevich, "World Culture Today", *Inostrannaya literatura*, No. 1, 1976, p. 206.
- ¹² L. White Jr., "The Historical Roots of Our Ecological Crisis", *Human Behavior and the Environment. Interactions Between Man and His Physical World*, Chicago, 1974, p. 23.
- ¹³ L. W. Moncrief, "The Cultural Basis of Our Environmental Crisis", *Ibid.*, pp. 29, 34.
- ¹⁴ For more details see O. N. Yanitsky, "The Towns of the USA: the Ecological Situation and the Anti-Urban Ideology", *Mirovaya ekonomika i mezhdunarodnye otnosheniya*, No. 9, 1976.
- ¹⁵ F. M. Dostoyevsky, "Winter Notes on Summer Impressions", *Collected Works* in 30 vols., Vol. 5, Moscow, 1973, pp. 94-95 (in Russian).



The Allround Development of Children

ALEVTINA FEDULOVA

Every thirty seconds a hundred babies of different races and nationalities are born into the world. They are all born, or so their parents hope, to a better life, for children are, after all, the future and the hope of mankind.

Each society and each individual family interprets these words in a particular way, for they apply to those who are to inherit everything created by the work and minds of former generations and who will take over material and cultural, intellectual and spiritual values, will care for them and multiply them.

All progressive mankind is, of course, interested in the younger generation that will cross into the third millennium and live their lives in the 21st century being better educated, more cultured and better physically developed than people of today thus guaranteeing mankind's progress.

Each state's responsibility for the fate of children, their upbringing and education is indeed great. The problems of childhood in all their aspects are directly connected with many of today's most pressing problems in general. The state's attitude to children is to a considerable extent an indication of the society's social and moral health.

The United Nations Organisation has, in response to the initiative of many progressive organisations, declared 1979 International Year of the Child. The whole world and each individual state is now taking stock of what has been done for children.

Soviet people see the International Year of the Child as a year of solidarity in the struggle by all progressive forces on Earth against social deprivation and racial oppression of children, as a year in the fight for the future of mankind.

Protection of children cannot be ensured without a solution to such contemporary problems as the struggle for peace and

disarmament. This is the most important thing that can be done for children and young people at the present stage.

"Everything better for children" is the principle that was declared in our country after the Great October Socialist Revolution. Today, too, the privileges enjoyed by children are financed by thousands of millions of rubles from the state budget: Soviet society does not skimp on funds for implementing its comprehensive programme for the education and upbringing of the younger generation.

In the Soviet Union, the ten humane principles contained in the Declaration of Children's Rights, adopted twenty years ago by the UN General Assembly, have been both secured in the Constitution and implemented in practice.

Our society and Communist Party show tremendous attention to and concern for guarantees that each growing citizen of the country will assimilate the rich social and cultural experience of his nation, become a developed person, enjoy great vital energy and creativity, and show a deep loyalty to his country. This is the aim towards which all Soviet educational institutions are geared.

Guidelines for the Development of the National Economy of the USSR for 1976-1980, adopted by the 25th Congress of the CPSU, set the task of extending "the network of Young Pioneer centres, clubs for young technicians and nature lovers, children's clubs, sports and music schools and other children's establishments"¹ as one of the main factors in the programme for the social development of our people and raising their standard of living.

Extramural establishments, together with schools, are a reliable guarantee that each child will enjoy his or her right to an education, will develop his or her talents and interests, professional inclinations, scientific, technical and artistic creativity. In the USSR there are 4.5 thousand Young Pioneer homes and palaces, and 15,463 cultural and educational and extramural cultural establishments under the trade unions.

Over forty years ago, Young Pioneer song and dance groups were first formed in our country, and many of these are today famous throughout the world. They combine together the various types of children's artistic pastimes—choral singing, orchestral playing, dancing, solo and group singing, instrument playing.

There are now over four hundred such ensembles. One of them is the Loktev Song and Dance Ensemble of the Moscow City Palace of Young Pioneers and Schoolchildren. During the 36 years of its existence, this ensemble has given over 2,500 concerts. Now more than 1,200 children are involved in it, and over the years 15,000 have passed through its "school". There are many who, having taken part in the ensemble in their childhood, later took

up art seriously as their life's work. Thus, Vladimir Vasilyev, Tamara Sinyavskaya, and Natalya Bessmertnova, internationally famous soloists of the Moscow Bolshoi Theatre, took their first steps towards real art within this ensemble. In 1977, the ensemble became the first children's amateur group to receive the Jubilee Medal of the World Peace Council in recognition of its great and fruitful activities for the benefit of peace.

Eight years ago the famous Soviet choirmaster Victor Popov set up the big All-Union Radio and Television Children's Choir. Since then, the team has won renown not only at home; it has taken part in international festivals in Czechoslovakia, the FRG, the GDR, Hungary, Italy, and Poland. Not all the many thousands of children who have sung in this choir over the years have become professional singers, of course, but the team of instructors has instilled a love of music in all of them and taught them all to listen to music and appreciate it.

The Kishinev Young Pioneer Palace has its own cartoon film studio, where paper, cardboard and wooden heroes of fantastic films come to life in the children's hands. Then on the screen they sing, laugh and weep, in fact do everything the children teach them to. The studio's pupils understand the tremendous joy of creation, which enriches them spiritually and on many exerts a serious impact, even perhaps determining the future course of their lives.

The Zhdanov Young Pioneer Palace in Leningrad is an example of a tremendous and active love for children. Over forty years ago, the famous Anichkov Palace, a most outstanding Russian architectural monument, was handed over to them for their use. Leningrad plants and factories, the University, scientific institutes, museums and theatres all took part in setting up this Pioneer Palace. Engineers brought machine-tools and instruments for the laboratory and workshops, set up an automatic telephone exchange, installed radio in the building and equipped a radio laboratory. Shipbuilders presented young sailors with a wonderful laboratory with a mess and a testing tank for model ships. Workers from the Kinap Factory sent a cinecamera that had won first prize at an international exhibition in Milan. Textile workers wove silken wall-hangings. The Hermitage and the Russian Museum gave the Pioneer Palace extremely rare chandeliers and paintings. A group of famous Palekh painters decorated the walls of two rooms with scenes from fairytales by Pushkin and Gorky.

At the official opening of the Palace, the well-known Soviet children's writer Samuil Marshak said that it was not only a beautiful and rich Palace, but above all a sensible one. Here the children would find the keys opening many doors to real science,

technology and art. Here they would learn to work well and work as friends, together, collectively.

Today the Leningrad Pioneer Palace opens the doors to science, technology and art for more than ten thousand children. It runs 600 study groups and 15 clubs for pioneers, where much can be learned about 126 professions in modern production, science, technology, astronautics and biology.

The teaching staff of extramural institutions focus particular attention on making their establishments into a laboratory for the best experience in individual work with each child and for encouraging his or her creative development. Millions of children participate in the work of Houses of Young Pioneers, and each of them takes away a feeling of being needed, of participating in the great achievements of the nation.

Rationalisation and invention occupy an increasing place in the activities of young technicians. For instance, on request of the State Oil Engineering Design Institute young technicians of the Moscow City Pioneer Palace developed and manufactured a unique automatic device for mounting heavy equipment on petrochemical and oil-refining industry sites. Hundreds of small-scale machines, tractors, motor vehicles and other agricultural technology have been built in recent years by the young craftsmen of the Krasnodar and Stavropol territories, the Gorky, Perm and Rostov districts.

The young technicians' study group in the Novostroyev rural school in the Perm district of Siberia was set up fourteen years ago. Initially the children made models indoors, but later started to design and test genuine machines. Thus, one very important field has emerged in the creative work of young technicians: the designing of small-scale agricultural machinery—motorised ploughs and the "Jine" mini-tractor with semitrailer, for instance.

Today children interested in technology can join their local organisation: there are 1,085 centres and 1,283 clubs for young technicians, thousands of technical study groups in schools, extramural establishments, houses and palaces of culture.

The designing and modelling of equipment is not only an absorbing occupation for schoolchildren; it is also a good opportunity for providing them with vocational guidance, after all, today's young designers might be tomorrow's experts. Devices to facilitate work that have been invented by such children are already in use in industrial enterprises in Leningrad and the Donetsk, Sverdlovsk, Chelyabinsk and Zaporozhye districts.

In 1977 alone, more than 2,500 schoolchildren were awarded medals of the Exhibition of Economic Achievements of the USSR, where advances in all sectors of the economy are on permanent display.

The Exhibition has two special pavilions—"Young Nature Lover" and "Young Technician" telling of the results of creative research work by children. Not only children visit these, however; the heads of enterprises and scientific establishments often come, too. This is because they see the children as future scientists, rationalisers and inventors—and the children fulfil these hopes. Igor Lautkin, a seven-grade schoolboy from Vitebsk, built a self-propelled plough, a spreader for loose substances, and a street-cleaning machine. Pioneer Shovkat Avtamov from Tashkent, capital of the Uzbek Republic, has invented a chloral paste that has been applied in sericulture. He has been awarded an inventor's certificate by the USSR Academy of Sciences. Schoolboy Volodya Borisenko from Krasnodar has designed a sowing machine that was demonstrated at the 8th World Congress of Agricultural Machinery in the USA and is now undergoing tests on collective farms.

The words of Nadezhda Krupskaya come to mind about extramural work being extremely important, as it can assist in children's education and in creating the conditions required for their allround development.

Time spent in study groups and participation in mass events run by extramural establishments provide children with useful skills, add to the knowledge they acquire at school, awaken an interest in scientific research, USSR technology, and instil a feeling of the beautiful in them. Speaking of instilling feelings, we must bring in the topic of "Children and Nature", for a child's love of his country often begins with a love for the Nature and countryside familiar to him.

Nature study and protection groups, those on agricultural crop growing, fur farming, livestock breeding, flower growing and phenometeorology were set up right at the beginning of the young naturalists' movement and over the ensuing decades have accumulated very rich experience. The discoveries, achievements and problems of modern biology have aroused considerable interest among schoolchildren in such sciences as the physiology of animals and plants, the physiology of higher nervous activity, biochemistry, biophysics, agrobiolgy, agrochemistry, microbiology, as well as the problems involved in Man's exploration of outer space, aerospace biology and medicine. All this has engendered a rise in the scientific level of work in extramural study groups and the establishment of such groups in new fields.

The 641 young naturalists' centres, 1,100 young naturalists' summer camps and the huge number of study groups in schools, Houses and Palaces of Young Pioneers, help children to penetrate the secrets of living things, and teach them to love Nature. The first school forestry sections were set up over ten years ago. Now

in the Russian Federation alone there are more than 5,500 of them, catering for about 290,000 students. In five years, the young foresters planted 237,000 hectares of forest and established 11,000 hectares of tree nurseries.

In 1969, scientists from the Forest Institute of the Karelian Branch of the USSR Academy of Sciences took an active part in organising the "Berendey" school forestry section on the basis of the Karelia Republican Young Naturalists' Centre. The forestry section is made up of older children from schools in Petrozavodsk. All these years, the main part of the work undertaken by the school forestry section has been to create plantations of valuable tree species, to carry out experiments on multiplying and protecting them. The members of the "Berendey" section work in the arboretum, tree nursery, study rooms, masters' stations and in the Forest Museum. The young foresters are members of the All-Russia Society for Nature Protection, study in the Small Forest Academy, and maintain close ties with scientists of the Forest Institute of the Karelian Branch of the USSR Academy of Sciences.

On the reservations themselves, the young naturalists get to know the state system for protecting and restoring the rarest animals, plants, unique landscapes and other natural monuments, and take part in scientific research under the supervision of local experts.

No matter whom the young forester may become in the future, he will always be a real friend of Nature and never be wasteful of natural resources.

Extramural establishments provide their members with great opportunities for satisfying a wide variety of interests. Houses and Palaces of Young Pioneers, young technicians' centres and young naturalists' centres, musical and art schools are open to all.

Our account would be incomplete without mention of such an important sphere of extramural work as the physical education of children. Sports sections are set up in schools, Houses and Palaces of Young Pioneers, clubs, children's parks and at stadiums. There are also, however, special establishments—children's and young people's sports schools, which provide the young sportsman with a good training. The instructors in the schools try to discover the embryo sportsman's potential and help him or her to choose the sport best suited to his or her physical and psychological make-up.

Whatever the type of extramural establishments its main goal is the harmonious education of the young citizen. Its work must, therefore, have an ideological direction, and links with life and with communist construction in practice, take account of the age-group and individual features of the children and young people, provide an education within the group, develop the

initiative and social activity of the individual, and ensure the continuity and consistency of education.

Of fundamental importance for improving the activities of extramural establishments is the 25th CPSU Congress' support for a comprehensive approach to all education, i.e., for a close unity of the ideological and political, vocational and moral education, taking account of the specifics of individual groups of the working people.

With a comprehensive approach to the purpose and organisation of educative work with schoolchildren, the role of extramural establishments is rising in, jointly with primary and secondary schools, providing children with an ideological and political, vocational and moral education, developing their thirst for knowledge, and ensuring them an aesthetic and physical training.

The entire history of the development of extramural establishments testifies to the constant concern shown by the Communist Party and the Soviet Government for the younger generation. It would be impossible to imagine the lives of Soviet children without these establishments, for they are a clear indication of the Soviet way of life.

A concern for children means concern for the country's future, so it is not by chance that Leonid Brezhnev addressed workers in the Pioneer movement with these words: "Remember: today's children are tomorrow's builders of Communism." The purpose of the Soviet school and extra-school system is not only to give the pupil a rounded-out education but also to cultivate high moral standards so that teaching and extra-curricular activities form an integral whole.

Children make up a third of the population of the Earth. Our duty today is to do everything to ensure that they grow up healthy, kind, educated, and filled with the spirit of peace and international understanding, that they become genuine internationalists.

NOTE

¹ *25th Congress of the Communist Party of the Soviet Union. Documents and Resolutions*, Moscow, 1976, p. 109.



ANNUAL MEETING OF THE USSR ACADEMY OF SCIENCES

The Academy's annual General Meeting (March 1979) was opened by its President, Academician Alexandrov. The epoch of developed socialism, he noted, has brought with it new demands on science. A whole number of problems concerning Soviet society's further advance need to be treated in a new way. Guided by the decisions of the 25th Congress of the CPSU, social scientists have contributed greatly to the improvement of planning, of methods of stimulating national economic development along the lines of intensifying and increasing the efficiency of social production. Historians continued their work on a number of multi-volume publications: ten volumes of *A History of the Second World War* and five volumes of *A History of the Socialist Economy* have already appeared and work is being completed on the fundamental edition *History of the USSR*. Of great interest are the works on the world revolutionary process, the international working-class movement, philosophical aspects of natural science. All 30 volumes of *The Great Soviet Encyclopaedia* have been put out:

Academician Alexandrov then

touched on some promising avenues of research prompted by the needs of the Soviet and world economies. He dwelt on the necessity of speeding up the establishment of a large-scale industry to produce coal processing products—fluid hydrocarbons, gaseous fuels, of making wider use of nuclear power, and on other key problems facing Soviet experts in the natural and technical sciences.

Chief Learned Secretary of the Presidium of the USSR Academy of Sciences G. Skryabin reported on the Academy's activities in 1978. He noted that it was marked by science drawing still closer to practice, and coming to grips with national economic priority tasks. Soviet scientists, he said, have achieved many important results both for the economy and culture and for the progress of science itself. G. Skryabin and other speakers devoted much attention to international cooperation. The Academy's contacts with scientific establishments of the socialist countries were expanding as also the contacts with colleagues from the capitalist and developing countries. The Academy, its agencies and individual scientists are members

of 168 international scientific organisations.

Gold medals and prizes named after outstanding scientists were then presented at the Meeting. Academician Alexandrov who received the Lomonosov Gold Medal, the highest award in the natural sciences, delivered a scientific report. Academy awards were also presented to Soviet cosmonauts, young scientists and students.

NEW MEMBERS OF THE USSR ACADEMY OF SCIENCES

The 1979 annual General Meeting of the USSR Academy of Sciences elected 23 academicians and 83 corresponding members, including four full members (academicians) and nine corresponding members in the field of the social sciences.

The new academicians are:

Division of History (speciality "History of the USSR")

M. Kim, Sector Head of the Institute of the History of the USSR, USSR Academy of Sciences. Specialises in the history of the USSR of the contemporary period. Author of about 300 works on socialist and communist construction; on the general regularities of social and national development in the epoch of socialism, including the formation of socialist nations; on the history of Soviet culture, its periodisation, essence and content.

Division of Philosophy and Law (speciality "Philosophy")

J. Gvishiani, Director of the All-Union Systems Research Institute of the State Committee for Science and Technology; member of the Editorial Council of this journal. Specialises in Marxist-Leninist

The final session discussed organisational questions. Academician B. Petrov was elected Vice-President and Academician I. Glebov—member of the Presidium of the USSR Academy of Sciences. The General Meeting also approved the 74 heads of the Academy's scientific institutions who had been elected by the corresponding divisions of the Academy.

philosophy and sociology. Author of more than 250 works on the philosophical and sociological aspects of organisation and management, the scientific and technological revolution, global modelling, systems research methodology, and the evolution of the bourgeois concepts of organisation.

Division of Economics (speciality "Economics")

E. Primakov, Director of the Institute of Oriental Studies, USSR Academy of Sciences, Deputy Academic Secretary of the Economics Division of the Academy, member of the Editorial Council of this journal, specialises in the contemporary world economy and international relations. Author of more than 180 works with the accent on the social, economic and political problems of the developing countries, and particularly those of the Middle East. Author of the methods of short-term forecasting of the development of political situations, so-called situation analyses.

Division of Literature and Language (speciality "Literary Criticism")

A. Bushmin, Director of the Institute of Russian Literature (the

Pushkin House), USSR Academy of Sciences, specialises in the history of Russian classical and Soviet literatures, the theory of literature and the methodology of literary criticism. Author of more than 150 works on the historical development of the genre of satire in the system of realistic art, the theoretical and methodological aspects of the development of literature, and on the works of Saltykov-Shchedrin and contemporary Soviet writers.

The new corresponding members are:

Division of History
Speciality "World History"

I. Grigulevich, Honoured Scientific Worker of the Russian Federation, Sector Head of the Miklukho-Maklai Institute of Ethnography, USSR Academy of Sciences, Editor-in-Chief of the "Social Sciences Today" Editorial Board, Deputy Chairman of the Editorial Council of this journal, Editor of the *Races and Peoples* yearbook. Specialises in the history and ethnography of Latin America and the history of religion. Author of more than 100 works, including 20 monographs on the history of the national liberation movement, religion and atheism, the ethnography of Latin America, and also on the struggle against racism and racial discrimination.

A. Iskenderov, Honoured Scientific Worker of the Russian Federation, Deputy Director of the Institute of World History, USSR Academy of Sciences, specialises in world history, historiography, the history of Japan, current problems of the national liberation and the international working-class movements. Author of more than 80 works on these subjects.

Speciality "Archaeology"

A. Derevyanko, Secretary of the Young Communist League Central Committee, specialises in the archaeology of the Far East. Author of more than 100 works on the first settlement of the Far East, the emergence of productive economies, the Neolithic cultures and the cultures of the early Iron Age in the Amur area.

N. Dikov, Laboratory Head of the North-Eastern Research Institute of the Far East Science Centre of the USSR Academy of Sciences, specialises in the history of the North-East of the USSR from ancient times to the 17th century, and in the historiography of the non-capitalist development and socialist construction in that region. Author of nearly 150 works.

Speciality "History of the USSR"

Yu. Kukushkin, Dean of the Department of History, Moscow State University, Deputy Chairman of the USSR National Committee of Historians, specialises in current problems of the history of the USSR. Author of more than 70 works. The history of the Soviet state apparatus as the major instrument of building communism is central in his studies.

Division of Philosophy and Law
Speciality "Law"

V. Laptev, Sector Head at the Institute of the State and Law, USSR Academy of Sciences. Specialises in economic law. Author of more than 200 works on the legal aspects of the organisation and activity of socialist enterprises and on the legal regulation of economic activities abroad.

Division of Economics
Speciality "Economics"

V. Makarov, Deputy Director of the Institute of Mathematics of the Siberian Division of the USSR Academy of Sciences. Specialises in the application of mathematical methods in the economy. Authored more than 80 works on the development and mathematical analysis of economic models, their application in national economic and branch planning, production efficiency and coordination of economic interests.

Division of Literature
and Language
Speciality "Literary Criticism"

Yu. Vipper, Head of Department at the M. Gorky Institute of World Literature, USSR Academy of Sciences. Specialises in the history of West European literatures, from the Middle Ages to the 20th century. Author of more than 150

works, many of which are devoted to the French literature of the 16th-17th centuries.

Speciality "Linguistics"

T. Gamkrelidze, Director of the Tsereteli Institute of Oriental Studies of the Georgian Academy of Sciences. Specialises in general and comparative-historical linguistics, the ancient Oriental and Kartvelian languages, and also in structural and applied linguistics. Author of more than 50 works.

Many works by the scholars listed above have been published abroad and also in our journal.

The *Social Sciences* Editorial Board congratulates the new full members and corresponding members of the USSR Academy of Sciences and wishes them every success in their creative endeavours.

Congresses • Conferences • Symposiums

INTERNATIONAL CONGRESS OF ANTHROPOLOGICAL AND ETHNOLOGICAL SCIENCES

More than 2,000 scientists from over 70 countries participated in the 10th International Congress of Anthropological and Ethnological Sciences in New Delhi and a number of other cities in India in December 1978. Among the delegations from socialist countries the biggest ones were from the Soviet Union (38 members) and Poland (18). Soviet scientists prepared 90 papers for the congress which were published in four collections: "Soviet Studies in Anthropology", "Soviet Studies in Ethnography", "General Problems of Ethnography" and "General Problems of Anthropology and Ethnography of the South Asia". The total number of papers presented to the congress exceeded 2,100.

The general trend of discussions and the atmosphere at the congress were largely determined by the fact that it was held, for the first time, in a developing country—India, one of the biggest multinational states, the cradle of one of the most ancient world civilizations (Indian scientists comprised almost one-half of all participants in the congress). Discussions centred around the problems of the social development of Third World coun-

tries, which became so urgent in view of the tumultuous population growth there, essential changes in agriculture, industrial development, expansion of urbanisation, the rising level of education among the popular masses, emancipation of women, etc.

Five plenary sessions of the congress were devoted to the main subject of the congress—"Anthropology and the Challenges of Development". The first session discussed general world problems, and the subsequent ones, problems of individual regions.

The papers submitted to these sessions covered quite varied subjects. At the session devoted to Asian problems pride of place was taken by the problems connected with the population growth in the countries of this region and the influence of this phenomenon on their future development. At other sessions papers dealt with the processes of the "modernisation" of the village. Western scientists, D Foster (USA), for example, tried to substantiate the thesis about the beneficial influence of capitalist "modernisation" of the village in the Third World. This

thesis was opposed by a number of representatives of the developing and socialist countries, who noted that rural development under capitalism and the private ownership of land lead to the aggravation of social inequality in the village, the pauperisation of a considerable part of the peasants and their forced migration to towns, where they join the army of unemployed. S. Arutyunov and Yu. Mkrtumyan (USSR) and T. Hodder (Hungary) in their papers emphasised the advantages of the socialist transformation of the village, notably the fact that this transformation leads not to a degradation and destruction of folk culture, but to the flourishing of its progressive traditions.

Almost all papers presented to the plenary sessions emphasised the essential practical significance of physical and cultural (social) anthropology which provide a scientific foundation for solving many pressing problems of the social development of the Third World countries.

About 90 special sessions on definite subjects were held within the framework of the congress, including nearly 60 ethnological, seven archaeological and four linguistic; besides, there were 23 symposiums and six commissions dealing mainly with ethnological questions.

The congress participants displayed much interest in the work of the symposium on ethnic integration, where Soviet scientists presented nine papers. The symposium was chaired by the head of the Soviet delegation, Academician Yu. Bromley. In the past decade, research into ethnic processes has been in progress in the USSR. Soviet scientists have demonstrated

that the processes of ethnic drawing closer together and integration, manifested, among other things, in the integration of cultures of various peoples on a countrywide scale, or in its large regions, have been most characteristic of the present-day advancement of nationalities. Yu. Bromley's paper "Cultural Aspects of Ethnical Processes in the USSR", as well as other papers by Soviet ethnologists defined the general laws of the processes of ethnic integration in various regions of the USSR, conditioned by the impact of the general socio-economic and political factors, and some local specific features of these processes. It was noted that an organic combination of the growing national consciousness of the indigenous peoples with the development of their feeling of affiliation to the entire Soviet people is a reflection of the successes scored in solving the nationalities question in the USSR. The Soviet ethnologist, A. Sedlovskaya, devoted her paper to comparing the ethno-cultural development of India with that of Soviet Central Asia.

Of considerable methodological significance was the symposium "Neo-Evolutionism and Marxism". Its chairman, E. Markaryan (USSR), presented a paper "Neo-Evolutionism and Problems of Ecological Studies in Culture". The symposium also heard papers by S. Arutyunov (USSR), I. Sellnow (German Democratic Republic), D. Shimkin, M. Harris (both USA), and others. The symposium dealt with certain stages of the history of neo-evolutionism which is based on the idea of technological determinism. Marxist scholars noted the basically materialistic nature of this trend, but at the same time revealed its limited character.

It should be pointed out that neo-evolutionists are more and more often seeking answers to the problems of social development in historical materialism. The eclectic concept of "cultural materialism" advanced by Harris was criticised at the symposium; this trend tends to unite neo-evolutionism, structuralism and historical materialism.

Lively discussions were held at the session devoted to "Nomadism". They centred around the problems of overcoming the backwardness of the nomadic and semi-nomadic peoples and raising their educational level, etc., as well as the question of the role of ethnology in solving the problems of nomadism. K. Karakeyev, Corresponding Member of the USSR Academy of Sciences, and other Soviet delegates dwelt on the experience of transferring to a settled way of life dozens of nomadic and semi-nomadic cattle-breeding peoples in Central Asia and hunters and reindeer-breeders in the North, about the substantial aid given by the state to these peoples and the considerable role of ethnologists, who advanced practical recommendations for reorganising the economies and everyday life and developing education (the creation of written languages, for example).

As we have already mentioned, the problems of population growth commanded considerable attention at the congress. The demographic foundation of this problem was examined at the session "Social Demography". V. Kozlov (USSR) in his paper "Ethno-Cultural Factors of the Birth-Rate (on the Ethnography's Part in Studying Population Problems)" showed the great significance of ethnology and a new discipline—ethnic demog-

raphy—in studying such important factors of birth-rate as religious canons and traditions of large families, the forms of family organisation, the position of woman in the family and society, etc. The paper presented by S. Brook (USSR), "Changes in the Dynamics and Structure of the Population in the Postwar World", gave a general picture of the demographic situation. The author maintains that the period of the very rapid growth of the world population (mainly due to the developing countries) has ended, and today the rates of the natural growth of the population are steadily declining in the majority of countries. However, this general trend does not exclude essential local specifics. In this connection the paper presented by Moni Nag (USA), who presided at the session, "Fertility-Increasing Effects of the Process of Modernisation", was of great interest.

Some papers presented at the symposium "Biology and Culture", devoted mainly to the relationship of the biological and socio-cultural aspects of the dynamics of certain ethnic groups of India, were close in their subject-matter to ethnic demography. The discussion that ensued centred around the questions of the integration of biological and social sciences in the system of anthropological knowledge. E. Markaryan, speaking on the subject, emphasised the importance of a systems approach, as well as the need and difficulties of unification of the means of cognition (theory, methods, terminology, etc.), when integrating greatly differing sciences.

The symposium "Origin of the State" was of considerable importance methodologically. It discussed the conditions of the formation

and the distinguishing features of the development of early class states. A majority of scientists from capitalist and developing countries participating in this symposium declared their adherence to Marxist methodology, or a certain community of views with this methodology. However, many of them do not agree with the definition of class adopted by Marxism, considering that a state can emerge as an "extended community" before the formation of classes. At the same time the attempts of some Western scholars to prove that Marx' views on the origin of the state suffer from "Eurocentrism" and therefore should not be applied to non-European realities, did not find much support.

Among other interesting features of the congress was a session on ethnogeny which examined the initial stages of the formation of ancient and modern peoples on archaeological and anthropological materials; a session "Family and Marriage" which discussed the main trends of the changes in the social status of women in the developing countries; a session on the questions of university training of specialists, whose participants emphasised the importance of combining general and regional knowledge among ethnologists and including ethnology in the curricula of all humanitarian faculties.

The proceedings of the commission on futurology should also be mentioned. It was mainly attended by Indian scientists. They summed up the results of a conference that had been held on the eve of the congress and discussed a possible ethno-cultural situation in India by the year 2000, particularly, the future of tribes, family, religion, etc. The basic conclusion of the

commission was that all phenomena in the country's traditional life would be preserved, but the general social situation in which they would manifest themselves would substantially change under the impact of population growth and other factors.

The congress allowed its participants to broadly familiarise themselves with many pressing problems of the developing countries, and also with complicated processes taking shape in ethnological science in these countries, formed mainly on the basis of Western concepts. However, recently scientists in the developing countries have been striving to get rid of this influence. In our view, this can be explained by two main reasons. The first is that scientists in the liberated countries are coming to realise more and more clearly the neo-colonialist trend of the Western ethnological schools, many of which (English functionalism, American racism and ethno-psychologism, etc.) to some extent, support imperialist aspirations. The second reason lies in the fact that almost all these schools are based on concepts of stagnation, or at any rate, on the great conservatism of ethnological phenomena, on the "immutability" of the traditional modes of life of the Asian, African and Latin American peoples. The concepts and methods of these schools therefore prove of very little value in studying transitional societies of the developing countries, essential changes in their culture and everyday life, the dynamics of ethnic processes, etc.

To sum up, the congress demonstrated the growing prestige of Marxism among the scientists of the developing countries, their

growing interest in the ethnological science of socialist countries and Soviet experience. In this connection one should mention the statement made by the Congress President, L. Vidyarthi of India, at the opening session. He said that Soviet ethnology developed on the Marxist-Leninist foundation, renovated the concept of social evolution, introduced new ideas in world anthropology and made it more balanced, having reduced the

sphere of Anglo-American influence.

At the congress, elections were held to the leading bodies of the International Union of Anthropological and Ethnological Sciences. C. Belshaw (Canada) was elected President, and Yu. Bromley—one of the Vice-Presidents. The next, 11th, congress is to take place in Canada in 1983.

V. Kozlov

NEW STAGE IN IMPLEMENTING LENIN'S COOPERATIVE PLAN

An all-Union scientific conference devoted to theoretical and practical problems of the realisation of the ideas contained in Lenin's cooperative plan at the present stage was held at the Institute of Economics of the USSR Academy of Sciences in December 1978. It was attended by scientists from the USSR Academy of Sciences and the Academies of Sciences of the Union Republics, professors and lecturers from higher educational establishments, associates of branch research institutes, officials of the State Planning Committee, the Ministry of Agriculture and other ministries and departments as well as managers of collective and state farms.

The conference discussed results of investigations on such comprehensive problems as the industrialisation of agriculture, the structure and management of the agrarian-industrial complex, methodological questions of the efficiency of agricultural production, property relations and the socio-economic development of rural areas.

In opening the conference, the Director of the Institute of

Economics of the USSR Academy of Sciences, E. Kapustin, Corresponding Member of the Academy, emphasised that the present-day agrarian policy mapped out and developed by the 23rd, 24th and 25th Congresses of the CPSU, and the March 1965 and July 1978 Plenary Meetings of the Central Committee of the Communist Party has marked a transition to a new stage in implementing the ideas contained in Lenin's cooperative plan. The main targets of this stage are to ensure a high efficiency of agriculture, reliably supply the country with food and agricultural raw materials, draw closer the material and cultural standards of life in town and countryside, improve the two forms of socialist property and create new forms of connections between the town and village on the basis of an organic combination of industry and agriculture. In view of this the role of agricultural science and its fundamental theoretical research was especially stressed.

Member of the All-Union Lenin Academy of Agricultural Sciences, A. Nikonov, delivered a paper "Economic Problems of the New

Stage of Implementing Lenin's Cooperative Plan". His report was centred around primary production aspects and socio-economic tasks of agricultural development. Specialisation and concentration of agricultural production on the basis of interbranch cooperation and agrarian-industrial integration are of primary importance for raising the efficiency of agricultural production and the entire agrarian-industrial complex of the country. A. Nikonov emphasised the role of planning in agrarian-industrial production and better utilisation of labour resources and commodity-money relations. A comprehensive solution of the economic and social problems in modern conditions is of paramount importance for the realisation of the main trends of agrarian policy, he stressed.

Member of the Academy of Agricultural Sciences, V. Tikhonov, read a paper "Industrialisation of Agriculture and the Agrarian-Industrial Complex". Among the questions he dealt with were the main directions of scientific and technological progress and the essence of industrialisation of agriculture and interbranch connections of the agrarian-industrial complex and its efficiency.

In analysing the interbranch connections of the agrarian-industrial complexes, the speaker noted that the development of social production in the conditions of the scientific and technological revolution is proceeding under the impact of the growing variety of society's requirements and an expansion, in this connection, of the variety of the goods produced, with the branch structure of production becoming progressively more complicated. This leads to a more narrow

specialisation of branches and an extension of interbranch ties. Integrated systems of multibranch national economic and regional complexes are emerging. In these conditions the significance of interbranch proportionality becomes greater as a decisive factor in the dynamic development of social production. Hence the objective necessity of evening out the basic parameters of the material and technical basis of production in all spheres of the economy. The expansion of the interbranch ties of agriculture within the framework of the agrarian-industrial complex is manifested in the changing structure of material and labour expenditures, as well as in the change in the growth rates and structure of the basic production assets of agriculture and the related branches. Essential changes in agriculture are taking place under the impact of agrarian-industrial integration: its material and technical basis is expanding, specialisation of production is deepening and the structure of production is becoming more complex.

In conclusion, V. Tikhonov noted that organic unity between agriculture and industry is only possible under socialism which eliminates social inequality between town and village. The economic mechanism of the integration of agriculture and industry is provided by their cooperation developing in a planned way.

L. Kassirov's paper "Methodological Problems of the Efficiency of Agricultural Production" was devoted mainly to analysing the economic essence of the criterion and indicators of the efficiency of socialist production and their specific features in agriculture. The net product or the

national income which reflects the aim of socialist production can also be regarded as the criterion of the effect of socialist agricultural production. At the same time, the speaker noted, the problem of production efficiency has not been elaborated sufficiently to form its branch characteristics on the basis of this criterion. The net income could be used as an additional criterion corresponding to the economy of developed socialism and to the practice of planning and management of production in a branch aspect. According to L. Kassirov, this indicator does not replace the general complete criterion of effect, but is its component element. It is suggested to work out a general criterion of efficiency for each element, which will provide an intensive incentive to ensuring the given rates and proportions of the development of branches and spheres of the national economy.

S. Syomin, in his paper "On Improving Socio-Economic Relations in Agriculture Under Developed Socialism", dwelt on the socialisation of agrarian production, and laws of the development of socialist property in agriculture; on improvements in the mechanism of exchange and distribution relations; on problems of the work force and growth of labour productivity in the conditions of the interbranch cooperation and agrarian-industrial integration. The speaker emphasised that under socialism the socialisation of production is of a planned character. At the present stage the state and collective farm-cooperative forms of property are drawing closer to one another, there is a trend towards close interaction, especially within the framework of inter-

branch enterprises and associations. Interbranch cooperation and agrarian-industrial integration emerge here as a special form of socialist socialisation.

L. Nikiforov spoke about the socio-economic development of the village and noted that the approach corresponding more fully to the present development stage is one that ensures a gradual overcoming of socio-economic distinctions between town and village and the formation on that basis of a single socio-economic structure uniting town and village in various respects and taking into account regional and national features. Within the framework of this approach the present state and prospects of the social division of labour between town and village were examined, as well as the expansion of the spheres of the application of labour in the countryside, forms of settlement and the narrowing up the gap between the living standards and the mode of life of the urban and rural population.

The role and significance of the national economic and regional agrarian-industrial complexes in raising the efficiency of social production, and also the problems of improving the economic mechanism of the agrarian-industrial complex were examined by V. Mozhin, M. Bronstein, Corresponding Member of the Estonian Academy of Sciences, and A. Rütel, Secretary of the Central Committee of the Communist Party of Estonia. They noted that district agrarian-industrial complexes made it possible to solve the numerous production and social problems of rural areas. For instance, in Estonia they coordinate the work of agricultural enterprises, their servicing and the

procurement and transportation of agricultural produce.

P. Ignatovsky devoted his paper to the criteria of scientific and technological progress in agriculture. He examined certain trends in this progress and made proposals for improving the structure of capital investment in agriculture, which now exceeds 27 per cent of all capital investments in the national economy. Higher labour productivity, the speaker said, is achieved not only by utilising machines and mechanisms, but is also due to the sum total of the economic, organisational and social conditions of production.

T. Zaslavskaya, Corresponding Member of the USSR Academy of Sciences, delivered a paper "On Ways of the Long-Term Socio-Economic Development of the USSR Agrarian Sector and the Tasks of Sociological Research", in

which she examined questions of providing skilled workers for agriculture, their educational level and its correspondence to the requirements of industrialised agriculture. She reached the conclusion that to make educated and skilled workers settle down in rural areas it is necessary to implement a whole range of measures for bringing closer together the living standards and the mode of life of the urban and rural population. Special attention was devoted to making a polyvariant comprehensive forecast of the social development of the village for 1990 and 2000, and also to the further advancement of sociological research.

The above-mentioned papers delivered at the plenary session were then discussed in four panels, with over 400 people attending.

M. Sidorova

SOVIET AND AMERICAN HISTORIANS MEET

The Third Colloquium of Soviet and US historians was held in Moscow in November 1978. The participants discussed problems of the political and socio-economic history of Russia and the USA in the second half of the 19th and first decades of the 20th centuries. The American delegation was headed by M. Thompson, Executive Director of the American Historical Association, and the Soviet by Corresponding Member of the USSR Academy of Sciences, S. Tikhvinsky, Deputy Chairman of the National Committee of Soviet Historians.

The participants in the colloquium discussed three topics: the main trends of the social and economic development of Russia

and the USA (second half of the 19th-beginning of the 20th centuries); the role of the state in the social and economic development of society in Russia and the USA (second half of the 19th-beginning of the 20th centuries); social movements in Russia and the USA (1865-1916).

On the first topic, a paper was presented by Corresponding Member of the USSR Academy of Sciences, I. Kovalchenko, and N. Selunskaya ("Sharecropping on Gentry Estates in Russia at the Close of the 19th and Beginning of the 20th Century), which defined the historical and socio-political significance of the study of the sharecropping system in Russia's landlord economy and its close

connection with the nature of the agrarian system in postreform Russia, with the prerequisites of the bourgeois-democratic and socialist revolutions. The paper convincingly showed the important nature of a systems approach, and modelling and quantitative methods in studying the sharecropping system in the landlord economy on the basis of processing mass historical sources. In the ensuing discussion, both Soviet and American scholars recognised the efficiency of the methods of research suggested by Kovalchenko and Selunskaya and agreed with the concrete historical evaluations outlined in the paper. The American expert on the paper, D. Field, spoke about the expediency of publishing this work in the USA.

Professor W. Parker of Yale University read a paper on the same topic: "Historiography of the Post-Bellum Economic History of the South with Special Reference to Organization of Cotton Agriculture". He devoted much attention to the reasons for the economic lag of the Southern regions after the abolition of slavery, and to an analysis of the development of the class structure in the US South following the Civil War. Parker spoke against the conceptual interpretation of historical process, accusing bourgeois historians of relying on theoretical premises in analysing historical events, and especially Marxist research methodology of determinism. The development of the American South, where the percentage of hired workers was low, disproves, in Parker's opinion, the universal nature of the Marxist method. Speaking in the discussion on his paper Soviet scholars maintained that the phenomenon of the

American South confirmed the correctness of the Marxist conclusion that the development of that region had not taken the classical capitalist path, but proceeded along the road of sharecropping and survivals of slavery.

Professor R. Sutch of California University also spoke on this topic. His paper ("Sharecropping in the Cotton-Growing Regions of the American South Following the Civil War") based on empirical data evoked a lively discussion. The speakers noted that Sutch's conclusions were based on an analysis of a wealth of statistical material. Of interest are calculations about the various forms of land property based on handwritten materials of the 1880 Census, on the strength of which Sutch asserts that sharecropping was the principal form of the organisation of agricultural production in the South, and was the main cause of the economic backwardness of that region. At the same time Soviet scholars noted with regret that the study of problems in isolation from an analysis of socio-political and socio-economic processes detracts from the level and significance of Professor Sutch's work. The Soviet historian G. Kuropyatnik was the expert on the subject of the American scholars' papers.

The first to speak on the second topic was Professor A. Chandler of Harvard University. His paper—"The Rise of Large-Scale Industrial Enterprise in the United States"—examined the changing organisational forms of American capitalism beginning in the 1880s and up to the Second World War. The speaker advanced his basic thesis that throughout that period there had been a "managers' revolution" in the USA, which sig-

nified the shifting of economic power from the hands of the owners of capital into the hands of the class of managers. Highly assessing the analysis of the evolution of the organisational structure of capitalist enterprise conducted by Chandler, Soviet scholars noted, however, that these changes in organisational forms do not change the nature of capitalist enterprise—something on which Chandler insists. This conclusion of Chandler's paper was opposed by a Marxist-Leninist analysis of the organisational forms of capitalism in the epoch of imperialism, the conclusion that the isolation of capital-function from capital-property did not undermine the foundations of the economic power of monopoly capital. Valuable considerations concerning the paper were expressed by some American scholars who objected to defining managers as a class that controls the economy. They also claimed that the class of the owners of capital is a constant, as are their privileges and their economic power which is transferred from generation to generation.

Professor D. North, University of Washington, also spoke on the second topic. He delivered a paper "Structure and Performance: the Tasks of Economic History". North examined changes in the role of the state in the socio-economic development of the USA at the end of the 19th—beginning of the 20th centuries from the point of view of contemporary economic history. He defines such factors as the organisational and functional changes in the capitalist market, the attitude to the problem of the environment, the ideology of the influential members of the state administration, etc., as ones deter-

mining the state's position in socio-economic life. Soviet participants in the discussion noted that the author of the paper underestimated such factors as the role of the class struggle, especially the position of the working class, which has a considerable impact on the forms and direction of the socio-economic activity of the state. At the same time, it was pointed out that North ascribed significance to ideological differences in American society, which influenced state policy in the socio-economic sphere. It should be mentioned that Parker who denied the significance of ideological differences in the successfully developing American society, opposed North's view.

The Soviet historian, A. Furse- nko, spoke as an expert on the subject of Chandler's and North's papers.

V. Laverychev spoke on the second topic for the Soviet side. His paper "The Role of the State in Social and Economic Development of Russia (Second Half of the 19th—Beginning of the 20th Centuries)" analysed the laws of the state's impact on the socio-economic life of Russia. The author warned against exaggerating the organising role of the state in Russia's economic life, dwelt on the problem of dependence of state finances on the domestic and foreign money markets and on banks, and showed the process of the merging of monopolies with definite state links and the formation of personal unions. Laverychev's paper also dealt with the problem of the development of the institution of managers and managerial hierarchy. Both American historians (including their expert, Professor J. McKay) and their Soviet counterparts agreed

with the main premises and conclusions of the paper.

Professor A. F. Scott of Duke University spoke on the third topic. Her paper—"The Struggle for Extended Participation in Political Life in the United States, 1863-1914"—discussed one aspect of the subject, namely, the movement for women's suffrage. Noting the importance of studying the problem of equal rights for women in the United States and praising the author for the interesting historical sources she drew on in preparing her paper, Soviet scholars (including I. Belyavskaya, an expert on the subject) pointed to the purely empirical nature of the paper, the lack of theoretical elaboration of the subject, and also to the fact that this problem was discussed outside the context of the entire socio-political and economic life of the USA, in isolation from the principal class movements of the epoch of imperialism, the struggle of the working class and farmers, the movement of the Blacks, etc.

The Soviet side submitted a joint paper by K. Shatsillo, A. Korelin and S. Tyutyukin on this topic ("Social Movements in Russia—the End of the 19th—Beginning of the 20th Centuries"). The paper substantiated the leading role of the working class and the Social-Democratic Party in the struggle

against tsarism and for democratisation of society and examined in detail the significance of the peasant and bourgeois-liberal movements in the conditions of the growing revolutionary crisis in Russia.

The American historian D. Field, who expressed dissatisfaction over the too general character of the paper, was criticised by his colleague, R. Manning, an expert on the subject. She noted the high professional level of work and an interesting examination of individual aspects of the subject.

The participants in the colloquium heard with great interest a communication by I. Dementyev (USSR) on "Leo Tolstoy and Social Critics of the USA".

In conclusion representatives of the two sides exchanged their impressions of the results of this meeting. The consensus of opinion was that the possibilities of comparative analysis had been positively used during the discussion on the history of both countries. The desire was expressed for more thorough comparative studies of individual problems of the socio-economic history of Russia and the USA. Both sides held the view that the necessary conditions had been created for the successful outcome of this traditional meeting.

S. Askoldova

CHRONICLE

* By a decree of February 28, 1979, the Presidium of the USSR Supreme Soviet has instituted the Day of Soviet Science which shall be celebrated annually on the third Sunday of April.

This review covers the events of November 1978-January 1979.

* The Presidium of the USSR Academy of Sciences has awarded the M. V. Lomonosov gold medals for 1978 to Academician A. Alexandrov (USSR) for his important work in atomic science and technology, and to Professor A. Todd (United Kingdom) for his outstanding achievements in organic chemistry. The

M. V. Lomonosov Gold Medal is the highest award of the USSR Academy of Sciences and is presented every year to one Soviet scientist and to one scientist from abroad for outstanding achievements in the natural sciences.

Academician A. Alexandrov is a noted scientist who specialises in a number of fields of modern physics and technology. He is President of the USSR AS, a prominent organiser of Soviet science, Director of I. V. Kurchatov Institute of Atomic Energy, thrice Hero of Socialist Labour, laureate of the Lenin and the State Prizes of the USSR.

Professor A. Todd is an authority in organic chemistry, founder of several branches of natural compounds chemistry and bio-organic chemistry, specialising in nucleic acids. President of the Royal Society since 1974.

* *The session of the general meeting of the USSR Academy of Sciences held in Moscow was devoted to the growing role of science in fulfilling tasks facing agriculture.* The session was opened by Academician Alexandrov who called on participants to chart a comprehensive scientific programme to meet the demands of agriculture. The programme should be a joint endeavour of the USSR Academy of Sciences, the All-Union Academy of the Agricultural Sciences and research institutes.

The following reports were heard at the session: "Urgent tasks of Soviet agriculture at the present stage" (V. Mesyats, USSR Minister of Agriculture), "Fundamental sciences at the service of agriculture" (Yu. Ovchinnikov, Vice-President of the USSR AS) and "The tasks of

agricultural science in the light of the decisions of the July (1978) Plenum of the CPSU Central Committee" (P. Vavilov, President of the All-Union Academy of Agricultural Sciences). Co-reporters at the session were Vice-Presidents of the USSR AS P. Fedoseyev and A. Sidorenko, Academicians Ye. Mishustin and S. Volkovich, Corresponding Members of the USSR AS G. Skryabin and K. Frolov.

* *Discussions were held in New York between a delegation of the USSR Academy of Sciences headed by G. Skryabin, Chief Scientific Secretary of the USSR AS, and a delegation of the American Council of Learned Societies headed by its President R. Lumiansky.*

The parties discussed work under the Agreement on Scientific Exchanges between the USSR AS and the ACLS during 1976-1978, exchanged opinions about the activities of the ACLS-USSR AS Commission on the Humanities and Social Sciences, and mapped out practical measures to promote scientific exchanges. The protocol signed by the heads of the two delegations says: "The parties noted with pleasure that the discussions between the delegations of the USSR AS and the ACLS were conducted in a spirit of mutual understanding and good will which facilitates the constructive resolution of questions about further academic exchanges."

* *An all-Union theoretical conference "Philosophy and the Arts Under Developed Socialism" was held in Moscow by the Philosophical Society of the USSR and the Scientific Council of the USSR AS on Problems of*

Aesthetics. An introductory speech was made by Academician F. Konstantinov, President of the Philosophical Society. A. Zis, D. Sc. (Philos.), delivered a report "Philosophical thought and art." The participants heard four reports and more than 50 communications.

* A symposium "The Usefulness of Marxist Dialectics in Science", held in Houston (Texas) within the framework of the 145th Annual Meeting of the American Association for the Advancement of Science, was devoted to the theme "Science and Technology: Resources for Our Future".

The following papers were read: "Dialectics in the problem of nature and the social functions of science" (V. Kelle, USSR, who also delivered a lecture "Ideology and social consciousness" at New York University), "The philosophical basis of economic science" (V. Perlo, USA), "Individual and society: conceptual problems of social science" (E. Leacock, USA), "Marxist materialism in teaching biology" (G. Allen, USA), "Dialectics, truth and scientific usefulness" (F. Cunningham, Canada), "The dialectics of causality in physics today" (J. Vigier, France).

The symposium was initiated by L. Motz and L. Talkington.

* Participating in the *International Seminar of Kushan Studies* devoted to history, archaeology and art of the Kushan Kingdom, which took place in Kabul, were scholars from Afghanistan, France, FRG, India, Italy, Pakistan, USA, USSR and the United Kingdom. Nearly 30 reports were heard. The Soviet scholars read two papers: "Kushan

studies in the USSR, 1968-1978" by B. Iskandarov, Director of the Institute of History under the Tajik Academy of Sciences, and "Archaeological investigations of Kushan monuments in the south of Uzbekistan" by G. Koshelenko, Cand. Sc. (Hist.).

Various aspects of the development of the productive forces, the relations of production, the socio-economic and political structure of Kushan society are to be discussed at the next seminar. G. Koshelenko was elected member of the International Centre of Kushan Studies.

The participants in the seminar were received by Nur Mohammad Taraki, Chairman of the Revolutionary Council and Prime Minister of the Democratic Republic of Afghanistan.

* More than 200 scholars from Bulgaria, Cuba, Czechoslovakia, GDR, Hungary, Mongolia, Poland, Romania, USSR and Vietnam took part in the *scientific conference "Main Trends in Modern Research into the History of Historical Science in Socialist Countries"* held in Moscow by the Division of History, USSR AS and the Scientific Council, USSR AS, on the problem "The History of Historical Science". The introductory speech was made by Academician Militza Nechkina, Chairman of the Scientific Council. The participants heard and discussed 19 reports.

* A *scientific conference in Moscow to mark the 20th anniversary of the Cuban Revolution* was sponsored jointly by the Institute of Marxism-Leninism, the Academy of Social Sciences at the CC CPSU and the USSR Academy of Sciences. It was

opened by Academician A. Yegorov.

The following reports were delivered at the plenary session: "The historical significance of the Cuban Revolution and its role in the world revolutionary process" by Professor B. Popov; "Twenty years of the Cuban Revolution" by F. Gróbart, Member of the Central Committee of the Cuban Communist Party, Director of the Institute of the History of the Cuban Communist Movement and Socialist Revolution; "The Republic of Cuba in the socialist community" by Corresponding Member of the USSR AS O. Bogomolov. Then the work of the conference proceeded in the panels "Socio-Economic Development of Cuba", "Socio-Economic Problems of Cuban Development" and "Foreign Policy of the Republic of Cuba—a Policy of Consolidating Peace and Security of Peoples", where more than 40 reports by Soviet and Cuban scholars were heard.

* A scientific conference devoted to the 60th anniversary of revolutions in Central and South-Eastern Europe was held in Moscow by the Scientific Council of the USSR AS on the comprehensive problem "The History of the International Working-Class Movement" and the Institute of International Working-Class Movement. The participants heard and discussed the reports: "The November revolution in Germany and the ideological struggle around its historical heritage" (Ya. Drabkin), "The historic significance of the November revolution" (G. Katsman), "Specific features of the revolutionary process in countries of Central and South-Eastern Europe" (I. Yazhborovskaya), "The revolution of 1918 and the formation of

the Austrian nation" (O. Velichko), and "The Communist Party of Austria and the struggle for management of production" (G. Ardayev).

* An introductory speech at a session in Minsk of the *All-Union school of young scholars "Methodological Problems of the Historical Science in the Light of the Decisions of the 25th Congress of the CPSU"* was made by Academician A. Narochnitsky.

I. Berkin, D. Sc. (Hist.), delivered a report "Methodological significance of the books *Little Land, Rebirth*, and *The Virgin Lands* by Leonid Brezhnev, General Secretary of the CC CPSU, Chairman of the Presidium of the USSR Supreme Soviet. Then the work of the school proceeded in colloquiums "The Methodology of Studying the History of the Great October Socialist Revolution", "Methodological Problems of Studying the History of Socialist and Communist Construction in the USSR", "The Critique of Methodological and Theoretical Principles of Modern Bourgeois Historiography".

* Participating in the readings to commemorate the work and life of E. Kosminsky (1886-1959), an eminent Soviet mediaevalist, were nearly 70 scholars from many scientific centres of the Soviet Union. They heard the reports: "Social mobility and social psychology of the peasantry. France, the 14th-17th centuries" (A. Lyublinskaya); "Traditions of civic humanism in Italy in the second half of the 15th century" (L. Bragina); "Humanistic programme of the Reformation and the struggle of the humanists against scholasticism in Europe at

the beginning of the 16th century" (I. Osinovsky); "The Moscow autograph of Bessarion of Nicaea" (B. Fonkich) and "The new materials about the English Utopian-socialists from Kosminsky's archives" (G. Kucherenko, V. Dunayevsky).

* The 18th World Management Congress sponsored by the World Council of Management (CIOS) was held in New Delhi. It was attended by more than 1,300 scholars from 32 countries. The Soviet delegation included Professor B. Milner, Deputy Director of the All-Union Institute for Systems Research, R. Rakhimov, Director of the Institute of Economics of the Tajik Academy of Sciences, and S. Yegorov, researcher.

The motto of the congress was "The Prospects of management for economic growth and public welfare". Prime Minister of India M. Desai, President of All-India Management Association P. Pandhi and President of CIOS B. Ram addressed the participants.

Besides plenary sessions, work proceeded in panels "Management Culture", "Management and Technology", "Management of Development for Human Welfare" and "Managers' Concerns in the Next Decade". The Soviet delegation presented the papers "Management and the scientific and technological progress" (Academician J. Gvishiani and B. Milner) and "The theory and practice of managing the formation of the territorial-production complexes" (R. Rakhimov).

W. Tanguis of Peru was elected the new president of the CIOS.

* At the Agrobusiness Executives International Seminar, held in Bos-

ton and sponsored by the Harvard Business School, Soviet delegates V. Martynov and V. Demyanenko of the Institute of the World Economy and International Relations of the USSR AS, presented a paper "The urgent tasks of the development of agriculture and food production in the Soviet Union". About 200 delegates attended the seminar.

* A Soviet-Nigerian conference on international relations and problems facing Africa and the developing countries took place in Lagos, Nigeria. The Soviet delegation was headed by An. Gromyko, Director of the Institute of Africa, the USSR AS; the Nigerian delegation was led by B. Akinyemi, General Director of the Nigerian Institute of International Affairs.

Participants in the conference concentrated on the four themes: "Perception of Soviet Foreign Policy by a Nigerian", "Perception of the Nigerian Foreign Policy by a Soviet Man", "Soviet-African Relations", and "Soviet and Nigerian Views on Southern Africa". The conference ended with a discussion of the new international economic order.

* A detailed and frank exchange of opinions on a wide range of pressing international political and economic problems took place in Moscow at a round-table meeting of representatives of the political, public, business and scientific circles of the Soviet Union and the United Kingdom. The two sides discussed prospects for consolidation of détente, containment of the arms race, expansion of a mutually advantageous international cooperation and the further development of Soviet-British relations.

The Soviet and British delegations were headed by N. Inozemtsev, Director of the Institute of the World Economy and International Relations of the USSR AS, and D. Watt, Director of the Royal Institute of International Affairs, respectively.

* An *All-Union Scientific Conference "Classes and Class Struggle in the Countries of the East"* was held in Zvenigorod, near Moscow, by the Institute of Oriental Studies, the USSR AS.

In his opening speech G. Kim, Corresponding Member of the USSR AS, emphasised the theoretical and practical significance of studying the evolution of class delimitation in the developing countries of Africa and Asia. The main report on the major problems of class formation in the East was made by Professor A. Levkovsky. The work of the conference proceeded in two panels.

The socio-political panel heard and discussed 30 reports on the following themes: classes, social coalitions and the struggle for political power; classes and social coalitions in the formation of political structure; the formation of class and coalition consciousness; the influence of international factors on the rate of class-formation process; prospects of class-formation processes under different social orientations.

The socio-economic panel heard and discussed 12 reports dealing with the themes: historical preconditions for building up modern socio-class structures; qualitative characteristics of class groups and strata; dynamics of class formation from the standpoint of reproduction process.

* Zvenigorod was the venue of an *all-Union scientific conference "Problems of Application of Mathematical Methods and Computers in Sociological Research"* sponsored by the Institute of Sociological Studies of the USSR AS and the Soviet Sociological Association.

At the plenary session the following reports were delivered: "Problems of qualitative methods in sociological research" (T. Ryabushkin, Corresponding Member of the USSR AS), "Problems of application of mathematical methods in sociological research" (V. Varygin), "Tasks of mathematical modelling in sociology" (Yu. Gavrilets), "Application of the theory of statistical solutions in sociological research" (L. Yevlanov), "Application of computers in sociological studies" (V. Varshavsky and V. Perekrest).

The work of the conference then proceeded in five panels which dealt with the methodological aspects of research into quantitative methods in sociology, mathematical methods of the analysis of data in sociological studies, mathematical modelling in sociology, information in sociological research, application of computers in sociology. More than 100 papers were presented at the panel sessions.

* A *Soviet-Indian seminar "The Sources of International Law"* was held in Delhi by the Indian Society of International Law. Ten reports were delivered at the seminar on five main themes: "General Theory of Sources of International Law", "International Treaties as a Source of International Law", "International Custom as a Source of International Law", "Problem of Other Sources of International Law", "New International Economic Order". The spokesmen

from the Indian side were R. S. Pathak, S. P. Sharma, T. S. Rama Rao, M. K. Nawaz and N. P. Jain; from the Soviet side—G. Tunkin, Corresponding Member of the USSR AS, N. Zakharova, M. Lazarev, T. Starzhina and Yu. Yudin.

R. Khan (India) made a report on the theme "Resolutions of International Organisations". Academician S. Rajabov of the Tajik Academy of Sciences delivered a communication about the basic research work of the Tajik AS.

* Nearly 150 lawyers and legal experts took part in an *All-Union Conference "Theoretical Problems of the State Law and Soviet State Construction Under the New Constitution of the USSR"* held in Zvenigorod jointly by the Institute of the State and Law of the USSR AS and the Scientific Council. "The Laws Governing the Development of State, Management and Law" of the USSR AS. They heard and discussed the reports "The theoretical foundations of the Constitution of developed socialism". (B. Toporin), "The Constitution of the USSR and problems of the further development of Soviets" (K. Shermet), "The national and state organisation of the USSR in the conditions of developed socialism" (V. Miller) and "The constitutional status of the individual" (N. Vitruk). Fifteen scholars took part in the discussion.

* A scientific conference "*Problems of the Soviet Family Law*", held by the Institute of the State and Law in Moscow, brought together jurists, philosophers, sociologists and practical workers. The following reports were delivered: "Family

protection by state—a constitutional principle of the USSR" (V. Tadevosyan); "The protection of the family as a social legal problem" (N. Yurkevich); "Further improvement of the family legislation" (V. Nikitina); "Improvement of the marriage and divorce legislation" (N. Solovyov); "Exercise of the right to divorce" (J. Vèbers); "On further improvement of the family legislation regulating personal relations between parents and children" (Z. Podoprigora). Besides, 37 communications were made on the subject of the conference.

* Participating in an *international scientific conference "Interaction and Reciprocal Enrichment of Socialist Cultures"*, held in Moscow, were prominent scholars, cultural workers, and party functionaries from nine socialist countries. The conference was opened by V. Medvedev, Rector of the Academy of the Social Sciences under the CC CPSU. Alternate Member of the Politburo of the CC CPSU, Minister of Culture of the USSR P. Demichev read a message of greetings from the CC CPSU and Leonid Brezhnev.

The main reports at the plenary session were delivered by M. Khrapchenko (USSR), A. Stoikov (Bulgaria), M. Szabolcsi (Hungary), Tran Do (Vietnam), H. Koch (GDR), B. Sumia (Mongolia), J. Kossak (Poland), O. Badiņa (Romania), and V. Šeda (Czechoslovakia).

At the panel sessions the participants discussed general problems of socialist culture and questions of the interaction and reciprocal enrichment of literatures and art of socialist countries. They described socialist culture as a new

historical type of culture, emphasised its international character, analysed versatile processes underlying internationalisation of the intellectual life of the peoples of socialist countries.

In conclusion, the Bureau of the Multilateral Commission of Socialist Countries held a meeting on theoretical problems of culture, literature and art.

* At a *Franco-Soviet Colloquium "The Modern Society and Culture"*, held in Paris, Soviet scholars made the following reports: "Multinational Soviet culture" (M. Kotovskaya), "Literary heritage and modern culture" (N. Balashov), "Man, culture and the environment" (O. Shvidkovsky), "Classical art in the conditions of scientific and technological progress" (G. Nedoshivin), "Art and personality" (A. Zis) and "Democratic culture—theatre, cinema and television today" (A. Karyagin).

* G. Stepanov, Director of the Institute of Linguistics of the USSR AS, was elected *Fellow of the Spanish Royal Academy* and the Lisbon Academy of Sciences for his studies in the languages and literatures of Spain and Portugal. He has written nearly 140 monographs and articles. He is Deputy Academic Secretary of the Section of Literature and Language of the USSR AS, Editor-in-Chief of the *Izvestia Akademii nauk SSSR. Seria literatury i yazyka* journal, Chairman of the Commission on Comprehensive Study of Culture of the Peoples of the Iberian Peninsula, Vice-President of the USSR-Spain Society.

* Delegations from nine countries took part in a *symposium of scholars*

of the CMEA member-countries on the problem "Factors Contributing to Creative Activity in a Scientific Collective", held in Moscow. The participants heard and discussed about 50 reports on methodological problems of research into the efficiency of scientific collectives' activity; sociological factors contributing to the efficiency of scientific collectives' activity; information at the service of research; socio-psychological factors ensuring efficiency of scientific collectives' activity.

* An *international symposium held in Kiev and devoted to the ethnogeny of the Slavs* was attended by archaeologists, historians and linguists from Bulgaria, Czechoslovakia, GDR, Hungary, Poland, Romania, USSR.

Presented and discussed were more than 30 reports and communications dealing with the origin and early history of Slavonic peoples. The work of the symposium followed four main directions: the character and specifics of Slavonic culture in the early period of the Middle Ages (the 5th-7th centuries); its connections with earlier cultures of the first half of the 1st millennium A.D., and theoretical grounds for revealing those connections; specific features of some cultures of the first half of the 1st millennium A.D.; the relation of the Bronze Age cultures to Slavs' ethnogeny. The symposium showed that scholars of socialist countries achieved signal results in their studies of Slavs' ethnogeny: they discovered, in particular, monuments of Slavonic culture relating to the 5th century A.D. and established the chronological ties between Slavonic culture and cultures of the Roman period.

* A Soviet-Indian symposium "Problems of Secularisation in Multi-Religious Societies: USSR and India" took place in Tashkent. The Soviet delegation was headed by V. Basilov, the Indian delegation was led by S. C. Dube.

The Soviet side submitted 14 reports: "Religion as a social phenomenon" (I. Kryvelev); "Religion from historico-ethnographic point of view" (S. Tokarev); "The Constitution of the USSR and freedom of conscience" (A. Okulov); "The creative role of scientific-materialistic atheism in the process of moulding the new man" (P. Kurochkin); "The Orthodox Church in tsarist Russia" (V. Milovidov); "Islam in tsarist Russia" (V. Basilov, G. Kerimov); "The Russian people's free-thinking in the 13th-19th centuries" (A. Klibanov); "The Orthodox Church in the USSR" (L. Tultseva); "Evolution of Protestant confession in the USSR" (E. Filimonov); "Islam in the USSR, 1917-1945" (G. Kerimov); "Islam in the USSR, 1946-1977" (A. Nurullayev); "The overcoming of religious traditions in Uzbek everyday life" (S. Mirkhasilov); "Survivals of pre-Moslem beliefs in Islam" (V. Basilov, K. Kubakov); "Creation of new, non-religious traditions as an aspect of secularisation of social consciousness" (N. Lobacheva).

Presented by the Indian side were eight reports: "Plurality of religions, science and secularism" (M. Miri); "Towards secularisation: nationalism in 19th-century India" (S. Chandra); "Breakdowns in secular situations" (R. Naidu); "Secularism in a multi-religions society: the Indian context" (R. Kumar); "The problems of secularism in a multi-religions society: the Sikh ex-

perience" (P. Singh); "Notes on the historical significance of secularism in India" (J. N. Madan); "Harmonising dimension in Hindu civilisational processes" (S. C. Dube) and "Secularism and Islam" (S. T. Lokhandwalla).

* The participants in a *Conference on the Application of Physico-Mathematical Methods in Archaeology*, held at the Institute of Archaeology of the USSR AS in Moscow, heard and discussed some 20 reports. They dealt with the use of modern geophysics in archaeology for field investigations and with various mathematical methods for processing mass data and formalisation of archaeological findings.

* Some 2,000 delegates, among them directors of the leading national institutions of higher learning, heads of research institutes and chairmen of specialised councils for the approval of dissertations, attended an *all-Union conference on ways of improving the certification of scientific and teaching personnel*, held in Moscow.

Taking part in the conference were M. Zimyanin, Secretary of the CC CPSU, V. Kirillin and L. Smirnov, Deputy Chairmen of the USSR Council of Ministers, and several ministers of the USSR. Professor V. Kirillov-Ugryumov, Chairman of the Higher Certification Commission of the USSR, reported on realisation of the tasks set up by the decree of the CC CPSU and the Government "On Measures for Further Improving the Certification of Scientific and Teaching Personnel". The participants made a thorough analysis of the progress of implementation of the decree and adopted recommendations on ways to further

improve the system of certification and the standard of dissertations.

* The Centennial Ceremony of the Japan Academy (*Nippon Gakushin*), held in Tokyo, was attended by delegations from scientific centres of 20 countries and two international organisations.

The Soviet delegation included E. Velikhov, Vice-President of the USSR AS, I. Milovidov, deputy head of the International Relations Department of the USSR AS, and T. Petrova, consultant of the Department.

Speeches of greetings were made by J. Harmatt (Hungary), President of the International Academic Union; E. Velikhov; H. Bethge, President of the Leopoldine German Academy of Researchers in Natural Sciences, GDR; J. Szentágothai, President of the Hungarian Academy of Sciences; A. Trautman, Vice-President of the Academy of the Socialist Republic of Romania; and other delegates.

* An Agreement on Cooperation Between the Institute of International Working-Class Movement of the USSR AS and the Pablo Iglesias Foundation of the Spanish Socialist Workers' Party (PSOE) was signed in Madrid by T. Timofeyev, Director of the Institute, and E. Moral Sandoval, General Secretary of the Foundation.

The Soviet delegation, which visited Spain at the invitation of the PSOE, was received by its General Secretary F. González. T. Timofeyev delivered lectures: "Soviet researches into the workers' movement" in the Complutense University of Madrid and "The working class in the face of the general crisis of capitalism" in

the Supreme Council for Scientific Investigations.

* An international symposium "Trends and Perspectives in Development of Science and Technology and Their Impact on the Solution of Contemporary Global Problems", held in Tallinn, was attended by nearly 100 scholars from 30 countries. It was sponsored by the UN and the USSR State Committee for Science and Technology within the framework of preparations to the United Nations Conference on Science and Technology for Development.

The participants discussed problems which are of crucial significance for mankind: health protection, raw materials and energy supply, protection of the environment, etc. The keynote report, "Global problems in the year 2000 and the role of science in their solution", was delivered by Academician J. Gvishiani.

* Rome was the venue of a European Meeting of National Research Institutions which brought together representatives of 29 countries, including eight socialist.

The Soviet delegation was headed by Yu. Ovchinnikov, Vice-President of the USSR AS. The participants reviewed the progress in international cooperation in scientific research and exchange of information. The resolutions adopted at the meeting emphasised the necessity for greater cooperation among the European scientific centres. It was noted that the exchange of opinions at the meeting would contribute to a more successful solution of problems scholars of various countries are faced with.



BOOK REVIEWS

И. Б. БЕРХИН. *Вопросы истории Великого Октября в Сочинениях В. И. Ленина*. М., изд-во «Наука», 1978, 335 стр.

I. B. BERKHIN, *Problems of the History of the Great October Revolution in the Works of V. I. Lenin*, Moscow, Nauka Publishers, 1978, 335 pp.

Lenin's writings besides constituting a methodological and theoretical basis for developing the social sciences, historical science included, are major documents that reflect the epoch-making events of his time. They contain a profound analysis of the historical process, a comprehensive appraisal of many phenomena and facts, and are an invaluable source for studying the three Russian revolutions.

Lenin's outstanding role as the founder of Soviet historical science is universally recognised. His contribution to historiography has been the subject of many studies, including works showing Lenin's conception of the history of the October Revolution. Among such works is the book by Berkhin here reviewed.

The author notes that the problems of the Great October Revolution

occupy a central place in Lenin's writings. Lenin's works written between March 1917 and the summer of 1918 alone, that is the period relating to the development of the bourgeois-democratic revolution into a socialist revolution, to the victory of the October Revolution and the establishment of Soviet power in the country, comprise eight volumes of his *Complete Works*. The events of that period are dealt with also in later writings, which include such fundamental works as *The Proletarian Revolution and the Renegade Kautsky*, *"Left-Wing" Communism, an Infantile Disorder*, *Our Revolution*.

One book cannot encompass the entire range of problems. The author has therefore confined himself to Lenin's analysis of the following problems: objective premises and creation of a political army of socialist revolution in Russia, the October armed uprising and the triumphal march of Soviet power, the destruction of the old state machine and the establishment of a new state apparatus, the revolutionary withdrawal from the world war and the conclusion of the Brest peace, the first socialist transformations and the socio-economic policy of the Soviet state. The author enlarges on those aspects

which had not been comprehensively dealt with in previous studies or which are still being researched.

The book gives a detailed exposition of Lenin's methodological approach to identifying the conditions of the victory of the October Revolution and its world historic significance, to the theoretical generalisation of the revolutionary experience gained by the Communist Party, the working class and all the working people. The leader of the revolution appears simultaneously as its first, most objective and profound historian.

Lenin, we read in the book, defined the October Revolution as a classic socialist revolution whose basic regularities are of universal significance. The historical experience of the revolution confirmed that the working class is the main motive force of the socialist revolution, its hegemon, that the political army for accomplishing such a revolution must include the overwhelming majority of the proletariat as well as the most active and class-conscious section of the rest of the working people, that the peasant poor are the natural ally of the working class, that a militant vanguard of the proletariat, a really revolutionary Marxist party is indispensable if the working class is to successfully fulfil its role (this, too, is borne out by the experience of the October Revolution).

Generalising the historical experience of the October Revolution Lenin shows that the state power won by the working class is used by it to consolidate its political victory, to overcome the sabotage and other forms of resistance by hostile elements of the revolution, and to

carry out socialist transformations in all spheres of social life. The first important steps along this path were the creation of a state apparatus of a new type, the replacement of bourgeois democracy by proletarian democracy, that is, democracy for the working people; the establishment of public property in the basic means and instruments of production; the introduction of worker's control, strict conscientious discipline, new forms of labour organisation, and socialist emulation.

The author shows, on the basis of extensive factual material, that Lenin, taking into account the experience of the October Revolution, formulated the fundamentally important conclusion about the unity of the national and international tasks of a socialist revolution, of the dictatorship of the proletariat. Lenin's postulates and conclusions, tested in the crucible of the October Revolution, are of world historic significance. They serve as a reliable compass in the revolutionary education of the working class and all working people, in the struggle for the triumph of communist ideals.

Berkhin's historiographical study treats of a theme of exceptional importance. It will undoubtedly be read with interest not only by historians concerned with problems of the October Revolution but by that broad readership who are studying Lenin's ideological and theoretical legacy, the history of the Great October Revolution and its significance for the progress of mankind.

I. Vorozheikin

A. И. ЛУКЬЯНОВ. *Развитие законодательства о советских представительных органах власти (некоторые вопросы истории, теории и практики)*. М., изд-во «Юридическая литература», 1978, 352 стр.

A. I. LYKYANOV, *Development of Legislation on Soviet Representative Bodies of Authority (Some Questions of History, Theory and Practice)*, Moscow, Yuridicheskaya literatura Publishers, 1978, 352 pp.

The book opens with Lenin's characteristic of the Soviets as a new form, a higher, proletarian type of state.

Drawing on extensive factual material the author traces the development of the legislation on the Soviets and the specific features of this legislation during the period of socialist construction and during the period of the building of a mature socialist society, shows how a firm legal basis was laid for the effective functioning of the country's representative bodies of authority at all levels.

Much space is devoted to the first Soviet Constitution of 1918 and to the subsequent Constitutions of the USSR and of the Union and Autonomous republics, and especially to an analysis of their provisions relating to the formation of the structure and powers of the bodies of authority.

In describing the process of development of the legislation on the Soviets, the author focuses attention on the factors underlying it. He notes, first of all, that this legislation was drawn up under the direct guidance of the CPSU and that it had as its purpose at every new stage to more fully embody

the Leninist principles of a unified system of Soviets combining legislative, executive and control work; of raising the activity of deputies who combine their participation in exercising authority with production work. The book clearly shows that the legislation on the Soviets is a single complex of legal acts corresponding to a single system of bodies of state authority and resting on a firm foundation of constitutional principles.

A central place in the book is held by the author's analysis of the laws passed in the country over the past two decades. The improvement of legal norms, carried out on the initiative of the CPSU, concerning the work of individual links of the Soviets, has assumed an all-embracing and planned character. The Constitution of the USSR and the Constitution of the Union and Autonomous republics adopted in 1977-1978 were the concluding step and, at the same time, a powerful impetus to the further development of the Soviet legislation.

The author shows the nature of the measures connected with extending the powers of the Soviets, strengthening their material-financial base, and further improving the forms and methods of their work, the enormous theoretical and organisational work carried out by the Party to bring the legislation on the Soviets in accord with present-day requirements. This legislation now clearly formulates and reflects the basic functions of the bodies of state authority, the forms and methods of carrying out these functions, the ways of strengthening the Soviets' ties with the masses.

The book also centers attention on the tasks connected with further

improvement of current legal norms in the light of the requirements of the new Constitution of the USSR. These include the drafting of Statutes of the Supreme Soviets, laws on the territorial, regional, and area Soviets. The author stresses that the development and strengthening of an integral Union and republican legislation on the

Soviets, that the ever fuller reflection in it of the present-day functions and methods of work of the representative organs and the codification and systematisation of legal acts—that all this is a continuous process based on the experience of the work of the Soviets over the years.

I. Azovkin

Проблемы развитого социализма в политической экономии. Под ред. В. Н. Черковца. М., изд-во «Наука», 1977, 335 стр.

Problems of Developed Socialism in Political Economy, Ed. by V. N. Cherkovets, Moscow, Nauka Publishers, 1977, 335 pp.

The monograph under review is a major work on political economy written by a number of authors in an attempt to sum up what has been achieved in theory and practice and to give a comprehensive analysis of the socio-economic laws governing developed socialist society.

The structure of the book makes it possible to tackle simultaneously two tasks that are not easy to combine: enriching the ideas about the fundamental economic laws as such, and subordinating theoretical and politico-economic analysis to the study and generalisation of the phenomena of economic practice.

Chapters I and II of the first part of the book, written by Cherkovets, are most important, for they analyse the basic trends in the political economy of socialism in the light of the decisions of the 25th Congress of the CPSU, and also examine the system of the economic categories and laws of

the political economy of socialism. The most valuable conclusions here are those about interdependence between the leading role of general communist production relations and the mechanism of socialism's development into communism; about the specific features of political economy as a theoretical science entering the sphere of social practice; about the importance of bringing out and comparing the distinctions in the development of production relations on a regional level for managing social processes; about the correlation and combination of economic and social approaches to efficiency; about the application of interdisciplinary methods and methods of the natural sciences in political economy, etc.

These chapters present a well-substantiated analysis of the relatively independent development of production relations. A thorough politico-economic consideration of the material and technical basis of society made it possible for Cherkovets to show that ignoring the relative independence of the development of production relations makes it difficult to bring out the advantages of socialism, when there are no essential distinctions between the technical levels of production under capitalism and socialism.

It is important to understand properly what features and characteristics of the production relations of socialism are good for communism, and which of them are destined to wither away during the transition to communism.

In this connection the necessity of following general Marxist methodology which asserts the priority of the general communist elements of the economic structure of socialism as against those historically transient, inherent only in the first phase of communism, has been emphasised. The first chapters contain convincing criticism of the attempts to present socialist production as commodity production by its "nature", and accordingly, as a "kind" or a "type" of commodity production. At the same time these chapters justly criticise authors who do not see any commodity essence behind commodity forms and believe that it is of a purely social character. The book emphasises that purely social and commodity-money relations are not an identity but a unity within which there are distinctions and contradictions.

Chapter III is devoted to forecasting production relations and contains some original, although arguable premises. Its author, A. Zakharov, correctly considers that the success of forecasting is determined both by the profound cognition of the system of the laws of political economy (their logical structure, the mechanism of their operation, subordination, etc.), and also the singling out of such characteristics (inner connections and external distinctions), in the essence of categories and laws which could form the basis for revealing quantitative shifts for a long period of time.

The chapter entitled "Property and the Fundamental Law" (written by O. Katikhin) shows the insolvency of the attempts to disclose the economic essence of property only through the legal categories of ownership, use and disposal. Property should be studied through the entire sum total of production relations, the author stresses, but it does not follow from this that property is a system of production relations.

A special chapter (V. Cherkovets, A. Yeryomin, O. Katikhin) is devoted to the correlation between the state and the economy under socialism. It examines the principally new qualitative features in the economic life of the state under socialism in the conditions of planned social production.

The essence and character of the socialist state organisation, the authors justly emphasise, are initially preconditioned not by the genesis of the state as such, but by the nature of the economic system of socialism and its specific qualities.

The chapter about the development of the social structure of Soviet society analyses the structural changes along the road to the complete abolition of classes. Taking into consideration all basic class distinctions, V. Venzher who is the author of this chapter, tries to find out with what the elements of inequality are connected, consequently, what are the ways to eliminate them.

An interesting chapter written by G. Latysheva is devoted to the qualitative and quantitative definitiveness of the fundamental law of socialism.

The section "Labour" merits special attention, in our view, for its considerations concerning the impact of scientific and technical

progress on working conditions. In this connection the authors convincingly substantiate the necessity of implementing a comprehensive national economic programme for the improvement and normalisation of working conditions (R. Ivanova and A. Maximov) and analyse progressive changes in the system of material and moral labour incentives (N. Zhelesovskaya and Zh. Blagodeteleva).

Of great interest is the chapter about the economic foundations of socialist emulation (M. Voveikov, E. Torkanovsky, S. Pavlov, V. Konyukhov). Its importance and novelty lie in that it substantiates the crucial significance of organisation, and also examines emulation as an element, an organic component of the mechanism of socialist economic management. It is precisely in this light that the authors analyse the economic functions, indicators, types, economic requisites and factors of emulation; the process of emulation is coordinated with the system of planning, management and incentives.

This part of the book devotes considerable attention to theory and methodology proper. The chapter discussing the development level of direct social labour (E. Mizhenskaya) convincingly proves the decisive role of non-materialisable production relations (popular participation in running society, for example, is not directly reflected in the movement of product) in the economy of socialism.

The section devoted to distribution relations, just as the preceding one, is characterised by the clearly defined idea of subordinating theoretical analysis to the tasks posed by social and economic practice. The premises on the specific nature of the contribution which

each form of distribution is making to socialist equality, and the need of drawing the function of the public consumption funds from the entire system of socialist distribution, seem quite promising both theoretically and practically (R. Khabibi).

The propositions on improving the relationship of all structural elements of wages and salaries with the results of labour, and on the ways of further differentiation of wages and salaries are scientifically substantiated, also with the help of applied instruments (I. Oblomskaya). A number of interesting considerations worthy of attention are expressed in connection with examining the problem of female labour (S. Petishkina).

The section devoted to the mechanism of management contains an analysis of the financial and credit relations (V. Rybin), investigating the specific features of cost-accounting as practised of various types by associations (V. Starodubrovsky and Yu. Subotsky). It is noted, among other things, that the concentration of the activities of production units of an association on the direct process of production is accompanied by the growing role of directive methods of control over their performance.

Unfortunately, some interesting ideas and concepts are not fully elaborated by contributors to the book under review, although the manner of presenting the material presupposes its thorough argumentation. This concerns, for example, the idea that property, while embracing production relations in their entirety, at the same time does not exhaust their essence, that the essence of their interrelation-

ships is not fully described by the concept of property.

On the whole, the monograph deserves high praise. The profound and timely character of the discussion, original thinking, the blending of theory and practice

and the wealth of factual data—all this makes the book an important source of scientific knowledge.

N. Moiseyenko,
D. Trifonov,
Yu. Pakhomov

Рабочее движение в развивающихся странах. Сб. статей. М., изд-во «Наука», 1977, 262 стр.

The Working-Class Movement in the Developing Countries, Collection of Articles, Moscow, Nauka Publishers, 1977, 262 pp.

Most of the articles in this collection represent expanded versions of the reports delivered at the scientific conference organised in 1975 by the Institute of Oriental Studies of the USSR Academy of Sciences jointly with the Editorial Board of the journal *The Working Class and the Contemporary World* published in Russian.

The underlying idea of the wide range of views, often debatable ones, put forward and substantiated in the collection, regarding the character, forms and conditions of the working-class movement in the emergent states is to clarify the socio-historical content and motive forces of the national-democratic revolution, representing the general democratic and pre-socialist stage of social progress in the liberated countries. The authors show in this connection the dialectical unity of the common and the specific in the complex of problems and phenomena researched.

One of the important manifestations of the general laws of social evolution are the historically determined phases of the formation of the working class through which all

its national contingents pass. The authors of a number of articles substantiate the conclusion that in most of the Afro-Asian countries the bulk of the proletariat is still at the initial phase of its development, a typical feature of which is the common character of the proletariat's social position as an emerging class, and at the same time, a certain political and ideological dissociation, an unawareness of its place in the system of social relations and of its historical role. A considerable part of the proletariat in the developing countries is in the transitional state when it begins to become aware of itself as a special class of society, to understand its status and its historical mission, when its unity, class consciousness and degree of organisation grow, when the process of combining scientific socialism with the working-class movement begins.

In connection with the growing impact of the working class on socio-political life, its increasing ideological and political maturity and organisational unity the problem of a proletarian vanguard is now a foremost one. The development of all national contingents of the proletariat has always proceeded along the path of combining scientific socialism with the working-class movement, of forming the proletarian vanguard in the shape of Communist parties. In their analyses of this process in the

Afro-Asian countries the authors show that in some of them the Communist parties have been able to win a leading position in the working-class movement whereas in others their influence is as yet inconsiderable.

The book shows the importance of the Communist parties' close and many-sided ties with the trade unions, and of their reliance on these most massive organisations of the working class. The need to strengthen these ties is all the more essential in view of the specific difficulties the Communist parties and trade unions have to grapple with. For instance, the multi-strata character of the working class, conditioned by the multi-sectoral economies, complicates the task of defining the trade unions' organisational structure and the elaboration of a trade-union policy corresponding both to common class interests and to the specific interests of various contingents of the working class.

The correlation of the specific national with general conditions is scrutinised in the context of the struggle of the proletariat in Latin America where the need for deep-going socio-economic changes is increasingly being posed as a priority task. An intensive process of the politicisation of the working class is under way in the continent, which is indicative of the growth of its class consciousness.

Considerable attention is paid in the collection to various problems (still awaiting further elaboration in scientific literature) concerning the formation of the proletariat and working-class movement in the socialist-oriented countries which are at different levels of development. It is the consensus of the authors that a fundamental prob-

lem of socialist orientation is to turn the working class into the spearhead force of the revolutionary process and to strengthen its alliance with the other strata of the working people. They note in this connection the positive significance of the concentration of the workers at the enterprises of the state sector, as well as a number of other factors conducive to their numerical growth and ideological maturity.

At the same time the socio-economic development of the countries of socialist orientation is beset by various contradictions which, as shown in the book, are rooted in the two main contradictions of non-capitalist development: 1) in the external—between the objective necessity to advance rapidly towards socialism, bypassing capitalism, and the still existing dependence on the world capitalist economy, and 2) in the internal—between the objective trend towards reconstructing society on socialist principles and the nature of subjective factors (especially the social nature of the leading political forces).

The advanced forces of the working-class movement of these countries therefore have to tackle very complicated tasks. They have to work out in specific conditions, hitherto unknown in social practice, a long-term strategy and tactics of the proletariat and its party; to define the aims, forms and methods of the working-class movement, as well as the character of its relations with revolutionary democrats; to ensure the combination of national and proletarian class interests. Fruitful development of the social processes of the national liberation revolution implies democratisation of public life

and, especially, the establishment and functioning of mass organisations of the working people and Communist parties.

The collection underscores the topicality of the complicated, and as yet inadequately elaborated, problem of determining the possibilities and prospects of working-class political cooperation with revolutionary democracy which expresses, in the main, the interests of the petty-bourgeois masses of town and country.

The role of the national working class, the strategy and tactics of its class organisations depend considerably on the stages of development of the revolutionary process. In the Afro-Asian countries, we read in the book, three such stages can be distinguished: the national-liberation, national-democratic (the present one) and the socialist (in perspective). The second stage, covering a long historical period, holds the authors' particular interest. They focus on the essence of the main contradictions, the alignment of social and political forces, the nature of the revolutionary-democratic transformations and the principal tasks of this stage distinguished by the following two phases: general democratic transformations and its subsequent development into a socialist revolution.

The present development of the working class poses before the social sciences ever new challenging problems, particularly in connection with the impact of the scientific and technological revolution. The book discusses the ideological and theoretical debate regarding the boundaries and composition of the modern working class, including that in the developing countries. Soviet scientists believe that to

expand these boundaries or, conversely, excessively narrow them is equally erroneous. The boundaries of the working class of the Afro-Asian countries, for instance, are sometimes unjustifiably expanded by the inclusion of semi-proletarian or pre-proletarian elements—a large transitional entity that is swelled as a result of rapid and deformed urbanisation, and the urban labour glut. Characteristic of it are an extreme social heterogeneity, amorphousness and a tendency to spontaneous outbursts of discontent. Its representatives, although they earn their living doing odd jobs, do not belong to the working class. The authors also note a common feature of the developing countries (and examine its socio-political consequences); the fact that the white-collar workers of these countries are more remote from the working class than is the case in the industrialised capitalist countries.

The collection as a whole gives the reader a comprehensive idea of the new frontiers reached by Marxist scientific thought in the study of the highly complex and pressing problems of the working-class movement in the emergent states, and also of the current problems and new phenomena still awaiting an in-depth study and elucidation. The book's high scientific and theoretical level, as also its wealth of cognitive material, its theoretical and practical conclusions on the problems reviewed are an indicator of the major successes of the USSR Academy of Sciences' institutes working in this area of research: the Institute of Oriental Studies, Institute of the International Working-Class Movement, Institute of the World Economy and International Relations, Institute of Af-

rica, Institute of Latin America and other research centres many of whose associates are among the

authors of the collection under review.

V. Martynov

Д. В. ЕРМОЛЕНКО. *Социология и проблемы международных отношений (некоторые аспекты и вопросы социологических исследований международных отношений)*. М., изд-во «Международные отношения», 1977, 232 стр.

D. V. YERMOLENKO, *Sociology and Problems of International Relations (Some Aspects and Questions of the Sociological Research into International Relations)*, Moscow, Mezhdunarodniye Otnosheniya Publishers, 1977, 232 pp.

The monograph under review is devoted to the problems of international relations examined from the positions of Marxist-Leninist sociology. The work investigates the development of the sociological and politological schools studying international relations abroad, especially in the United States. The author demonstrates a thorough knowledge of the problems under study and the complicated realities of the class, political and ideological struggles in the international arena.

"... The range of many general theoretical questions and certain particular aspects of international problems," he writes, "is increasingly becoming an object of interdisciplinary (sociological) analysis and investigation. Studying the laws and motive forces of the functioning and development of human society as a whole, the social systems and their interaction, as well as more specific processes,

institutions and establishments, sociology examines the interrelationships and interaction of the most diverse social phenomena, defines their typology, delves into the general aspects of the interdependence of nature and society, and also the general laws and elements of the social actions of the classes, social groups, individuals and organisations" (pp. 6-7).

Thereby, not only the subject but also the concrete method of a sociological analysis of international relations is revealed, which performs an important function in elaborating systems and comprehensive approaches. This explains, among other things, their increasing role in the study of the problems of international relations. D. Yermolenko attempts at elucidating the problems comprising the sociological theory of international relations and the conceptual apparatus corresponding to such theory, and, finally, particular methods that make such investigations possible.

The author proceeds from the need to conduct scientific analysis simultaneously and in a coordinated manner at different levels of sociological knowledge—the general theory of historical development, that is, historical materialism; special theories embracing various spheres of social being and consciousness; at the empirical level—collection of facts, analysis of concrete experiments, etc. He notes that in Western sociology, talks about the different "levels" of analysis often conceal narrow pragmatic, scattered and fragmentary

approaches lacking a uniform theory and methodology.

D. Yermolenko makes an interesting attempt to isolate and analyse the most general trends in the sociological investigation of international relations. On the one hand, an analysis of the nature of international relations, their basic laws, trends and the relationship and role of the objective and subjective factors presents certain interest; on this basis it is interesting to investigate the economic, scientific and technical, political, cultural and ideological aspects, the role of the world systems, popular masses, the class struggle, groups and strata within the classes, states, parties and the armed, forces in international relations, etc. On the other hand, of definite interest, too, are special investigations into the basic categories of international relations (war and peace, foreign policy concept, doctrine, programme, strategy and tactics, main trends, foreign policy principles, aims and tasks, organisations, etc.).

The author's view that "sociologists should insist on the sociological character of the general and a number of special theories of international relations" (p. 37) seems quite promising for studying international relations. Of course, one should take into consideration that historians and legal experts have their own approach, as the author correctly notes, to an analysis of the theory of international relations. The analysis of the evolution of Western sociological science contained in the book, as well as criticism of its basic, including the latest, trends are also interesting.

The author discusses at length a whole range of problems connected with international relations: the scientific and technological re-

volution and the ideological struggle; the scientific and technological revolution and the mass media. The book reveals original features of their interrelationships.

The author emphasises that a long-term sociological analysis of international relations should utilise forecasting. A whole chapter is devoted to this problem; it discloses the opposite character of the Marxist and the bourgeois approaches to the methodology of forecasting. The question of foreign policy forecasting is elaborated especially thoroughly. The author dwells in great detail on the problem of the correlation of chance and necessity, which is one of the complex and important problems in foreign policy forecasting, and poses the question of the need to elaborate a classification of chances. The author combines his analysis of foreign policy forecasting with a critical review of new trends in approaches to forecasting.

The book devotes much attention to international conflict as a specific object of sociological research. The author's approach to the methodology of investigating international conflicts, their typology, his analysis of particular methods of studying conflicts, including the evaluation of formalisation methods, is of interest, too.

Yermolenko's work touches on questions which require further creative analysis. Nevertheless, the fact that they have been posed and serve as a reference point for further investigations is certainly to the author's credit. Among these questions is the character of the theory of international relations as a scientific discipline and its place among other branches of Marxist-Leninist social science. Is the

theory of international relations just one field of sociological knowledge or does it, as an autonomous branch of science, have more complicated relationships with many branches of the social sciences? This subject requires further elaboration. We deem it useful to

continue work on theoretical interpretation of international conflicts in the present situation. For one thing, we would like to have a more detailed analysis of the so-called crisis diplomacy.

V. Gantman

A. П. ОКЛАДНИКОВ, З. В. ГО-
ГОЛЕВ, Е. А. АШЕПКОВ.
*Древний Зашиверск. Древ-
нерусский заполярный город. М.,
изд-во «Наука», 1977, 211 стр.*

A. P. OKLADNIKOV, Z. V. GO-
GOLEV, E. A. ASHCHEP-
KOV, *Old Zashiversk. Old Rus-
sian Arctic Town, Moscow,
Nauka Publishers, 1977, 211
pp.*

At the very close of the 18th century, while in exile in far-off Ilim, the great Russian enlightener Alexander Radishchev wrote a historical survey of Siberia, which he entitled *A Brief Outline of the Acquisition of Siberia*. The main idea of the essay is in its title: not conquer by force of arms, but acquisition through creative endeavour, development of Siberia by applying there the labour experience and culture of the Russian people. Already in those days progressive thinkers clearly saw that the movement of Russian explorers across the Urals was the natural completion of the formation of the multinational Russian state, which met the vital interests of both the Russian people and the peoples of Siberia.

The book under review is concerned with the archaeological discovery and exploration of the site of the ancient town of Zashiversk,

on the Indigirka river, a major material monument of the development of Siberia in the 17th century.

The discovery of Siberia by the Russian trail-blazers was not of a purely geographic nature. Their ultimate goal was more than the mapping of these lands. As they advanced eastwards the pioneers built fortresses and towns, laying the foundation of urban life in this land. Following Mangazeya, in 1632 they built the town of Yakutskiy Ostrog. In the same decade the detachment of Ivan Postnik founded the town of Zashiversk.

Even in the 19th century, Zashiversk was barely accessible for European expeditions, and news about it seldom reached European capitals. Although cut off by long distances from the country's principal centres, this Siberian town lived its life organising its environs as the major administrative centre of a vast territory populated by Russians, Yukagirs and Evens.

Due to an unfortunate confluence of circumstances, in the second half of the 19th century Zashiversk went out of existence. Its population was mowed down by an epidemic, its derelict structures became destroyed and the very memory about it, gradually dimming, passed into legends about an extinguished town. Researchers made efforts to reach it. Some of them did reach its ruins braving

the incredible challenges of thousands-of-kilometres-long journeys and leaving only capsule descriptions which induced other explorers to carry on the search.

In 1969-1970, Zashiversk was rediscovered by an expedition organised in Novosibirsk under the guidance of Academician A. Okladnikov, an indefatigable student of Siberia. A group of researchers dispatched to the site of this ancient town by helicopter found that an amazingly beautiful wooden church built by Andrei Khabarov in 1700 had survived there. This antique structure sustained some damage. However, archival efforts led to the discovery of a detailed 19th-century description of the church supplied with the necessary measurements and drawings—an excellent basis for the restoration of the monument in its pristine beauty.

The expedition made excavations establishing the configuration and specific features of the layout of this no-longer-existing fortress and, most importantly, conducted operations vital for the saving and perpetuation of this old building.

The reader will find a description of the exploits of Russian explorers and detailed analysis of the artistic merits of this outstanding monument of 17th-century Russian wooden architecture. The text is illustrated by many photographs, copies of old engravings and drawings and modern water-colours.

Well aware that this valuable monument of Russian history, culture and art should become the property of a broad circle of researchers and a popular tourist attraction, the Government of the Yakut Autonomous Republic has adopted a decision to turn it over to the Siberian Division of the USSR Academy of Sciences for exhibition in Novosibirsk.

The authors pay tribute to the participants in the expedition and all people who, despite the extra-harsh conditions, carried out a scientific quest, dismantled the extant unique structures and, then, moved this priceless historic monument over a distance of several thousand kilometres.

V. Yanin,
Yu. Kukushkin

Л. В. КРУШИНСКИЙ. *Биологические основы рассудочной деятельности. Эволюционный и физиолого-генетический аспекты поведения.* М., изд-во МГУ, 1977, 272 стр.

L.V. KRUSHINSKY, *The Biological Foundations of Intelligent Activity. The Evolutionary, Physiological and Genetic Aspects of Behaviour,* Moscow University Press, 1977, 272 pp.

It is hard to name a domain of scientific research as intriguing and

as difficult for experimental physiological analysis as the problem of intelligent activity, of thinking.

It is no exaggeration to say that, despite a long history within the system of philosophical and psychological disciplines, the problem of the brain's intelligent activity has not yet occupied the place it deserves among physiological problems.

It is this that makes the monograph by L. Krushinsky, Corresponding Member of the USSR Academy of Sciences, one of the

Soviet Union's leading experts in animal behaviour, such a major event. For the first time in world science it presents systematised results of physiological and genetic studies of the mechanism of intelligent activity in animals and sets forth criteria for evaluating it.

Krushinsky adheres to the evolutionary principle in studying the intelligent activity of the brain, drawing on the observations of numerous natural scientists and extensive experimental material in comparative physiological research by the team he heads, and he convincingly demonstrates that elements of intelligent activity can be observed already in some representatives of the lower classes of vertebrates.

He calls forms of animal behaviour due in some measure to the existence of elements of intelligence rather than directly associated with learning or based on instincts "elementary intelligent activity", which he views as the organism's adaptation to sudden changes in the environment. The most characteristic feature of this form of higher nervous activity, Krushinsky holds, is the ability of animals to detect the simplest laws of the environment and to operate with them.

To study this form of activity experimentally, Krushinsky developed a method for isolating the intelligent component from the behavioural act as a whole. He takes the ability of animals to extrapolate and operate with the empirical dimensions of figures as a criterion of elementary intelligent activity.

By the ability to extrapolate the author means the ability of animals

to basically foresee certain actions. Thus, in one experiment an animal is shown a tray of food moving at a distance and it must determine the direction of motion at the moment when the tray passes behind an opaque screen and go around the screen in that direction so as to get to the food. The predominance of correct solutions over mistaken ones is indicative of the animal's ability to extrapolate. This ingenious and simple methodology is used in Krushinsky's laboratory to study intelligent activity in all system animal groups, from fishes to primates.

In experiments involving the empirical dimensions of shapes, the animal is confronted with a more difficult task. It is shown two shapes, one three-dimensional and the other a two-dimensional stereographic projection of it. It is then shown a bait, which is placed inside the three-dimensional figure (without the animal's seeing it). Finally, both figures are shown to the animal, which must determine the one containing the bait. Only highly organised animals—dolphins and monkeys—cope with this task.

With a vast body of experimental material, the book shows that parallel series according to the level of the development of intelligent activity can be constructed among different classes of vertebrates. For example, among the birds, ravens rank at one level with carnivorous mammals. Reptiles are comparable in intelligent activity with rodents. Primates and dolphins display the highest levels of intelligent activity.

The author has discovered some important regularities. Firstly, he confirms the conventional view that

the level of intelligent activity of animals within different classes is closely related with brain size. Secondly, he finds that animals with different cytoarchitectonic brain structures may be at approximately the same level of elementary intelligent activity.

On the basis of his own experimental data and the latest achievements in neurophysiology, genetics and molecular biology, Krushinsky analyses possible mechanisms of intelligent activity and suggests a hypothesis the basic proposition of which is the existence of genetically determinate differences. (See L.V. Krushinsky, "A Possible Intelligence Mechanism", *Priroda*, 1974, No. 5.)

Various functionally active sets of genes control the morphophysiological differentiation of neurons, their qualitative diversity and the structural-functional organisation of the brain. The great diversity of neurons is what makes the perception and processing of diverse sensory information possible.

The author proceeds from the assumption that the larger the brain the greater its capacity for absorbing information.

One of the principal functions of intelligence is selection of information on the structural organisation of the environment needed to construct a programme of adaptive behaviour in given conditions. Ac-

ording to his hypothesis it is performed at the level of thalamocortical interrelations with the direct participation of the limbic system.

Of considerable interest is the section in which the author shows the role of intelligent activity in the organisation of animal communities and traces a definite link between its level and the complexity of relations within the group.

Of special value, in our view, are the chapters devoted to the further development of certain problems of microevolution. They offer a general picture of the evolution of behaviour, which is invaluable for the development of a scientific biological outlook.

The value of Krushinsky's book lies in its illustration of the fruitfulness of the physiological-genetic approach to the study of intelligent activity, as well as in the prospects for further studies of this form of higher nervous activity it outlined.

The monograph contains lucid descriptions of observations of natural behaviour of animals together with some expressive photographs.

The author thus presents himself to the reader as both an outstanding experimentalist and a natural scientist.

O. Zubova

Г. Н. МОЙСЕЕВА. *Спасо-Ярославский Хронограф и «Слово о полку Игореве». К истории сборника А. И. Мусина-Пушкина со «Словом». Л., изд-во «Наука», 1977, 95 стр.*

G.N. MOISEYEVA, *The Spaso-Yaroslavl Manuscript Codex and "The Lay of Igor's Host". On A.I. Musin-Pushkin's Collection Containing "The Lay",* Leningrad, Nauka Publishers, 1977, 95 pp.

The number of studies devoted to "The Lay" is close to 5,000. Some of our most prominent scholars in the field of early Russian culture have been deeply interested in "The Lay". Here is a new book about this greatest work of early Russian literature.

Moiseyeva has set herself a difficult task—to shed new light on the history of the manuscript of "The Lay of Igor's Host". She cites the works of the Soviet scholars V. Adrianova-Peretz, L. Dmitriev, D. Likhachev, F. Priima, B. Rybakov and O. Tvorogov, who proved the authenticity of the manuscript of "The Lay of Igor's Host" and its close connection with the Russian culture of the late 12th century. Moiseyeva then describes the new materials relating to "The Lay" which she has found in the archives of Yaroslavl, Moscow and Leningrad. The book under review consists of three chapters. In the first the author discusses and sums up the studies of the history of "The Lay of Igor's Host"; in the second she examines the new materials she has uncovered; and in the third she analyses the initial stage of A. Musin-Pushkin's work in St. Petersburg on "The Lay of Igor's Host". The "Afterword"

presents some brief conclusions and poses new tasks in further research on "The Lay".

Moiseyeva describes in detail the history of the well-known collection of manuscripts of Musin-Pushkin, which included "The Lay of Igor's Host". She compares "Notes for a Biography" by A. Musin-Pushkin with K. Kalaidovich's work "Biographical Information About the Life, Work and Collection of Russian Antiquities of Count Alexei Ivanovich Musin-Pushkin". This latter work was compiled on the initiative of the Society of Russian History and Antiquities at Moscow University. Studying the manuscript version of Kalaidovich's work Moiseyeva found in it a most valuable piece of information, namely, that Musin-Pushkin had bought from Archimandrite Joel of the Spaso-Yaroslavl Monastery all Russian books, among which was "The Lay of Igor's Host".

Moiseyeva began her research by verifying what Musin-Pushkin said in the first edition of "The Lay of Igor's Host" and in his letter to Kalaidovich dated 1813, about a "Manuscript Codex" which he had obtained from Joel, and by finding out whether there were manuscript codices in the library of that monastery. The search in Yaroslavl's archives produced a manuscript authored by a local connoisseur of antiquity, a merchant by the name of Vasili Krashennikov, under the title "A Description of the Earth and Water Circle". Moiseyeva made a thorough study of Krashennikov's work, which mentioned, along with other sources, the "Great Manuscript Codex of the Spaso-Yaroslavl Monastery". A study of the "Description" led Moiseyeva to conclude that it was written before the

latter half of 1756. Thus, in his historical research Krasheninnikov turned to the "Manuscript Codex of the Spaso-Yaroslavl Monastery" two decades before the arrival of Joel Bykovsky to Yaroslavl, who had been appointed the Archimandrite of the Monastery in 1776, and three decades before that codex went to Musin-Pushkin's library. Moiseyeva did a great amount of work to ascertain the sources of Krasheninnikov's "Description" and established that its principal source was a book by Johann Hubner called "A Short Description of the Earth and Water Circle", edited by Ya. Bruce and published in Moscow in 1719.

Moiseyeva quite justifiably regards Chapter 13 of the "Description" by Krasheninnikov as a substantial piece of independent work of a historico-geographic nature written in a popular style. Moiseyeva proved that Krasheninnikov had used for his work not only books published in Russia in the early 18th century, but also manuscripts of Old Rus, and above all the already mentioned "Great Manuscript Codex of the Spaso-Yaroslavl Monastery". The difficult task now is to find out whether this "Manuscript Codex" was the same manuscript book which Musin-Pushkin got from Joel. Having studied the four extant inventory records of the Spaso-Yaroslavl Monastery (three dated 1709, 1776 and 1787 in Yaroslavl archives, and one dated 1788 in the State Museum of History in Moscow), Moiseyeva came to the conclusion that at the time when the "Book Named Manuscript Codex" had appeared in Musin-Pushkin's collection, the only copy of this book had disappeared from the Spaso-Yaroslavl Monastery.

Basing herself on Tvorogov's investigations on the subject, Moiseyeva analyses the entire text of Chapter 13 of the "Description" and confirms the conclusion that the "Manuscript Codex" which contained "The Lay of Igor's Host" was an extended version of the "Manuscript Codex" of 1617. She has found numerous direct and indirect indications in Krasheninnikov's work showing that he not only knew but also carefully studied "The Lay of Igor's Host" that was in the "Manuscript Codex" of the Spaso-Yaroslavl Monastery.

Moiseyeva's textual proofs are well substantiated and based on a thorough study of the entire work of the Yaroslavl historian. Moiseyeva, who has studied the contents of the Spaso-Yaroslavl "Manuscript Codex" in great detail, believes that in the course of further investigations copies of other parts of this vast manuscript collection kept in the sacristy of the Spaso-Preobrazhensky Cathedral may be found, among which there could be copies or fragments of the text of "The Lay of Igor's Host".

The book under review analyses in detail the inventory records of the Spaso-Yaroslavl Monastery, which the author studied with the aid of optical and photographic methods. As far as the four manuscripts are concerned, which had previously been regarded as "destroyed" because of the "decrepit state", they were in, it is now possible to make certain corrections. These manuscripts were noted down as loaned out in the 1787 inventory record. But when it became clear that the persons who had taken these four manuscripts from the monastery would not return them, the corresponding

notes were carefully expunged. It was only with the help of photo-analytical and other modern methods of restoring lost texts has it become possible to read these notes.

After a thorough study it remains unclear who had given these four manuscripts to Musin-Pushkin for temporary use, and later, having become convinced that they would not be returned, drew up a statement about their "destruction". Moiseyeva's assumption that Archbishop Arseny Vereshchagin, who had moved from Rostov to Yaroslavl in 1787 and had been a close friend of the Musin-Pushkin family, handed over the manuscripts to Musin-Pushkin, seems the most plausible. In 1788, Musin-Pushkin who was well aware of the despatch of the inventory record to Moscow in which it was officially stated that four manuscripts of the Spaso-Yaroslavl Monastery had been "destroyed" because of their "decrepit state", could then consider the "Manuscript Codex" his property, take it to St. Petersburg and study it.

In speaking about the final stage of the existence of the manuscript of "The Lay of Igor's Host", preceding its publication in 1800, the author notes correctly that Musin-Pushkin informed the scholars he knew about "The Lay", having started to translate it and to write commentaries for it. Aware of the keen interest of Catherine II in Russian history, he presented a copy of "The Lay" to her. While working on the translation of "The Lay" and encountering inevitable difficulties in deciphering a number of words and ideas, Musin-Pushkin could not but turn to "Rodoslovnik" (Family History)

and other historical works by Catherine II.

Moiseyeva showed, for example, how Musin-Pushkin used the description of Mstislav given by Catherine II in her "Notes on Russian History". Research done in Leningrad archives has led the author to the interesting conclusion that while working on the commentary to "The Lay of Igor's Host" in the late 1780s and early 1790s, Musin-Pushkin studied works on Russian history by I. Boltin, A. Barsov, M. Shcherbatov and Kh. Chebotarev, who had prepared historical materials for Catherine II. This only confirms the author's belief that Musin-Pushkin used a considerable part of his commentaries in preparing his translation which was published after his retirement and settlement in Moscow in 1799.

In pointing out the need to systematically study collections of manuscripts and archives where it may be possible to find monuments of early Russian literature believed lost, Moiseyeva emphasises the importance of paying special attention to additions and afterwords to early Russian manuscripts where one can come across passages copied out from "The Lay", similar to the notes written down by the scribe Dionisy on the *Pskovsky Apostol* (Books of the Apostles of Pskov) of the early 14th century.

Thus, archive studies, no matter how complicated, are promising and necessary, for they help clarify and ascertain the circumstances in which monuments of early Russian literature were discovered and their subsequent history.

G. Novitsky

С. БОНДИ. *О Пушкине. Статьи и исследования*. М., изд-во «Художественная литература», 1978, 476 стр.

S. BONDI, *About Pushkin. Essays and Studies*, Moscow, Khudozhestvennaya literatura Publishers, 1978, 476 pp.

The 180th birthday of the great Russian poet Alexander Pushkin is being widely celebrated this year both in the Soviet Union and abroad. On this occasion a number of works devoted to Pushkin have been published, among them the book under review.

The name Bondi is not only well known in the history of Pushkin studies; it is an inseparable part of that history. Bondi's first works on Pushkin appeared in 1921. But this interest in the poet dates back to his student days. It was while he was a student at Petrograd (now Leningrad) University that Bondi discovered the key to deciphering Chapter X of *Eugeni Onegin*.

The publication in 1931 of Bondi's *New Pages from Pushkin* was a literary event. On the basis of a careful study of Pushkin's drafts and notes Bondi was able to reconstruct and emend a number of Pushkin's works which had been either unknown or published with distortions. Several of Pushkin's works became accessible only thanks to Bondi's rare talent for disentangling the skein of Pushkin's rough copies, for delving into the text, and for reconstructing the history of a manuscript from words and phrases found here and there in that manuscript.

The importance of Bondi's textual emendations cannot be overestimated. But Bondi's main con-

tribution to scholarship is that he is able, on the basis of his own experience in textual analysis, to formulate certain general principles. Already in *New Pages from Pushkin* Bondi made several observations concerning textual criticism which are of methodological significance. Further developed in two of his books, *About the Reading of Pushkin's Manuscripts* and *Disputed Questions Concerning the Study of Pushkin's Texts*, they came to form a system of textual study which is consistent and orderly, simple, clear, and flexible.

Working over a period of many years with Pushkin's manuscripts helps define Bondi's field of interest as a scholar; it confirms for him the validity of the principles which he has elaborated and applied in his work. These principles are embodied in the book under review.

The book consists of articles and essays written at different times. But this is not just a collection of works; it is a systematic, well-rounded study, and what gives it completeness is not so much the fact that all the articles and essays are about Pushkin, as a unified methodological approach.

The book provides a fairly good idea of the scope of Bondi's interest. Here we find studies of Pushkin's prosody ("Pushkin and Russian Hexameter" and "Folk Verses in Pushkin"), an article on literary history ("The Emergence of Realism in Pushkin's Work"), analyses of individual works ("Mozart and Salieri" and "Monument"), and a major study of Pushkin's dramatic works ("Pushkin's Plays"). Each of these helps us better to understand Pushkin's work; each serves as a compass to guide us in our search for the true meaning of the poet's writings.

Bondi is asking us to sit down and read Pushkin together with him, *attentively*. This means that we are to try to understand and interpret a work by Pushkin in the context of all his writings and against the social and literary background of Pushkin's time. Such an approach has proved highly rewarding. But Bondi expects of a scholar more than mere erudition, a good knowledge of the material he handles; what is most important, in Bondi's view, is that the scholar should be on a certain *aesthetic* level when conducting a literary analysis, a level he can attain only if he is *imaginatively* gifted. Bondi is keenly aware of the linguistic aspect of Pushkin's poems; he is sensitive to the shades and nuances of the poet's words. And this awareness is in a high degree *historical*.

This quality is perhaps most clearly revealed in "Mozart and Salieri", probably one of Bondi's most brilliant essays.

When we read this essay, in which Bondi is not only the scholar and literary critic but also someone with a fine knowledge of music and theatrical art, we feel we are

witnessing an outstanding performance; and thus one of the great dramas of all time becomes part of us.

The essays and articles included in the book under review are all written in a clear, simple manner, free of rhetoric, paradoxes, or unexpected associations. Bondi is not trying here to astonish the reader, but to *persuade* him. In analysing a problem or a biographical detail or a work by the poet, Bondi seems to foresee all possible interpretations and he lays them before us and "plays" with them. Some may appear fairly convincing at first. But Bondi is never "fettered" by even the most "brilliant" ideas; he subjects them to the strict test of scholarship and, if he finds that they do not meet the required standards, dismisses them without further thought. Bondi seeks out what is true, and in this search he is undaunted by any obstacles that may arise. Indeed he regards such search as his main task as a scholar.

A striving towards accuracy is a distinctive feature of this book by Bondi.

S. Selivanova



BIBLIOGRAPHY

NEW BOOKS BY SOVIET LINGUISTS

From the Editors: Below we give a list of books by Soviet linguists published in Russian in recent years. The list has been compiled by the Institute of Linguistics of the USSR Academy of Sciences.

V. A. Avrorin, *Problems in the Study of the Functional Aspect of Language. Towards the Question of the Subject of Sociolinguistics*, Leningrad, Nauka Publishers, 1975, 276 pp.

The author gives reasons for the existence of socio-linguistics as an independent division of the science of language, analyses the question of the dual essence of language—its material structure and social function, offers specified variants of such cardinal concepts of sociolinguistics as the function of language, its form of existence, environment, sphere of application and conditions of existence, and discusses the methods of sociolinguistic research.

N. D. Arutyunova, *The Sentence and Its Meaning. Logico-Semantic Problems*, Moscow, Nauka Publishers, 1976, 383 pp.

The work centres on the logico-semantic aspect of the meaning of the sentence, in which four types of relations are identified: relations of existence, identification, nomi-

nation and characterisation. The scholar examines the dependence of the text structure on which one of the said types of logico-syntactic relations is the communicative nucleus of the sentence.

N. A. Baskakov, *Historico-Typological Characteristic of the Structure of the Turkic Languages*, Moscow, Nauka Publishers, 1975, 287 pp.

The author analyses material on word combination and the sentence as well as the formation and development of word combinations and sentence constructions. The book sets out the theoretical principles of the typological study of the Turkic languages.

V. A. Beloshapkova, *Modern Russian. Syntax*, Moscow, Vysshaya shkola Publishers, 1977, 248 pp.

The author discusses the theoretical problems of syntax and a wide range of questions pertaining to the structural, semantic and communicative aspects of the study of word combinations, simple and

composite sentences. She analyses the subject-matter of syntax and various aspects of the study of syntactic bonds.

A. V. Bondarko, *Theory of Morphological Categories*, Leningrad, Nauka Publishers, 1976, 255 pp.

The work represents an essay on the construction of the particular theory of morphological categories. Theoretical constructions are based on an inductive concrete-linguistic basis. Theoretical propositions are based on the generalised results of the study of the morphological categories of Russian and other Slavonic languages. The author describes the functional types of morphological categories, the role they play in the functional-semantic field, the types of formbuilding, etc.

R. A. Budagov, *The Struggle of Ideas and Trends in Modern Linguistics*, Moscow, Nauka Publishers, 1978, 248 pp.

The author made an attempt to describe the concept "modern linguistics" and show the struggle of ideas and trends in the science of language. He substantiates the applicability of some or other theoretical constructions to the material of concrete national languages and the struggle of idealist and materialist concepts in modern linguistics.

T. V. Bulygina, *Problems of the Theory of Morphological Models*, Moscow, Nauka Publishers, 1977, 287 pp.

The author discusses some aspects of morphological description, compares different morphological theories and models and shows how definite theoretical ideas are reflected in the practical description of concrete languages. Materi-

al for research has been taken from inflexional (fusion) languages (Russian and Lithuanian).

I. F. Vardul, *Fundamentals of Descriptive Linguistics (Syntax and Suprasyntax)*, Moscow, Nauka Publishers, 1977, 351 pp.

The monograph deals with such basic theoretical questions of descriptive linguistics as the linguistic approach proper to language, the subject-matter and objectives of descriptive linguistics, the tier composition of language, the logical foundations of descriptive research, the place of descriptive linguistics among other linguistic disciplines. Attention is focused on the deductive aspect of the descriptive theory.

The Great October Revolution and the Russian Language, Kiev, Vysha shkola Publishers; Leipzig, Enzyklopädie Publishers, 1977, 294 pp.; Editors: V. V. Ivanov et al.

This publication—a collective effort by linguists from the Soviet Union and the German Democratic Republic—deals with questions of the development of the Russian language after the Great October Socialist Revolution and its role as a means of inter-nation and international communication. The contributors show the influence of Russian on other languages in Soviet years.

Ye. M. Wolf, *The Grammar and Semantics of Pronouns (Based on Material from Ibero-Romance Languages)*, Moscow, Nauka Publishers, 1975, 223 pp.

The monograph appears in the series "Typological Characteristics of Romance Languages: Linguistic and Social Aspects". The author explores the relationships between the grammatical and semantic as-

pects of language, employing material on anaphoric pronouns, which constitute one of the principal organising elements of a connected text. The book deals with the grammar and semantics of personal, demonstrative and possessive pronouns and describes the specifics of their use.

Ye. M. Wolf, *The Grammar and Semantics of Adjectives (Based on Material from Ibero-Romance Languages)*, Moscow, Nauka Publishers, 1978, 200 pp.

The monograph is in the same series. The author draws on material from Spanish, Portuguese and Catalan to study the functional specifics of adjectives in the context of the semantics of syntax and the linguistics of the text. The author discusses the semantics of adjectives and the semantics and syntax of nominal groups.

N. Z. Gadjeva, *Problems of Turkic Areal Linguistics*, Moscow, Nauka Publishers, 1975, 303 pp.

The author treats of the areal distinctions of the Turkic languages of Soviet Central Asia in their interrelation with the Turkic languages spoken elsewhere. Language data are studied at the level of phonetics, morphology and partly syntax. The author substantiates the idea that the study of the Turkic languages of Soviet Central Asia by the methods of areal linguistics is not only instrumental in specifying the ideas about the languages of a given areal, but is also of great general linguistic significance.

B. K. Giginishvili, *The Comparative Phonetics of Daghestan Languages*, Tbilisi, Tbilisi University Press, 1977, 164 pp.

The work reconstructs the all-

Daghestan system of consonantism and traces the main stages of its transition to the phonetic systems of modern Daghestan languages.

The Grammar and Semantics of the Romance Languages (Apropos of the Problem of Universals), Moscow, Nauka Publishers, 1978, 227 pp.

This is the closing book in the series of monographs devoted to the typological characteristic of the linguistic and social aspects of the Romance languages. The author identifies phenomena common to all Romance languages and those inherent only in some of them. The definition of a kind of particular universals enables the researcher to present the group of languages in question as a unified type in contrast to other groups of languages (Germanic, Slavonic, etc.).

Yu. D. Desheriev, *The Patterns of Development of the Literary Languages of the Peoples of the USSR in Soviet Times. The Development of the Social Functions of Literary Languages*, Moscow, Nauka Publishers, 1976, 431 pp.

The monograph explores the processes of development of the social functions of the literary languages of the peoples of the USSR, summarises the functional development of languages, offers a general characteristic of their trends of development and forecasts linguistic evolution in this country. The work discloses the role played by the Russian language in the life and linguistic development of the Soviet peoples.

Yu. D. Desheriev, *Social Linguistics (Apropos of the Fundamentals of General Theory)*, Moscow, Nauka Publishers, 1977, 382 pp.

The work outlines problems of the general theory of social linguistics. It describes the subject matter of sociolinguistics, its conceptual apparatus and place among the linguistic disciplines. In addition, the author defines the place of sociolinguistics among other branches of knowledge, the aspects and methods of sociolinguistic research.

G. B. Djaukyan, *General and Armenian Linguistics*, Yerevan, Armenian Academy of Sciences Publishing House, 1978, 475 pp.

Among the general linguistic problems the author focuses on these of metalinguistics, linguistic modelling and typology. He suggests, in particular, a universal linguistic model, a classification of methods of linguistic research and a periodisation of the history of linguistics, analyses and specifies the concepts "phoneme", "grammatical category", etc. As regards the theory of the Armenian language, the author considers problems of comparative phonetics and grammar, the history of the language, dialectology and the history of linguistic theories.

M. Dzhavadova, *The Vocabulary of Shah Ismahil Khatai Based on the Poem "Dehname"*, Baku, Yelm Publishers, 1977, 213 pp.

Taking a linguistic approach to works of Shah Ismahil Khatai the author offers on this basis a comparative-historical study of the vocabulary of the Azerbaijanian literary language of the early 16th century. Citing concrete facts she shows the role played by the poet's language and style in the evolution of the vocabulary of the Azerbaijanian literary language.

V. Zakirova, *Grammatical Terms in the Kirghiz Language*, Frunze, Ilim Publishers, 1976, 151 pp.

The author analyses the formation of grammatical terminology in the Kirghiz language, in which she points out three periods: 1) publication of the first textbooks of Kirghiz (1924-1930), 2) launching of grammatical research and enriching of grammatical terminology (the 1930s-1950s), 3) improving and enriching of grammatical terminology (the 1960s—the present time).

V. A. Zvegintsev, *The Sentence and Its Relationship to Language and Speech*, Moscow, Moscow University Press, 1976, 307 pp.

The author endeavours to trace the bounds of the science of language and define the category of the sentence, discusses problems of the levels of a language and relationships between them (paradigmatics) and the units of one level (syntagmatics), discloses the bounds of linguistic description, analyses the problem of presuppositions and offers a possible solution to the problem of covert conceptual categories in the sentence by providing an answer to the question whether or not presuppositions are universal and what are the delimitations of the presuppositions of language and speech.

Kh. Imazov, *Dungan Phonetics*, Frunze, Ilim Publishers, 1975, 174 pp.

The author gives a systematic description of Dungan phonetics and discusses the structure of the syllable, the specifics of vowels and consonants, the ways of building composite words and grouping sounds in the word and the syllable.

Historico-Typological Morphology of Germanic Languages. Phonomorphology, Paradigmatics, Category of Noun, 359 pp; *Category of Verb*, 299 pp; *Nominal Forms of Verb*, 210 pp; Edited by M. M. Gukhman, E. A. Makayev, V. N. Yartseva, Moscow, Nauka Publishers, 1977.

The monograph gives a typological analysis of the regularities governing the historical evolution of the morphological system of the Germanic languages from the ancient written monuments to the formation of national languages. The object of study are both formal-structural and semantic transformations. The accent is on the identification of general typological trends in the processes under study, which are not infrequently realised in non-identical constructions.

Historico-Typological Studies in Finno-Ugric Languages, Moscow, Nauka Publishers, Editor B. A. Serebrennikov, 1978, 328 pp.

The monograph is the first attempt in the history of Finno-Ugric studies to explore problems of historical typology by drawing on material from Finno-Ugric languages. It analyses the historical evolution of microtypes and their conversion into microtypes of a different quality. As microtypes the authors use the Old-Mordovian and Old-Permian systems of local cases, the Old-Mari system of past tenses and the Old-Uralic word structure.

Y. N. Karaulov, *General and Russian Ideography*, Moscow, Nauka Publishers, 1976, 355 pp.

The author defines the subject-matter and method of ideography, describes the views on the relationship between the word as an ele-

ment of the lexico-semantic system and as a component of the context. He analyses problems of the organisation of ideographic dictionaries and the realisation in them of the systems, properties of the vocabulary as well as a number of fundamental properties of the lexico-semantic system of a language and its vocabulary.

Categories of Being and Possession in Language, Moscow, Nauka Publishers; Editor V. N. Yartseva, 1977, 259 pp.

Drawing on material from a number of Indo-European (Germanic and Romance) and non-Indo-European (Melanesian and African) languages the author surveys the categories of being and possession in terms of their linguistic expression.

G. A. Klimov, *Typology of Active Structure Languages*, Moscow, Nauka Publishers, 1977, 320 pp.

The author substantiates the independence of the active structure as a linguistic type differing from the nominative and ergative structures. He gives for the first time the definition of the basic structural characteristics of this structure at the level of the lexical, syntactic and morphological systems, discusses the synchronous mechanism of functioning of the active structure and its trends of development and the dependence of its specificity on a definite meaning-oriented stimulus. A hypothesis of the origin of the active structure is formulated.

G. V. Kolshansky, *Correlation of Subjective and Objective Factors in Language*, Moscow, Nauka Publishers, 1975, 230 pp.

The book deals with problems of language structure, isomorphism

and information content in the gnoseological and linguistic aspects. The author considers the correlation between the sensual and the rational in the content and structure of linguistic units, the grammatical and logical segmentation of an utterance, the individual and the common in communicative structures. The theoretical analysis is based on concrete material from European languages.

R. G. Kotov, *Automated Control Systems: Linguistic Aspects*, Moscow, Nauka Publishers, 1977, 167 pp.

The study is devoted to the use of natural language in automatising information processes in administrative and organisational control systems. The author discusses the linguistic aspects of evolving means of a language, an information base and individual components of the programme-controlled means of data processing in automated information systems.

I. G. Koshevaya, *Problems of Linguistics and of the Theory of the English Language*, Moscow, Moscow Lenin State Pedagogical Institute, 1976, 166 pp.

The author discusses problems of language integration, including the principles of subordination and autonomy.

Kh. Kurbanov, *Roshorv Language*, Dushanbe, Donish Publishers, 1976, 312 pp.

The monograph describes the Roshorv language (one of the languages of the Pamiers group). The author analyses the phonemic system of the language, its parts of speech, word-combinations, means of expressing parts of the sentence, and the main types of composite sentences used in oral speech.

T. P. Lomtev, *General and Russian Linguistics*, Moscow, Nauka Publishers, Editor F. P. Filin, 1976, 381 pp.

This book is a collection of papers by a well-known Soviet scholar, which were published in different years in periodicals and now are bibliographic rarities. It contains articles on general and comparative-historical linguistics, the phonology, syntax and semantics of modern Russian, historical morphology and historical syntax.

E. A. Makayev, *General Theory of Comparative Linguistics*, Moscow, Nauka Publishers, 1977, 205 pp.

The author elucidates the fundamental tenets of comparative linguistics and their imperative significance in constructing the comparative grammar of different language families. He makes an attempt to describe a single unified method for a comparative-historical study of both the Indo-European and non-Indo-European languages.

D. I. Marinescu, *Bilingualism as a Factor in Drawing Socialist Nations and Nationalities Closer Together*, Kishinev, Kartya Moldavenyaska Publishers, 1975, 147 pp.

The author makes a socio-political assessment of bilingualism in socialist society. He notes that like any community, the Soviet people—a new historical community—needs a unified means of communication such as the Russian language. The author elucidates theoretical questions of the national-language policy of the CPSU and their solution in practice. He cites data illustrating the linguistic situation in the Soviet Union in general and in the Moldavian SSR in particular. It is demonstrated that in socialist society languages

develop and function in close interaction, thus enriching each other.

A. M. Mukhin, *Linguistic Analysis. Theoretical and Methodological Problems*, Leningrad, Nauka Publishers, 1976, 282 pp.

The pivotal problem is that of language levels. The author points out elementary and constructive units related to the phonological, morphological, lexical and syntactic levels. In identifying elementary units of all language levels he employs methods of experiment and modelling.

National-Cultural Specificity of Speech Behaviour, Moscow, Nauka Publishers, 1977, 352 pp.

The book explores the relationship between national culture and speech communication, deals with problems of national-cultural variants of the genesis of speech communication, analyses sociological and socio-psychological problems of speech communication and defines the range of concepts and categories of the socio-psychological description of communication. The monograph contains material on the description of the national-cultural specificity of speech communication.

German-Ukrainian Language Parallels. Comparative-Typological Grammar, Kiev, Visha shkola Publishers; Editor Y. O. Zhluktenko, 1977, 262 pp.

The contributors concentrate on questions of the comparative-typological analysis of the grammars of the two languages, investigate the difference between the comparative-historical and contrastive analysis of languages and describe the comparison of the phonological systems and the

grammatical categories of the case, number, etc.

V. Z. Panfilov, *Philosophical Problems of Linguistics. Epistemological Aspects*, Moscow, Nauka Publishers, 1977, 297 pp.

The author surveys the role of language in the cognition and reflection of reality, the means of linguistic expression of the categories of quality and quantity in languages of different types and the patterns of historical development of these categories. He also discusses problems of the language sign, the nature of language significance, and so on.

A. Piročkinas, *At the Sources of Literary Language. Life and Work of J. Jablonskis, 1860-1904*, Vilnius, Mokslas Publishers, 1977, 227 pp.

The monograph is devoted to the early period of the life and research activity of Jonas Jablonskis, a Lithuanian linguist and one of the eminent students of the Lithuanian language. The author analyses a large number of documents and other original sources, giving an idea of the scholar's life and the role of his writings in the evolution of literary norms of the Lithuanian language.

Principles and Methods of Semantic Research, Moscow, Nauka Publishers; Editor V. N. Yartseva, 1976, 379 pp.

The contributors systematise and critically assess the existing semantic theories and methods, substantiate the underlying principles of semantic analysis and set out the fundamentals of semantic theory covering all significant units of language.

Principles of Describing the Languages of the World, Moscow, Nauka

Publishers; Editors V. N. Yartseva, B. A. Serebrennikov, 1976, 343 pp.

The contributors explore basic questions pertaining to the description of typologically and genetically different languages which confront researchers with special difficulties in selecting the method of language classification. The authors also discuss such problems as sufficiency of the signs of language description, semiotic principles of language description, typological description of languages, areal description of languages, and so on.

Problems of Language Policy in Countries of Tropical Africa, Moscow, Nauka Publishers; Editor N. V. Okhotina, 1977, 198 pp.

The monograph examines the specifics of the linguistic situation and language policy in a number of countries of Tropical Africa (Tanzania, Cameroon, Nigeria, Ghana, Sierra Leone, Mali). Special attention is given to the languages which are employed in the official spheres: administrative, educational and mass media. Some chapters are devoted to the development of the vocabulary of the Bamana language and several Bantu languages.

The Development of National-Russian Bilingualism, Moscow, Nauka Publishers; Editor Y. D. Desheriyev, 1975, 368 pp.

The monograph deals with the development of national-Russian bilingualism in Azerbaijan, Lithuania, Estonia and the Buryat ASSR. The studies have been made with the use of sociolinguistic and statistical methods. The work describes the main spheres of application of non-Russian and Russian languages and the role they play in the said republics. The authors

offer suggestions and recommendations as regards the further development of national-Russian bilingualism.

The Russian Language as a Means of Inter-Nation Communication, Moscow, Nauka Publishers; Editor F. P. Filin, 1977, 302 pp.

The monograph is devoted to general questions of functioning of the Russian language in the national republics and regions of the Soviet Union. The authors furnish data on the language situation in the USSR, show the importance of the Russian language in the linguistic life of the Union republics, and discuss the development of national-Russian and Russian-national bilingualism in the economic, scientific and cultural fields.

G. S. Sadvakasov, *The Uigur Language of the Ferghana Valley. Vocabulary, Morphology and Linguistic Interference*, Alma Ata, Nauka Publishers, 1976, 286 pp.

The author deals with the extralinguistic conditions of the formation and functioning of the subdialects of the Soviet Uigurs of the Semirechye area and the Ferghana Valley. He singles out the Uigur (all-Turkic) vocabulary stratum proper and borrowings of Iranian, Arabic, Chinese and Russian origin, analyses problems of Uigur word-building and elucidates questions of Uigur-Uzbek bilingualism.

G. D. Sanzheyev, *A Linguistic Introduction into the Study of the History of Writing of the Mongolian Peoples*, Ulan-Ude, Buryat Book Publishers, 1977, 161 pp.

The author deals with topical questions of the phonetic interpretation and transformation of the signs of the Old-Mongolian and Oiryat (Old-Kalmyk) alphabets.

V. M. Solntsev, *Language as a Systemic-Structural Formation*, Moscow, Nauka Publishers, 2nd edition, 1977, 341 pp.

The book is devoted to theoretical problems of language as a systemic-structural formation. The author analyses the concepts "system", "structure" and "substance" and discusses the sign theory of language and the sign problem in language in the context of the Marxist-Leninist theory of reflection.

Social and Functional Differentiation of Literary Languages, Moscow, Nauka Publishers; Editors V. N. Yartseva, M. M. Gukhman, 1977, 343 pp.

The monograph presents studies in the typology of literary languages, elucidates the forms of functional and social variation of literary languages and their interconnection with a view to disclosing the common patterns of the existence and development of language. The contributors draw on material from different languages which developed and functioned in different historical conditions.

Sense Perception of a Speech Message in Mass Media, Moscow, Nauka Publishers; Editors T. M. Dridze, A. A. Leontyev, 1976, 263 pp.

Proceeding from experimental data and literary material the contributors discuss processes of perception of the meaningful aspect of the text in conditions of mass communication: the press, radio. The authors analyse factors behind selectivity in text perception. Methods of research into the logical, semantic and communicative aspects of the text are examined. The book is an attempt to substantiate practical recommendations relative to the optimal parameters of

the text offered to the listener or reader by mass media.

G. V. Stepanov, *The Typology of Linguistic States and Situations in the Countries of Romance Languages*, Moscow, Nauka Publishers, 1977, 224 pp.

The monograph appears in the series "Typological Characteristics of Romance Languages: Linguistic and Social Aspects".

The author attempts to evolve a conceptual apparatus to describe the external functional system of language and determine the types of linguistic situations in the countries of Romance languages. The author discusses the external system of language in its relationship to the internal structure, on the one hand, and to social reality, on the other.

Y. S. Stepanov, *Methods and Principles of Modern Linguistics*, Moscow, Nauka Publishers, 1975, 311 pp.

The author discusses quests in modern linguistics which have not yet developed into scientific trends. He analyses methods of historical study of language as well as of the most common categories employed in the synchronous description of a language. These categories (distribution, opposition, function, generative processes) are described to elucidate the logical principles of modern linguistics.

Structural Communities of Caucasian Languages, Moscow, Nauka Publishers; Editor G. A. Klimov, 1978, 132 pp.

The book systematises and establishes new structural features which unite ---Abkhaz-Adyghe, Kartvelian and Nakh-Daghestan languages in their synchronous state. The authors consider the parallel-

ism of these languages at all levels of their structure and analyse some processes of structural change common to the Caucasian languages. An attempt is made to disclose the causal conditionality of the larger part of the analogies identified.

A. V. Superanskaya, *Theoretical Principles of Practical Transcription*, Moscow, Nauka Publishers, 1978, 283 pp.

The author discusses the transcribing process as the recoding of the information contained in the noun and its expression by the means of another graphic system. The author discloses the interrelation between practical transcription and transliteration and alphabetic writing in languages of different types as well as the history of borrowings and of the perfection of the methods of their recording in Russian.

A. V. Suprun, *The Grammar and Semantics of the Simple Sentence (Based on Material from Spanish)*, Moscow, Nauka Publishers, 1977, 268 pp.

The work appears in a series of publications devoted to the typological characteristic of Romance languages in the linguistic and social aspects. The author investigates the grammatically simple Spanish sentence and its semantics, identifies the patterns of relationship between the formal structure and the semantic content of the simple sentence, analyses the main types of semantic relations and the methods of their combination characteristic of Spanish syntax.

E. G. Tumanyan, *The Structure of Indo-European Nouns in the Armenian Language. An Essay on Reconstruction*, Moscow, Nauka Publishers, 1978, 366 pp.

The monograph deals with questions pertaining to the analysis of the specifics of transformation of the Indo-European archetype in the Armenian language. The author for the first time systematised the patterns according to which the Indo-European structural elements like the root, suffix, extender acquire a different manifestation in the Armenian language.

A. P. Feoktistov, *Essays on the History of Formation of Mordovian Written Literary Languages*, Moscow, Nauka Publishers, 1976, 259 pp.

The author explores the history of the Mordovian literary languages at all stages of the existence of the Mordovian written language ranging from the emergence of its first written monument to the present period of the development of the Moksha and Erzya literary languages. He analyses questions pertaining to the establishment and classification of the norms of the literary language.

M. N. Khadyrov, *Some Questions of the History of the Turkmen Language*, Ashkhabad, Turkmen Gorki State University Press, 1975, 86 pp.

The author discusses questions of Turkmen grammar in a historical context. He analyses the origin of verb formants in the present and the past tense, identifies the primary roots of a number of Turkic words, draws Altaic lexical parallels.

S. M. Khaidakov, *The Verb System in Daghestan Languages (Based on Material from Archi, Tsakhur and Avar)*, Moscow, Nauka Publishers, 1975, 276 pp.

The author describes all grammatical categories of the verb (indicative, imperative, jussive, aspect,

etc.) types of verbal word-building and nominal forms of the verb. A special section is devoted to the root morpheme, its lexical nature and phonological structure.

The author analyses the inflexional forms which enter into the paradigm of the verb of each language, and makes an attempt to trace the relative chronology of building some or other forms—primary or secondary stems.

D. N. Shmelyov, *Syntactic Divisibility of an Utterance in Modern Russian*, Moscow, Nauka Publishers, 1976, 150 pp.

The author discusses topical problems of syntax: the structure of a syntactic whole and its syntactic segmentation, word-combination and the sentence, the role of word order and intonation in the structural organisation of a sentence, the relationship between the principal and secondary parts of a sentence, etc.

Languages of Asia and Africa, Vol. 1, Moscow, Nauka Publishers, 1976, 343 pp.; Vol. 2, Moscow, Nauka Publishers, 1978, 344 pp.

This generalising fundamental work on the Afro-Asian languages contains systematised information on language families, the groups which form part of these families and in some cases individual languages. The authors give data on the structure of the languages—their phonetics, morphology, syntax, vocabulary and word-formation—with a view to identifying the common typological features, distinctions and trends in the further development of these languages.

Language Nomination, Part 1. *General Questions*, Moscow, Nauka Publishers; Editors B. A. Sereb-

rennikov, A. A. Ufimtseva, 1977, 359 pp.; Part 2. *Types of Names*, Moscow, Nauka Publishers; Editors B. A. Serebrennikov, A. A. Ufimtseva, 1977, 358 pp.

The contributors discuss the linguo-epistemological and semiotic principles of nomination, the socio-psychological and linguistic aspects of nomination, review problems of the choice of formal and meaningful signs of nomination and of the typology of language nominations. Drawing on concrete material they analyse various types of language nomination: word-forming, lexical, phraseological, syntactic.

Language Situation in African Countries, Moscow, Nauka Publishers; Editor N. V. Okhotina, 1975, 267 pp.

The contributors survey the general features of the language situation in several multinational countries of Africa (Nigeria, Cameroon, Uganda, Tanzania, Kenya, Zaire, Congo, Sierra Leone, South Africa), explore the functions of the dominant African languages (Swahili, Hausa, Fula) and their relationship with the European languages which have an official status in Africa. Special attention is given to the study of the formation of official languages in the developing African countries.

B. V. Yakushin, *Algorithmic Indexing in Information Systems*, Moscow, Nauka Publishers, 1978, 143 pp.

The author deals with the problem of algorithmicisation of the "compression" of text information (indexing). He discusses the semiotic and informational aspects of the problem as well as the methods typical for individual types of algorithmic indexing.

SCIENTIFIC THEMATIC COLLECTIONS

Since 1969, the "Social Sciences Today" Editorial Board, USSR Academy of Sciences, has been publishing the "Problems of the Contemporary World" series dealing with current problems in philosophy, history, economics, politics, sociology, law, psychology, ethnography, philology, and other social sciences. The collections acquaint the reader with the latest achievements of Soviet scholars in these fields of knowledge and with their approach to problems of broad interest to scientific and social circles.

In 1978, the "Social Sciences Today" Editorial Board, meeting the wishes of numerous specialists abroad, started the publication in Spanish a new series of thematic collections under the title "Latin America: Studies by Soviet Scholars". They include writings by leading Soviet experts in the history, economics, home and foreign policy, culture, national liberation struggle and the working-class and communist movements in Latin America.

The Editorial Board would appreciate your opinion on the scientific collections in the "Problems of the Contemporary World" and "Latin America: Studies by Soviet Scholars" series. Your remarks and suggestions will be taken into consideration in further plans for the series.

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Orders for the collections can be placed with firms and bookshops handling Soviet publications in your country, including the firms listed at the end of this issue. Sample copies are sent on request by the Editorial Board.

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OUR GLOSSARY

NATION is a community of people, which takes shape historically in the course of the formation of a community of territory, economic ties, literary language and some specific features of culture and character.

Nation is the form of community which arose as a socio-historical phenomenon in the period when the fragmented feudal domains gave way to the development of capitalist relations, when the economic ties between individual regions of a country became consolidated and a national market took shape. The state plays an important role in the consolidation of nations. Lenin emphasised that "nations are an inevitable product, an inevitable form, in the bourgeois epoch of social development" (*Collected Works, Moscow, Vol. 21, p. 72*).

National community does not imply social homogeneity.

The class antagonisms inherent in capitalism are typical also of the nations and national relations in capitalist society. Enmity among nations and national conflicts are inevitable consequences of capitalism. The proletariat opposes bourgeois nationalism with the ideology and policy of internationalism.

With the abolition of the exploiting system and the building up of socialism, nations undergo radical changes and become nations of a new, socialist type. Characteristic of socialist nations in the conditions of the public ownership of the means of production and the corresponding political system are the friendly alliance and the moral and political unity of their classes and social groups, equality, internationalist solidarity and the leading role of the working class.

The emergence of a new historical community of people—the Soviet people—is a vivid manifestation of the drawing closer together and consolidation of socialist nations in developed socialist society. Article 36 of the Constitution of the USSR says: "Citizens of the USSR of different races and nationalities have equal rights."

NATIONALITY is a notion expressing an ethnic community of people, which is one of the factors of nation formation.

It should be noted that the notions "nation" and "nationality" are closely related but are not identical. In its essence the notion "nationality" is narrower than that of "nation".

COMPRADORE BOURGEOISIE is the part of the national bourgeoisie of economically less developed countries, which is closely linked with foreign capital and acts as middleman in the home and foreign markets between the peasants and craftsmen of its country and the foreign monopolies.

The compradore bourgeoisie appeared in the epoch of the formation of the colonial system of imperialism. It emerged mainly from that part of the national exploiter groups and classes (merchants, usurers, feudals, tribal élite) which unconditionally deferred to foreign capital, both politically and economically.

At that time, the economic activities of the compradore bourgeoisie were confined mainly to the sphere of distribution. The exploitation of the petty commodity producer was the source of its profits. Having accumulated sufficiently large sums of money through trade and money lending, the compradore bourgeoisie gained legal access to some branches of colonial industry and agriculture, while the development of national enterprise as a whole was hampered by both non-economic and economic measures taken in the interests of the capital of the colonial powers.

Typical of the compradore bourgeoisie was its refusal to participate in the bourgeois nationalist anticolonial movements of the late 19th-early 20th centuries and between the First (1914-1918) and the Second (1939-1945) World Wars; its anti-national and pro-imperialist stand. After the Second World War, with the disintegration of the colonial system and the intensification of the national liberation movement the role of the national bourgeoisie, especially its anti-imperialist-minded sections increased. The participation in that movement of the national bourgeoisie (notably the petty and middle bourgeoisie) has led to the political isolation of the compradore bourgeoisie.

In the young states which have taken the capitalist path of development, the compradore bourgeoisie, whose political interests sometimes coincide with the interests of the entire class of the national bourgeoisie, remains by the nature of its activity closely associated with foreign capital whose economic and political influence it feels most.

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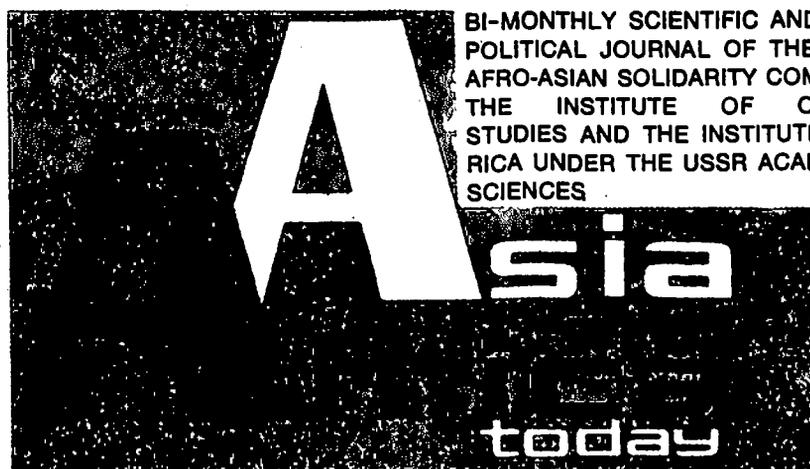
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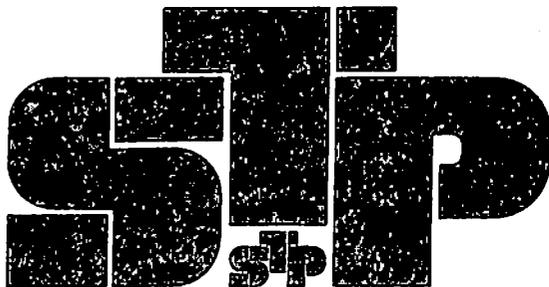
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