

SOCIAL SCIENCES

*Politico-Economic Foundations
of Acceleration*

*The Problem of Man:
Topical Aspects
(for the 18th World
Philosophical Congress)*

*Modern Militarism:
Global Dimensions*

*Consciousness
at the Juncture of the Sciences*

*Nikolai Miklouho-Maclay:
Scholar and Humanist*

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To the Reader

The 27th Congress of the CPSU, which gave a powerful impetus to the development of socialist society's spiritual sphere of life, set Soviet science a number of important questions relating, in particular, to the human factor in the country's socio-economic transformation and to the problem of man on a general philosophical plane.

This issue opens with articles by the distinguished Soviet scientists Academicians P. Fedoseyev and A. Aganbegyan in which they elaborate on the subject.

The Problem of Man: Current Aspects

The Editorial Board of this journal jointly with the Soviet Organising Committee of the 18th World Congress of Philosophers, which will take place in Great Britain in August 1988, have prepared a series of articles on the issues to be discussed at the congress. The article by Academician I. Frolov maintains that real humanism is equally important in both the world of today and of tomorrow as the foundation for a new ethos and a new type of science conducive to human development. In his study Academician T. Oizerman notes that man is responsible for preserving life on Earth, since in distinction to all other living species he possesses the ability of choice. Considering man and humanity as the highest value of civilisation, V. Mshvenieradze (Corr. Mem., USSR AS) discusses, in his article, the new thinking which makes it possible to take into account the new social situation that has shaped in the late 1980s. N. Lapin, Director of the Institute of Philosophy (USSR AS), considers man's innovative activity as a humanistic imperative, for such activity helps to develop man as a personality and as a subject of social and cultural progress.

Economics

We commend our readers' attention to the round table discussion held in the Institute of Economics (USSR AS) on the theme "Political and Economic Foundations of Acceleration". Some of its ideas and suggestions were subsequently reflected in the documents of the June 1987 Plenary Meeting of the CC CPSU and Session of the USSR Supreme Soviet. Analysing the restructuring of the system and methods of planned economic management **L. Abalkin** (Corr. Mem., USSR AS) underlines that today a radical reform and not partial changes are needed and a strategic system of measures for reconstructing the economic mechanism by successive stages. **A. Livshits** examines the works of Western economists advocating monetarism and the supply-side economics. He analyses their ideas regarding government regulation of the economy to be divorced from real life.

Historical Sciences

Z. Udaltsova (Corr. Mem., USSR AS) examines cultural ties between Kiev and Constantinople and reveals one of the facets of the complex problem of Byzantine influence on Old Russia's cultural development. In connection with the 100th anniversary of the death of the outstanding Russian physical anthropologist and ethnographer **N. Miklouho-Maclay** **D. Tumarkin** offers an essay on his life and work. In his analysis of books by American historians dedicated to the US Constitution, **V. Sogrin** points out that though the first bourgeois republican constitution of the 18th century was undoubtedly progressive in character, it curtailed the democratic gains of the War of Independence period.

Linguistics

Summarising the work of linguists of various countries in the field of comparative linguistics, **V. Yartseva** (Corr. Mem., USSR AS) comes to the conclusion that its achievements can be used in the communicative practice of each language and of all the languages of the world.

Interdisciplinary Research

In the opinion of Academician **E. Velikhov**, **V. Zinchenko** and **V. Lektorsky** the general orientation of philosophical thought towards ontologising social consciousness is gradually being reflected in a similar process in individual consciousness which holds the promise of success for interdisciplinary studies of consciousness. Investigating the problem of man in the system of Oriental religious reformative theories, **M. Stepanyants** describes social development in the spiritual evolution of the Afro-Asian peoples. Considering revolutionary-democratic enlightenment which was so typical of 19th-century Russian culture, **V. Kantor** said that **N. Chernyshevsky** and his comrades-in-arms strived for implanting in the people an ideal of an individual independent in his activity.

Global Problems

Modern science has laid the foundations for the international cooperation to prevent possible ecological crises, writes Academician **N. Moiseyev**. But it is not enough if we want to survive and preserve life on Earth, for the ecological situation of our planet demands new forms of behaviour and thinking not only from scientists but from all humanity. In the conditions of global military economic activity it is becoming obvious, **S. Blagovolin** and **A. Buzuyev** stress, that reliable security must rest not on the arms race but on the means of defence within the bounds of reasonable sufficiency and on the collectively created political and legal mechanisms for regulating international relations.

As usual this issue also carries extensive information on meetings of scholars on problems of the social sciences, book reviews and an annotated list of new works by Soviet social scientists.

The Editors

Man in the Modern World

Pyotr FEDOSEYEV

The problem of man as the central theme of the 18th World Congress of Philosophy is not accidental. It can safely be said that man is one of the most topical and urgent problems of our time in which the complex and contradictory picture of the social, scientific, technical and ethical development of humanity has been brought into focus.

Man became a major subject of thought of philosophers, scientists and cultural figures long ago. However, it is only in the present epoch distinguished by profound and dynamic changes, and the complex new tasks facing social practice and scientific knowledge that the fundamental problems of man's being have come to the fore, demanding a thorough philosophical analysis.

New conditions of the existence and development of man have taken shape at the close of this century. These include, first, the intensification of the processes of the social renewal of the world, and the acceleration of the movement of humanity from obsolete to new, more perfect and humane forms of social organisation. Second, the changes in the character of man's labour activity which means that as a result of the scientific and technological revolution the development of the productive forces has approached the point when any further progress of production increasingly depends on the advancement of man himself. Third, a new situation is taking shape in man's relations with the environment. Fourth, the new conditions of man's existence and development are connected with the greater possibilities of enhancing the influence of the rational and ethical aspects in his vital activity as a bio-social being.

Published here is Part I of P. Fedoseyev's article, the unabridged version of which appears in the collection of articles *The Problem of Man in Philosophy* issued by the Editorial Board in 1988.

Finally, the new conditions of man's being are engendered by the complication of the international factors furthering social progress in our age. A fundamentally new situation faces humanity today. The threat of thermonuclear war poses the question of the very survival of mankind, of human civilisation. Not only must this threat be eliminated; it is no less urgent to create a mode of life and international relations, under which the fruits of scientific and technical progress would benefit the whole of mankind.

Naturally, these and other aspects of the problem of man call for its more profound socio-philosophical study.

MAN AS A COMPREHENSIVE PROBLEM. SPECIFIC FEATURES OF ITS PHILOSOPHICAL STUDY

In our time, the problem of man, in one or another aspect, has become, directly or indirectly, a general problem for all sciences, all spheres of the artistic comprehension of nature, the entire system of culture. Involved is the broadest range of conceptual, socio-political and ethical views and forecasts, sometimes mutually excluding one another.

Previously, too, man was an object of study by a number of sciences, among them anthropology, psychology, biology, physiology, pedagogics, ethics and medicine. But in contrast to the preceding period, the modern studies of man are distinguished by a considerably greater diversity of approaches, new aspects, and new questions; as a result several new scientific disciplines, interdisciplinary connections and marginal, overlapping problems have appeared. Among such new disciplines and trends in the system of the natural sciences are the physiology and morphology of man's age, the typology of higher nervous activity, the genetics of man, and somatology, and in the system of the humanities—ergonomics, axiology, heuristics, and social ecology. Also many technical sciences, such as cybernetics and the theory of information, are increasingly joining in the study of the problem of man.

As a result, the general volume of scientific knowledge about man is quite impressive. However, it has not been possible so far to create an integral picture of man's vital activity on its basis. We are now faced with the danger of being swamped with the material accumulated as a result of the studies of different "particular" questions. The problem lies not only in the growing amount of particular scientific data, but also in the difficulty of comparing and generalising these data, since they are related to different sciences using different conceptual apparatuses and methods of investigation. That is why it is methodological questions that are now looming large in the study of the problem of man. In this connection an analysis of the specificity of the levels and methods of studying man by different

sciences, their correlation and synthesis has acquired special importance.

In recent years the view about the need for a comprehensive approach to the study of man has been gaining increasing recognition. It proceeds from the premise that the allround study of man cannot be made by means of just one or several special sciences, that such a study requires the joint efforts of the entire range of the natural sciences and the humanities as well as of the entire system of modern scientific methods.

A comprehensive approach to the study of man is, of course, necessary, for it opens broad prospects for deepening our scientific knowledge about man in all the multiformity of his social and natural interconnections. But can a uniform, comprehensive and integral theory of man be built on the basis of combining the heterogeneous data about him? In our view, it cannot. For man is a most complex system to be studied not by just one, but an entire complex of social and natural sciences, each one of them employing its own methods and approaches. References to the integration of the sciences made in this context are hardly convincing. The integration of knowledge is not the merging or the mutual fusion of the sciences, but their interaction and reciprocal enrichment for reaching a joint solution of comprehensive problems, each being studied by a special science in some one aspect.

The attempts to unite various scientific data about man with the use of particular scientific and special general scientific methods often turn into a fragmentary, eclectic description of essential and inessential aspects, specific features and interrelations. Thus, instead of an integral scientific picture we get a mechanical combination of heterogeneous data about man. It is clear that no systematisation and summing up (even the most complete) of the knowledge about man obtained by particular sciences will result in obtaining the knowledge about man as an integral system possessing integrative socio-natural qualities and an integral notion about man and the world of man.

Meanwhile, there is a pressing need for such a general and coherent concept that should theoretically ensure a new level of the knowledge about man, including the well-grounded principles connected with the formation of the individual in the interaction of the social, ethical and natural biological factors.

Philosophy is to play a special role here, for owing to its specific features, this branch of knowledge fulfils the function of an integrator of the knowledge about man. A major task here is to comprehend these specific features and the essence of the philosophical concept of man, its role in the development of the concrete sciences about man, which study the various aspects of his existence: the elaboration of the methodology of the integral scientific study of man and his functioning in the system of social, economic, production, scientific-technical, and organisational-

managerial relations. In its turn, the task of the further creative elaboration of the philosophical concept of man can be fruitful only in the conditions of the allround development of special scientific investigations and the close interconnection of philosophy with particular sciences. This is demonstrated, in particular, by the problem of man posed and tackled in various philosophical trends of the past one hundred years.

As is known, there are two diametrically opposed approaches to the question of the correlation of philosophy and the special sciences in studying the problems of man: scientific and anti-scientific. On the one hand, the rapid successes of particular sciences have given rise to positivist ideas about the possibility of special scientific knowledge being able to tackle the philosophical problems of man. On the other hand, representatives of various forms of anti-scientism (some of them have been given the name of "anthropologism") gave priority to the "purely" philosophical methods of the comprehension of man, and emphasised the limited character of science, regarding it as something alien and hostile to the "real" nature of man. However, the experience of modern philosophical and scientific investigations of the problem of man has shown that absolutisation of both the philosophical and particular scientific approaches is fraught with the danger of constructing one-sided, inadequate images of man. Despite all the distinctions between the particular scientific and philosophical levels of the analysis of the problem of man, they are closely linked and should be mutually complemented and enriched.

At the same time, it should be emphasised that in a comprehensive approach to man the philosophical aspect has a determining significance for all the other aspects. Scientific philosophy in general and the philosophical concept of man in particular provide the conceptual and methodological basis for analysing and solving the problems of the multiform being of man by individual natural and social sciences. Moreover, by making man an object of knowledge and correlating the range of its problem with him, philosophy reveals the main link which lends man his integral character.

What then is the main link which lends the character of integrity to all possible definitions of man? The comprehension of man as a social and active being, as the subject of not only theoretical, but also socio-practical and historical activity is the coherent and determining definition of human nature which reflects the various abilities and specific features of man. It is in this creative activity that man is revealed in the integrity of his being; it is in this activity and its concrete forms that the unity of the physical and the spiritual, the material and the ideal, reality and ideals is realised.

A philosophical approach to the knowledge about man presupposes, above all, the study of those aspects of his nature and vital activity which characterise him as a material being, creating the objective forms of his existence (the economy, the state,

science, art and religion). The philosophical approach has as its aim to show the connection of these forms of being with the subjective human factor as relatively independent realities, accessible to the transforming influence of man, as concrete-historical products of man's creative activity. Man's nature is revealed through the study of precisely these objectivised products of his creation, through concrete types of social and cultural formations.

The philosophical investigation of these objective spheres likewise seeks to reveal and characterise those factors and aspects of their functioning which show the creative abilities of man, the human sources and foundations of the origin and existence of the given objective forms. Accordingly, the problem of man in philosophy can be understood only with due account of and in the unity of all elements of social development and the personal qualities of man himself.

The philosophical comprehension of man should not be confused with the biological, psychological or sociological. In the context of a philosophical analysis man is represented not as a simple empirical individual characterised by a sum total of his specific socio-psychological features and not as a some abstract "generic" being existing outside time and life. Philosophy presents man as a social being capable of acting and thinking in accordance with his "generic" nature in a definite historical epoch.

In this sense philosophy seeks to evolve a notion of man reflecting not his temporal, special and hence always limited position in the world, determined by the existing historically transient situation, but his universal position, his developing "generic" essence in a concrete situation. Philosophy is the knowledge about the historically developing "generic" features of man, that is, everything that is not reduced to a sum of psychological, social and historical specific features of an individual, that is not lost in all that, but makes him a full-fledged representative of the entire human race.

Thus the problem of man turns out to be one of finding such parameters of human existence which would simultaneously include the necessary conditions for the existence of the human race as a whole, as distinct from all other species of living beings. The philosophical question about man is that about the boundaries of humanity, about what lends mankind the character of an entity, despite all the contradictions of its historical development (class, national, interstate, ideological), and the entire diversity of the historical forms of its existence. Philosophy sees in man not some extra-historical being, but a "generic" being enriched by historical experience.

Such an approach makes it possible not only clearly to delineate the so-called human sphere, but also to analyse scientifically the question about the prerequisites and ways of creating the conditions of life and development worthy of man and releasing the creative

potentials inherent in the individual. This question, as the experience of comprehending the problem of man in the history of philosophical and scientific thought shows, is no less difficult and important than developing an adequate understanding of the nature of man.

It is well known, for instance, that the foundations of humanism as a general theory of man were laid by thinkers of the Renaissance. Their works expounded the views on man as a being that independently chooses his aims and realises them on the basis of a rational analysis of reality. In their concepts man acted as an internally integral, reasonable and active being. They also posed the question about the interconnection of human aims and actions with the conditions of the social environment.

However, thinkers of that epoch did not see the real foundation of that interconnection. Many of their humanistic concepts therefore acquired a naturalistic character, since they ascribed primary significance to the physical structure of man and his natural-biological features. In contrast to such manifest belittling of the role of the consciousness and reason of man, concepts were advanced within the framework of the humanistic tradition which, on the contrary, absolutised the spiritual in man.

Equally significant is the fact that the lauding of the power of human reason, of the free man endowed with a strong will, and able to create and transform the world as he saw fit and enjoy it, which was characteristic of the European humanistic culture of the new epoch, was embodied, in all versions of early humanism, in the concept of the value of the individual and his ability not only to oppose all and every oppression and pressure from without, but also to oppose himself to the social environment, to another man, and nature. As a result, the supporters of that concept proved unable to place the problem of humanism on concrete-historical ground. The humanistic ideals proclaimed by them were of an extremely abstract character and, what is most important, they did not substantiate the ways of implementing them.

Today, too, humanism is often presented as a doctrine out of touch with the real life of man and confined to proclaiming some eternal values far removed from time and the real state of affairs. Sometimes, humanism boils down to no more than wishes or standard demands addressed to the individual. Even in those cases dealing with conceptual systems of notions, ideals and evaluations which proclaim the common weal to be the highest value and the main aim of social development and which are critical of the conditions and forces enslaving man, they often have, to a greater or lesser degree, features of abstract, contemplative humanism. They are unable to provide answers to the basic questions standing in the way of the realisation of humanistic ideals: how, while recognising the value of man, his creation of history and his own being, to learn to see such a creator in the real empirical man; how to achieve that

all people in all countries could really enjoy all human rights, and satisfy and develop their requirements; how to guarantee every representative of the human race the inviolability of his or her personal dignity, and a life without devastating wars, hunger, poverty and diseases?

Representatives of all the latest philosophical trends, which consider analysis of man's being their primary task—be it personalism, neo-Freudianism, existentialism, Protestant neo-Orthodoxy or modern Catholic philosophy—place the emphasis on the manifestations of subjectivity, individuality and the primacy of the personal. However, it invariably turns out that this subjectivity, "primacy" is illusory, is always connected with a definitely formulated or presupposed dependence of the individual on the supernatural or any other forces not controlled by man; secondly, this "primacy" is a speculative expression of a dual "break" between the individual and society really existing in bourgeois society, on the one hand, and a break in the individual himself, on the other.

Thus, the idea of the "primacy" of the individual, his absolute independence, on the general philosophical plane, paradoxically becomes, on the historical and social plane, an assertion of its non-sovereignty. And the main reasons for that are the isolation of man from, and his opposition to, society. In the opinion of representatives of these philosophical trends, only by "freeing" himself from the social ties imposed on him by society does man preserve his real essence, his individuality, and becomes a being with morality.

Such an isolation of the individual from society is deeply contradictory. It is objectively directed against bourgeois society, whose values and culture man cannot share, and also against the ideas of social solidarity and liberation movements. At the same time it can involuntarily be a theoretical expression and stimulus to mass protests in capitalist countries, as well as one of the reasons for abandoning struggle. As recent experience has shown, the youth, student and various alternative movements based on the ideas of man's opposition to society are as inconsistent and contradictory as the ideas of anarchic social rebelliousness. For humanists of this type social reformism is not a problem of the transformation of the social system of society, but that of restructuring its culture and man's consciousness. They rely mainly not on the strength of the social movements of the popular masses, but on the renewal of the emotional and psychological life of the individual, on the transformation of the biological nature of man.

Among all humanistic theories of our epoch, it is only the real humanism of Marx that insists on the priority significance of the restructuring of social relations. He regards man in his essence as a being not in isolation from and not in opposition to these relations, but as "the ensemble of the social relations".¹ That is why the task of

realising the ideas and principles of humanism in reality, from Marx's point of view, is to change man's social status, that is, the system of social relations. By disclosing the social dimension of man, Marxism has overcome the basic limitation of the humanism that preceded it, as well as all subsequent philosophical and anthropological concepts. The distinction of Marxist humanism from other concepts lies in that it imparts a real content to the general ideals of humanism, which is a result of scientific analysis, and that it has turned them into an instrument of practical actions.

To create the conditions of life and development worthy of man means, above all, to transform the conditions of his work, both mental and physical. For it is precisely the social conditions of labour that determine the measure of man's development as a personality, as a creator. In contrast to idealist concepts Marxism proceeds, in tackling this problem, from a simple and clear premise: there is nothing except nature and man, who is changing it by his vigorous activity and creating civilisation out of natural materials. It is nature-transforming labour that is the first and decisive specific feature of man which distinguishes him from the animal kingdom and turned the ape's paw into a human hand able to create beautiful statues out of a block of marble and transform the ore lying in the depths of the earth into parts of space missiles and synchrotrons.

Regarding labour as the force which has given man his human stature Marxism naturally considers that a truly humane approach cannot but highlight the problem of the emancipation of labour. Labour has not only created man and been, throughout history, the main criterion of the humanisation of nature and of man himself, but continues to be a crucial indicator of the social maturity of man. Of course, one cannot call a society humane, in which the wealth of some is created by the exploitation and misery of others, a society which is ruled by the enslaving division of labour denying millions of people even the elementary opportunities for realising their natural requirement for creative work.

This contradiction between man and the social conditions limiting the opportunities for manifesting his personality in socially useful labour is rooted in the private ownership of the means of production. Private ownership is not just an economic category. It determines the everyday conditions of man's life and work. Where the private ownership of the means of production holds sway the proclamation of personal freedom means the assertion of conditions for the free development of a small number of the privileged, whereas the majority of mankind, deprived of the means of production, does not have these conditions. For private ownership not only lies at the basis of the unjust division of human labour, but constantly alienates its products from real producers. Genuine humanism demands, therefore, the abolition of the private ownership of the means of

production. To bypass this crucial condition of real humanism and, all the more, to defend the existence of the private ownership of the means of production means to pay lip-service to humanism, to engage in fruitless day-dreaming.

Recognition of objective conditions as primary does not belittle the individual and his activity; on the contrary it shows his creative role and reveals the human dimensions of social life in all its unity and multiformity, contradictions and integrity. For the objective conditions we are speaking about are not some natural phenomena, but the products of human activity, the forms and methods of vital activity which have evolved in the course of the process of creation. It is absurd therefore to reproach Marxists with singling out only the "objective", "material" factors of human life and ignoring the "subjective" ones. The important role of "subjective" factors in history is clearly defined in Marxism. At the same time, the connection is disclosed between the subject and the object in human practice. The subjective is understood as the purposeful, transforming activity of man, that is, man himself and the subjective forms of human existence, with the important difference being that the subjective form should be understood not only as various manifestations of man's spiritual life, including his fantasies and illusions about himself, but as the real and objective forms and methods of human labour, of practical activity transforming natural materials and creating cultural values.

Of course, emphasis on man's social essence does not mean that in theory or practice one can disregard his personal-existential characteristics describing the phenomena of subjective reality, man's inner world, his convictions, ideals, tastes, aspirations, etc. Marxism has overcome the antinomy of the social and the individual that prevailed in the history of philosophy, by showing that the individual is not simply a unique empirical being "disseminated" in society, but the individual form of the existence of that society. Each individual as a representative of the human race and the bearer of the generic features of man, is at the same time an inimitable being. However, it does not follow from this that the individual is basically opposed to the social, for it, too, is determined by social characteristics of activity. The essence of the individual (and not only as a generic being) can be revealed not by opposing him to the social, but through an analysis of social relations.

On the other hand, society is not simply a sum of empirical individuals characterised by casual (individual) specific features, but a sum total of ties and relations between these individuals. "What is to be avoided above all," Marx wrote, "is the re-establishing of 'Society' as an abstraction *vis-à-vis* the individual. The individual *is the social being*. His life, even if it may not appear in the direct form of a communal life carried out together with others—is therefore an expression and confirmation of *social life*."²

Evidently, the emergence of the new in social development cannot be simply deduced from the present objective reality, from objective circumstances, without taking into account the specific and little studied "contribution" which creative activity and such specific feature of social reality as the consciousness, the subjective world of man make to objective processes. It is therefore important that the modern studies of the development processes of man's spiritual world should overcome the metaphysical isolation of consciousness from man, from the subject of practical action, as a result of which consciousness becomes an isolated and the only object of investigation, existing by itself, in the manner of the Hegel spirit. One cannot accept the excessive "epistemologisation" of consciousness and reducing it to cognitive processes (and in some instances, to the process of obtaining new knowledge), and, accordingly, a "rationalised" interpretation of man as mainly a cogitative, "contemplating" and philosophising individual. Greater account should be taken of such aspects and functions of consciousness as the choice of the aim, substantiation of programmes and projects, adoption of decisions, organisation of actions, evaluation of the results of activities, criteria of their effectiveness and of all other aspects of human knowledge and actions.

The development of the individual proceeds under the influence of the determining factors of the social and natural environment. However, the essence of the individual is not a result of any mechanical inculcation of the laws of the objective world in his consciousness, but a result of the inner striving of the individual.

The principle of the unity of the individual and the social is of major methodological importance not only for overcoming the attempts to absolutise individual being or dissolve the individual in society and thus take the problem of studying man as an individual off the agenda. This principle is also important because it pinpoints the need to pose the problem of man in a broad historical and socio-philosophical context, with due account of all aspects of man's existence and development: his personal qualities in their interconnections and interaction with social relations; the laws of the moulding of the individual in the process of upbringing, education and labour activity, in socio-cultural work and moral perfection; the interaction and mutual adaptation of man and technology, especially the latest; the dialectics of the interconnection of social and biological features, etc. All these questions need to be thoroughly studied if we are to understand the world of modern man with due account of the new conditions and the demands of social development.

NOTES

¹ K. Marx and F. Engels, *Selected Works*, Moscow, 1969, Vol. 1, p. 14.

² K. Marx, *Economic and Philosophic Manuscripts of 1844*, Moscow, 1967, p. 98.

Acceleration of Scientific and Technical Progress

Abel AGANBEGYAN

The Party's economic strategy adopted at the 27th CPSU Congress is known to rest on the concept of accelerating national socio-economic development. In quantitative terms, this means reversing the unfavourable slowdown tendency in growth rates, which was in evidence throughout the past three five-year periods. It may be recalled that the increment in our principal economic and social indicator, i.e. the national income, dropped from 41 per cent in the Eighth Five-Year Plan period of 1966-1970 to 16.5 per cent in the 11th Five-Year Plan period of 1981-1985. Considering the hidden price rise which is not taken into account in the price index applied in calculating those indicators, there are grounds to say that the end of the 10th (1976-1980) and the 11th Five-Year Plan periods saw the onset of stagnation in the national economy and a precrisis situation. To overcome stagnation phenomena, plans have been drawn up to increase national income by 22 per cent over the 12th Five-Year Plan period (1986-1990) and by an average 28 per cent in the 13th (1991-1995) and 14th (1996-2000) Five Year Plan periods.

Quantity is certainly not the main target of the strategy of acceleration. This can be expressed in stronger terms, namely, economic growth rates as such are far from being the most important indicator of national economic development. The qualitative aspect is far more important. It is not without reason that the notion of quality of growth, quality of socio-economic development, which earlier became current in scientific research, is so broadly used today. A major indicator of such quality is the content of growth and its sources.

The forthcoming period is to be different because development is to be accelerated against the background of a slowdown of the

growth of the production resources. This tendency has been especially manifest over the recent ten years. During the 9th Five-Year Plan period (1971-1975) fixed assets increased by 53 per cent, capital investments by 42 per cent, the output of fuels and raw materials by 25 per cent, and the number of people employed in material production by six per cent. Beginning with the 10th Five-Year Plan period those indicators began reducing. As far as the number of people employed in the production sphere is concerned, in long-term perspective its absolute reduction is to be expected because the workforce will be redistributed among the branches in such a way that the share of services will substantially increase. As of 1987, all of production increment will have to come from increased labour productivity. What is more, in the 1990s it will have to rise faster than the volume of production, making up for an inevitable reduction in employment.

The natural way to increase labour productivity is to raise its equipment-labour ratio. The problem is that not only the increment of the employed but also the amount of new investment are reduced. The latter, as has been noted above, was 42 per cent in the 9th Five-Year Plan period, 28 per cent in the 10th and 17 per cent in the 11th Five-Year Plan periods. This reduced growth was due to a general slowdown in the growth of social product and a lesser share of accumulation in the national income, which we deliberately resorted to since the early 1970s to augment the consumption fund.

The lower increase in investments figured prominently in the reduced increment in the productive assets, which was 42 per cent in the 10th and 37 per cent in the 11th Five-Year Plan periods. It is going to decline further to 30 per cent if we succeed in slashing the volume of unfinished production. True, a somewhat higher investment growth rate is stated for future five year plans (for example, a planned 25 per cent in 1986-1990). In this respect, the 12th Five-Year Plan period is particularly hard, for in those years a major shift will have to be effected in increasing housing and social construction, developing the production infrastructure, and beginning intensive renovation and restructuring of fixed assets. Fast development of several new industries predetermines a rather large investment programme.

On the whole, in the coming three five-year plans the main production assets and the national income are to double. Let us recall, in the preceding 15 years the main productive assets tripled while the national income increased by a factor of 1.8.

This means that plans are afoot to overcome the steady downward tendency in the output-capital ratio, which in the last three five-year plan periods dropped by some 14 per cent per period. In the 12th Five-Year Plan period this downgrade is to be slowed three-fold, in the 13th Five-Year Plan period the output-capital ratio will be stabilised, and in the 14th Five-Year Plan period,

somewhat increased so that in the fifteen years, as a whole, it will prove stable.

The greatest fall is in fuel and raw materials production. While annually extracting 5 billion tons of minerals, including some 2.3 billion tons of fuel (in fuel equivalent terms), the best deposits are being rapidly depleted and geological and mining conditions are steadily deteriorating. Fuel and raw material centres have to be moved northwards and eastwards. The result is rising cost of per unit of production increase in the fuel and raw material complex.

In its present shape, the mining industry is shackling the national economy. As much as a quarter of all investments in production, and the percentage is steadily rising, has to be funnelled into it. The chief objective of the energy programme, i.e. stabilisation of the level of investment in the fuel and raw material complex, has yet to be reached. There is but one alternative, namely to save resources. Today, unit investments in saving fuel are two to 2.5 times lower than in extraction. This is certainly nothing new. Even in the 11th Five-Year Plan period, about one-half of the additional fuel and raw-material requirements was supplied through more rigid rates of consumption. In the 12th Five-Year Plan period, this will cover two-thirds of additional requirements and in the future, according to the Guidelines for the Economic and Social Development of the USSR, the figure will go up to 75-80 per cent.¹ There are huge reserves in this respect. Up till now we have been far more wasteful per unit of the end product than the United States, using twice the metal, 1.5 times more of other raw materials and 1.4 times more fuel. And the USA is no leader for efficient use of its natural resources, lagging far behind Western Europe and Japan.

It's a real temptation for an economist to try and apply one indicator to all resources used, i.e. natural resources, labour and productive assets, and to observe its dynamics. This can be done because all resources are materialised or direct (manpower) labour. We could use the method of calculating present costs, with the volume of investment multiplied by the rate of effectiveness.

Taking that integral indicator, the total increase in resources amounts to 21 per cent in the 9th Five-Year Plan period, 13 per cent in the 10th, 9 per cent in the 11th, 7 per cent in the 12th, and about 6 per cent both in the 13th and 14th Five-Year Plan periods. National income used for consumption and accumulation went up in the 10th and 11th Five-Year Plan periods by 21 and 16.5 per cent, respectively, and will increase by 22 per cent in the 12th and by an average 28 per cent in the 13th and 14th Five-Year Plan periods. A comparison of data related to the increment of resources and to the growth of national income would easily produce an integral indicator of the increase in effectiveness for all types of resources, as a whole. Over the last three five-year plan periods, it was quite stable at 6 to 7 per cent.

But the substance of that ratio and the factor proportion changed. In the 10th Five-Year Plan period, increased efficiency was due merely to more economical use of direct labour and a reduced labour-intensity of products, but was applied mostly to offset the overspending of embodied labour, i.e. a cutback in the yield and effectiveness of capital investments. There was practically no change in fuel and raw-material efficiency, extraction of resources and the end product rose at the same pace.

From 1976 to 1980, labour productivity slowed down while saving fuel and raw materials produced an additional effect, with the end product growing faster than the output of mining industries. Again most of that effect was quashed by the overuse of past labour, i.e. a lower yield and effectiveness of capital investments. In the 11th Five-Year Plan period, the same picture was repeated. True, the effectiveness of investment remained more or less at the same level or, in any case, dropped insignificantly but the yield of investments continued to plunge, offsetting the effect obtained.

It is easy to see that the correlation between extensive and intensive growth factors was as follows: in the 9th Five-Year Plan period three-fourths of growth were due to extensive factors and one-fourth to intensive factors, in the 10th Five-Year Plan period two-thirds and one-third, and in the 11th, three-fifths and two-fifths, respectively. In short, we have advanced up to now mostly along extensive lines although the ratio has changed towards intensive factors.

If we are to achieve the targets outlined in the documents of the 27th CPSU Congress, we need a sort of "double" leap in the rise of effectiveness, that would compensate for the continued downgrade in natural resources and speed up growth.

It follows from the above that the increment in the integral indicator of effectiveness in the 12th Five-Year Plan period will have to be 14 per cent (with a 22-per cent increase in the national income and a more 7-per cent rise in resources) as against 6 to 7 per cent in each of the past three five-year plan periods, and up to 20 per cent in each of the 13th and 14th Five-Year Plan periods (28 and 6 per cent, respectively).

Other methods of computation would certainly produce somewhat different specific figures but the dynamics would probably be the same.

What leverage can the state wield to reverse the negative tendencies and achieve a drastic rise in the efficiency of social production?

First and foremost, there are immense untapped reserves in institutional and economic factors. Improved work organisation, stricter discipline, higher skills and a stronger interest can all bring about better performance, higher quality, more savings, more effective uses of technology, etc. These possibilities are all the more

appealing because they can be put to use forthwith and without major investments at the initial stage.

It stands to reason that a higher level of technology and hardware entails an enhanced role for the institutional and social factors of production, a more urgent need for man's development as the subject of labour, and more substantial investments in this sphere. It is not without reason that the so-called residual principle of appropriations for developing these spheres was sharply criticised at the 27th CPSU Congress. Starting with the 12th Five-Year Plan period, the share of investment in education and in the social and cultural field will keep on rising.

Initially, however, the social and institutional factors can be put to use without major additional outlays, for it would be more than enough to make good use of available funds. On the other hand, at the current level of technology the potentialities of these factors are limited. Thus, scientific and technical progress is the main, strategic lever of acceleration and higher efficiency.

Scientific and technical progress is a very complex phenomenon which apparently includes two distinct processes, namely the evolutionary improvement of presently available technology and hardware and the revolutionary transition to fundamentally new technologies and new generations of equipment.

For example, a blast furnace can be expanded profitably. But this would not remove the main faults of the blast furnace process, i.e. one-fourth of iron ore mined is lost during concentration; there is a need for extremely costly and scarce types of coking coal which are usually found lying in the worst possible conditions; they have to be turned into coke, etc. All these efforts yield merely an intermediate product, i.e. pig iron, which has yet to be melted down to produce steel.

There is, however, a direct reduction process technology, and the USSR had already worked out several versions thereof, one of which has already been put into practice. This technology permits the use of undressed and even noncomminuted ore and plain bituminous coal. There are other technologies making it possible to reduce metal from undressed low-quality ores and to find proper uses for what is now regarded as harmful impurities such as phosphorus and sulphur.

It is not easy, however, to introduce such technologies. It is necessary to start mass-production and dissemination of new equipment, which requires a huge capital investment, and, what's most important, time. This is why the evolutionary aspect has thus far prevailed in scientific and technical progress.

A typical example is shifting the Gorky Automobile Plant from its present base vehicle with a low-power inefficient gasoline engine to a new diesel model with a much lower specific rate of cheaper fuel consumption, higher power and a longer service life.

The effect of the restructuring has been estimated to be most substantial, with the investments paying back in three years from the first phase of the new production. But commissioning it requires a new plant to turn out diesel engines and the retooling of several others. Big initial investments are needed which pay back quickly, albeit not immediately but at a mounting rate, and during the first few years of operation the effect is not likely to be very high. Time is needed not only to manufacture new automobiles but also to replace the old models.

The upshot is that the enormous investments made in the radical overhauling of production during the 12th Five-Year Plan period will begin having a major effect only in the 13th and 14th Five-Year Plan periods. This is why the highest rate of economic growth due to a substantially faster increase in labour productivity and other efficiency indicators has been projected for the 1990s.

In this context, the investment policy of the current 12th Five-Year Plan period acquires a decisive significance. It figures most prominently in furthering investment engineering, that is those industries which turn out production equipment. Their work forms the basis for technical progress of the national economy.

There has been a 24-per cent rise in investments in these industries in the 11th Five-Year Plan period, and in the 12th Five-Year Plan period they are to go up by 80 per cent. A major problem facing machine-building is how to make the best use of those huge allocations, since there is a need for advanced projects, a construction base, and so on. Measures are now under way to eliminate the existing gap in this regard.

The projected investments will make it possible by 1990 to replace about 40 per cent of all equipment now in use in machine-building and to switch over to new products, the rate of renewal of the machinery produced is to go up from 3.1 per cent in 1985 and 4 per cent in 1986 to 13 per cent in 1990 while the new output should have better productivity and reliability indicators (an increase by a factor of 1.5-2) and should be less metal-intensive by 12 to 18 per cent. The series production of the new-generation technologies will facilitate a radical overhaul of other industries and an eventually more efficient use of resources.

The switch-over to the new generations of technology raises the question of whether there are any laws governing the revolutionising of technologies. The most important law seems to be the need to introduce not some individual kinds of new machinery but rather fundamentally new integrated technological systems embracing the entire process of production with all its auxiliary and service operations. There are numerous examples of the best technological innovations yielding a minor effect, unless they cover the entire production process.

Let us take a sci-fi situation where a mine manager, due to some innovation, is able, by pushing a button in his office, to mine as much coal as necessary from a seam without any additional cost. What would be the changes brought about by that innovation in the performance of the coal industry as a whole? There would be minor changes, indeed, with an approximate 25-per cent rise in labour productivity, a 7-per cent decline in unit costs, and no increase in the overall volume of production. The reason is that it is restricted now not by the production of coal from the seam, but by the face driving as such, since underground works still have to be done in many cases manually, i.e. blasting, haulage, drilling.... Besides, it is possible to mine only as much coal as the cars can carry. Each cubic metre of coal produced leads to additional gas emission. Hence, a need for more ventilation, the capacity of the present ventilation systems substantially curtails coal extraction, etc.

This science fiction can be dispensed with. In Gornaya Shoriya, scientists have designed and even introduced an iron ore extraction technology that increases ten-fold labour efficiency at the face. Yet, the mine's overall performance has changed much less substantially, with the productivity in related branches remaining at the same level.

The greatest effect at the foremost mines has been achieved not through the introduction of certain, no matter how well advanced, innovations but through an integrated restructuring, even though on the basis of the available technologies. Harmonised, synchronised across-the-board efforts to restructure the entire process of production have led to a two- or three-fold rise in labour productivity.

When applied to agriculture, an integrated technological system should be treated in a broader sense, encompassing as it does literally everything. Take Moldavia, for example. The tomato-growing system now in use in the republic (the end product is tomato paste, juice, etc.) embraces not only the farming technology but also the high-grade seed fund, fertilizers, herbicides, pesticides, and processing plant.

A law of the scientific and technological revolution, apparently, is the development and application of precisely such systems. Every one of them has clearly defined and rigidly programmed parameters, definite productivity, a definite level of quality, and definite requirements with regard to raw materials. Unlike certain kinds of equipment or machinery, the parameters of such a system are directly related to efficiency indicators.

Any attempts, for example, to evaluate the effect of a new tractor would result in assessing a merely conditional effect. Everything depends upon what specific operations it would carry out, what technologies it would be linked to, and what mounted implements it would have. The same is true of most of other production-purpose hardware. Only an integrated technological system possesses an objective, real rather than conditional economic effect.

Such an approach makes it possible to improve vastly the planning and control of technical progress in production. Within each and every branch, it is possible to single out relatively closed and integrated productive systems, to evaluate their parameters, to formulate requirements of potential replacement systems, and to set about designing systems with the required parameters.

For instance, all the mines now operating in the USSR can be conditionally subdivided into several technological groups, namely those with a gently dipping medium-thickness seam, with a low-yield seam, with a pitch-dipping seam, and so on. Several competitive technological systems with strictly fixed parameters can be found for each of the groups. In opening new or modernising old mines according to certain patterns, it is possible clearly to establish, and prescribe, an increment in effectiveness.

In this case, however, the very object of planning scientific and technical progress should change, with the integrated technological complex becoming such an object. As regards agriculture, for example, this implies a particular intensive technology of crop cultivation with all its parameters, i.e. definite tractors, precision drills, seeds, fertilizers, herbicides, and harvesting machinery. A plan should provide for developing and disseminating a new level of technology. The effect would then be determined on a "count-up" basis.

Another substantive problem is a need for specialised bodies that would introduce such technological systems. There are no such entities in most of the industries. As regards information about new technologies and new national and foreign literature on the subject, this is a task for scientific and technological information organisations. As to obtaining essential components, this is a job for the consumer himself, who has to buy everything he needs in various places. But even one missing technological link would almost cancel the effect of all the rest. This is the reason why we urgently need research and production associations (RPAs) which would be responsible, from the outset till the very end, for designing, developing and introducing the whole technological system. There are already prototypes of such associations, for instance Kriogenmash. But most branches of the national economy have no similar organisations, and the user is provided with separate, isolated types of equipment rather than integrated technology.

The system of research and production associations could make room for introducing organisations along the lines of engineering firms widespread in the West. The efforts by individual inventors or small groups, which oftentimes yield substantial results, are effective only if the inventor is not left "all by himself" with the national economy. Specialised agencies should be ready and able to shoulder the task of putting inventions into effect. If the RPAs are interested in securing effective work, they would also be ready to assume the

job of exploring "somebody else's" ideas. For it would be much easier to assess the effect of RPA activity than the performance of today's research institutes and design offices where it is necessary to analyse a conditional effect on many different subjects and development projects.

For example, Kuzbass boasts today of a huge institute with a 1,000-man staff, that has neither a design office, nor a production base of its own and concurrently works on some 200 subjects. How can one assess whether its performance is good or bad?

Judging by the reports from the mines, the institute works quite well. Its results seem to be put into practice, rendering an economic effect. Yet, labour efficiency in Kuzbass has of late shown practically no growth and the unit cost of coal has been going up.

If a development organisation, a design bureau or production enterprises were assigned to the institute and the latter would commission a modernised mine on the "turn-key" basis, the results of its work could be evident through the mine's performance. If, at that, the institute were not a monopolist and the user could have a choice of several design projects sponsored by different RPAs, this would certainly guarantee a good level of work.

Hence, the need to effect an in-depth integration of applied science, designing and engineering, and production. Integrated RPAs and major production associations with scientific and technological centres constitute effective forms of such integration.

At this point, we have to take up economic mechanism problems in their relation to questions of scientific and technical progress.

It stands to reason that the transition to large-scale introduction of integrated technologies and a search for new organisational forms thereof do not constitute an alternative to restructuring the economic mechanism. On the contrary, its restructuring is a sine qua non for translating such an approach into reality.

To promote scientific and technical progress in its revolutionary forms, the economic mechanism must meet certain general requirements. The main one is to subordinate production to social needs and the producer to the interests of the consumer. In this case, the producer would adjust to the consumer's specific peculiarities and demands. When there are shortages and the consumer is willing to take everything he is offered, substantial technical progress is hardly a thing to count on.

Specific ways of the required restructuring have been outlined by the June 1987 Plenary Meeting of the CPSU Central Committee. What is needed first and foremost is to restructure the planning system and largely to move over to drawing up plans according to the users' orders.

Shortages that make the consumer take whatever he is offered is largely due to the system of centralised distribution of the productive resources. A major issue now is, therefore, that of shifting over to

wholesale trade and commercial horizontal ties between enterprises and associations. This can be done only provided a radical reorganisation would be effected in the price system and in the financial and crediting mechanism—the task we have to accomplish within the current five-year plan period.

There would certainly be a need for all sorts of competitive systems enabling the consumer to choose a supplier, a contest of projects and proposals, etc.

I wish to dwell on one basic question, i.e. assessing the results of labour, both living and materialised, which needs new prices. The current prices for natural resources decrease the cost-effectiveness of many technical measures making it possible to increase production or to economise on raw material and fuel extraction. They correspond neither to world prices nor to the real national economic effectiveness of the given natural resources. Their projected increase would enable us to rectify the situation that has evolved here.

On the other hand, it will be necessary to sharply differentiate the prices for manufactured products and, primarily, for various kinds of machinery depending on their quality and efficiency. What is more effective for the national economy should also be more profitable.

Implementation of scientific and technological measures depends on whether production associations and enterprises possess sufficient sources of self-financing, primarily for establishing production, science and technology development funds. To this end, a decision has been taken to spread, as of 1987, the self-financing practice of the Volzhsky Auto Works and the Sumy RPA to the associations and enterprises within the jurisdiction of five ministries as well as to some 40 associations in several other industries. Starting from 1988, about two-thirds of the industry will operate on the basis of full cost-accounting and self-financing.

There should also be a direct relationship between labour efficiency, introduction of new technology, and earnings of a given collective. This could be done either by establishing wages and material incentive funds according to the economic norms and depending on economic performance, or by spreading the collective contract principle to the remuneration of labour of all workers at a given enterprise. In this case they would be much more interested in high quality, which would ensure good marketing opportunities and sufficiently advantageous prices. All this would certainly make sense only if the supplier is truly "tied in" with the consumer's interests and has real self-financing possibilities, with the prices motivating quality and the scientific and technological level of products.

It is evident that in such conditions technical modernisation would not be an end in itself for an enterprise; it would incur respective costs only when new technologies would actually guarantee better quality, a higher scientific and technological level and greater effectiveness of production.

The upshot is that improving the economic mechanism is not a single measure or even a series of measures but an integrated system of interrelated measures. The decisions taken by the June Plenary Meeting of the CPSU Central Committee and by the session of the USSR Supreme Soviet to overhaul national economic management create the necessary institutional, economic and social conditions for speeding up scientific and technical progress in our country.

NOTE

¹ *Draft. Guidelines for the Economic and Social Development of the USSR for 1986-1990 and for the Period Ending in 2000*, Moscow, 1985, p. 16.

The Problem of Man: Current Aspects

Global Problems, Man and His Outlook

Ivan FROLOV

Civilisation in the last third of the 20th century is facing an increasingly portentous new array of contradictions in global development which Marx and Lenin described in general terms but which became manifest specifically only much later, namely in the 1960s and 1970s. These are contradictions that can be termed as conflicts between imperialism and all of humanity, contradictions forming the cornerstone of what are commonly known as the global problems of our day. These include, primarily, the menace of nuclear war which puts the very existence of civilisation in peril. Then come problems such as overcoming economic backwardness and abolishing hunger and poverty, especially in the developing countries. The third group of problems concerns the man-nature relationship. Underlying the actual dialectics of present-day world development is the historically shaped antagonism between the two systems, combined with a mounting tendency towards the interdependence of nations. "Through the struggle of opposites there is taking shape a controversial but interdependent, and in many ways integral, world.... The last few decades of the 20th century confronted the nations of the world with difficult and acute problems. The need for solving the most vital global problems should prompt them to joint action, to triggering the tendency towards the self-preservation of humanity."¹

Global problems have a strong impact on many aspects of life today (socio-economic, political, ethno-cultural and geographic). They put many philosophical issues in a new perspective, the most crucial being that of the future of all of mankind.

Global problems are being addressed not only by philosophers and evangelists but also by public figures not given to moralising and by scientists who see the danger in uncontrolled utilisation of results of their work. There is a growing worldwide awareness of the importance of and need for new approaches to their solution. This concerns the whole system of global problems inasmuch as they touch on the interests of all of mankind, and the international community must pool efforts to resolve them.

All the problems referred to as global in one way or another influence the future of civilisation and oftentimes in an immediate way; there is no hope that the threat will diminish by itself and the solution of these problems allows of no delay. That is why thinkers of various schools are seeking new ways and methods of solving these problems, with the future in mind. This is done from different, often opposite ideological and political platforms, and it is not fortuitous that these problems have become the arena of bitter ideological and philosophical struggle.

* * *

Global problems are born of social development, first and foremost, of the growth of material production, and are the outcome of the scientific and technological revolution. But the STR by itself does not lead automatically to the depletion of natural resources, environmental pollution, hunger and increasing social inequality. The negative consequences of the advance of productive forces are unequivocally related to the nature of the social system.

This fundamental thesis underlies the Marxist-Leninist concept of today's global problems.

The theory of social development, whose foundations were laid by the classics of Marxism, helps see that imperialism is the main obstacle to solving global problems. While intensifying earlier problems, it packs global problems together on a catastrophic scale, endangering the very existence of civilisation.

Today not only internal development processes in any given capitalist country, but also global developments in general, point to a vital need for social reform in order to resolve in a revolutionary way the conflicts caused by capitalism. To quote Marx, only by following the path of revolutionary change can mankind arrive at a "genuine resolution of the conflict between man and nature and between man and man... between the individual and the species".² The forms of social change have always been infinite in their variety. None of them, however, can be raised to an absolute, nor be made a fetish, because it is a question of drastic social changes on a global scale.

According to Marx, changes of this kind do not happen by themselves, or on someone's order but are spawned by the course of social development itself, with the changes usually taking place within

a national rather than international framework. Therefore, the problems need to be solved in the context of comprehensive peaceful cooperation.

Referring to the system of global problems, today's followers of Marx are guided by his methodology, combining its scientific, social and humanitarian aspects and focussing on man and his future as the central problem in the system. "As we see it, the main trend of struggle in contemporary conditions," stresses the Political Report of the CPSU CC to the 27th Party Congress, "consists in creating worthy, truly human material and spiritual conditions of life for all nations, ensuring that our planet be habitable, and in cultivating a caring attitude towards its riches, especially to man himself—the greatest treasure—and all his potentials. And here we invite the capitalist system to compete with us under the conditions of a durable peace."³

In today's technologically-oriented civilisation there is a certain tragic paradox: the deadly menace of self-destruction hangs over man and at any minute he may vanish from the face of the earth. On the other hand, it was man himself who, guided by his intelligence, created this unnatural situation, and is now ever more aware of the need for this intelligence to be matched by humanism to produce wisdom. Today there is no single ideological or political trend that does not, in one form or another, refer to humanism. As a result, it is interpreted very broadly and oftentimes contradictorily. For this reason, it is extremely important to establish the meaning of humanism in each case and to define the relation between words and deeds. In this respect Marxism, while offering a clear, scientifically based conceptualisation, proceeds from the unity of words and deeds, of theory and practice. The humanistic essence of Marxism is integrally related to its scientific and revolutionary-practical aspects. It is Marxism that promoted true humanism which provides a philosophical foundation for humanity's technological and cultural advance and for resolving global problems.

The opponents of Marxism and bourgeois-reformist "Marxologists" have always tried to represent it as an "economic teaching" devoid of philosophic rationale, or to make it clash with its immanent revolutionary-practical substance (especially when dealing with Marxism's Leninist stage), or to present Marx all of a sudden as a "utopian prophet" who addressed man and humanism in his earlier works and then allegedly betrayed himself and evolved a teaching from which man disappeared giving way to economic determinism and an extreme exaggeration of the role of the *socium*. All this is a gross distortion of Marxism as an integral system.

On the theoretical plane, Marxism as real humanism appears as a science of liberation and development of man and humanity in general. This teaching, which Lenin and his followers elaborated on creatively, in new conditions, now represents a single Marxist-Leninist

science putting humanism on a real historical foundation and making it really work. This explains its intellectual and emotional appeal to progressively-minded people, all genuine humanists, who are extremely concerned about the threats and alternatives facing humanity today. As a science of man's liberation and development, i.e. embodied humanism, Marxism sees all other aspects of society's life as a means of achieving that objective.

To this Marx geared all his scientific pursuits and revolutionary activities. The task he set himself already in his young manhood, of arriving at a "*categorical imperative to overthrow all relations in which man is a debased, enslaved, forsaken, despicable being*",⁴ was tackled scientifically and practically through seeking ways and means of human liberation and development. His treatises on political economy and socio-political issues and his fundamental work *Capital* furthered the attainment of that objective. Marx's *Capital* revealed the secrets of capitalist production and proved the natural-historical need for a transition to communism as a genuinely humane society making possible free and allround development.

Numerous attempts are made today to prove that some new forms of humanism, taking particular account of the global approaches to man's activities and future, are allegedly needed in new circumstances. They are seen as resulting from the scientific and technological revolution and the emergence and sharpening of global problems when the course of world events and production growth make new demands on man, his activities, consciousness and self-awareness, his will and morals, while the threat of a global nuclear war endangers the very existence of the human race. It is also alleged that Marxism-Leninism is "hopelessly outdated" in this respect and should be discarded or reformed in accordance with the ideals of "humane socialism". Moreover, many bourgeois theoreticians in the fields of philosophy, sociology and political economy merely tailor Marxist ideas to fit their liking. Perhaps, today it is especially true of Marxism's interpretation as real humanism or a science of man's liberation and development. The term "science" should be emphasised here because in the history of social thought Marxism was the first teaching to renounce an abstract, non-historical and supra-class approach to man's problems and questions of humanism. It put these on a solid foundation by linking the implementation of the ideals of human liberation to a genuinely scientific theory of social development, to the revolutionary struggle of the proletariat and struggle for communism. This theory, propounded in works by Marx and Engels and elaborated upon by Lenin, and backed up by the experience gained by the world Communist movement at large, has been embodied today in the achievements of real socialism. As the Political Report of the CPSU Central Committee to the 27th Party Congress stressed, "the Communists have always been aware of the intrinsic complexity and

contradictoriness of the paths of social progress. But at the centre of these processes—and this is the chief distinction of the communist world outlook—there unfailingly stands man, his interests and cares. Human life, the possibilities for its comprehensive development, as Lenin stressed, is of the greatest value; the interests of social development rank above all else. This is what guides the CPSU in its practical activity"⁵.

The communist perspective revealed by Marxism was seen from the very outset as the overcoming of the individual's alienation and incompleteness, as an attempt at achieving the unity of the common, the particular, and the singular, the social and the individual in man, and as the formation of an allround and harmoniously developed individual. The humanistic message of this perspective, according to Marx and Engels, consists in that man and society put under their control "the conditions of the free development and movement of individuals, ... conditions which were previously abandoned to chance and had won an independent existence *over against* the separate individuals..."⁶ Marx pointed out that different social functions performed by an individual "are but so many modes of giving free scope to his own natural and acquired powers".⁷ Moreover, "*just as society itself produces man as man, so is society produced by him*".⁸ And, finally, to quote Lenin, "... all history is made up of the actions of individuals, who are undoubtedly active figures"⁹.

Under socialism and communism, the development of the individual is to be achieved by all, and not by elite. Following the triumph of the Great October Revolution of 1917, for the first time ever in history the workman, his interests and needs became the focal point of state policy, the Soviet state led by the Communist Party.

Nonetheless, even the most stupendous achievements cannot and should not overshadow the actual conflicts in the process of creating genuinely humane conditions of life, to say nothing of our mistakes and omissions in an endeavour of such import.

* * *

In accordance with the principles of Marxism-Leninism proven true by the practice of building socialism, the objective of social development, namely, the allround development of the individual, conveys the essence and meaning of socialism. It is an objectively built-in feature of the new social system. However, at one time when subjectivist, authoritarian assessments and judgements became unequivocal truths, in theory there became current a technocratic vision of man as a cog, supplementary to the social system. What is even more to the point, such notions were identified with the essential features of socialism. In this way both theory and practice were relieved of the task of ensuring man's development as a factor and an objective of social progress, i.e. the task of gearing the entire

national economic mechanism and resources to reaching that objective. This weakened the impact of socialist ideals and created a gap between ideological and educational work and real interests and requirements. Those scholars who at the time studied man's problems, interests and needs and the man-nature interaction in conditions of the scientific and technological revolution were given no support. As a result, the social thrust of economic development was obviously weakened, as was noted at the 27th Congress of the CPSU. Our society was successful in solving employment problems, having secured for all citizens social guarantees of a fundamental nature, but it failed to take full advantage of its strong points as regards man's development and making the utmost of his abilities and gifts. A drop in social activity among a certain part of the population, lack of responsibility and consumerism were the inevitable outcome.

All these negative developments were examined critically by the Communist Party which developed a scientifically based acceleration strategy whose ultimate aim is that of fundamentally refurbishing all aspects of our life, giving the social set-up advanced forms and taking maximum advantage of the humanistic nature of our system.

The historical scale of the problem being tackled should not be overlooked either. We live not in a vacuum, but in a world where nations are closely interdependent and the two social systems are compared on the basis of the most stringent principles. Therefore, the criterion involved is the potential of each of them to create genuinely humane conditions of life. High technology is the means of taking advantage of and building up such potentials. It requires not only special skills and know-how but also an extremely high general cultural and humanitarian level.

The process of man's liberation and development is highly complex and, of necessity, science-oriented. On the other hand, science itself undergoes radical changes, addressing man more and more, or restoring its interest in him.

Science, primarily philosophy, faces the challenge of summing up the results of the natural sciences, technical disciplines and the humanities in order to offer an integral conception of man in the light of the sharply increased role of the subjective factor and sharpening global problems, with ever new nations moving over from a society based on private ownership, exploitation, class antagonisms and wars to a society based on the principle of socialism, i.e. humanism, progress and peace for all.

Today, as how often earlier, it seems the time has come for philosophy to forge ahead. And not only because at all times it focused on man, exploring his boundless world in an equally boundless world of his relationships and states, including natural, social and moral. Philosophy has been given another chance of combining science and humanistic ideals on the basis of the principle

that man, to paraphrase the well-known dictum by Protagoras, is "the measure of all sciences". Philosophy, however, not merely complements science in this respect; it dares to do more—to combine the various sciences studying man in one way or another—to form a single complex in order to establish (implementing Marx's prediction) a single science of man. Furthermore, philosophy regards as top priority the need for science and art to be combined to be able to cognise man. It is only natural that this throws new light on the nature of a single science to be construed, making one wonder whether it would be a science in the traditional sense of the word. It is well to remember what Leo Tolstoy wrote in a letter to Nikolai Miklouho-Maclay (for details see article in this issue). Expressing his negative opinion of "scholastic science" he declared himself dedicated to serving "the science of how people should live together".

Hypertrophied "scholastic rationality" is today in a state of collapse, which also is true, more or less, of cognition of man which covers the ground from "pure" anthropologism to overt sociobiologism, with its one-sided, reductionist methodology, as two extremes. Man is a mystery. It must be unravelled and if you spend your life unravelling it, say not you wasted your time. This well-known view of Dostoyevsky's may seem eccentric or non-scientific, but it carries a lot of wisdom and a warning. Upon reading certain contemporary writers who deal with the issue of man, the impression can be gained that we already know the answers to the most important questions such as "What is man?", and have even a clear idea of what he will be like in the nearest future. However, on reflection, we become convinced of just the opposite: we have just launched on the path of cognising man and have a long way to go before we unravel the mystery.

If we restrict Marx's scientific definition of man by merely revealing his social essence, this "condensed socium" would be a far call from an actual man living on this Earth, while his history would appear as the advance of reason in its fight against non-reason. However, such a rationalistic view typical of the Enlightenment was alien to Marx who treated history in terms of activities of thinking, sensitive human beings living a full life and experiencing at times agonising conflicts between the calls of reason and nature, between suppressed instincts and passions, and between the conscious and the subconscious. Even in his most sophisticated abstract and theoretical arguments (e.g. in *Capital* where abstraction was his main tool of cognition) Marx addressed himself to a real man, the image of whom he saw always in his mind's eye.

Those who oppose Marxism never tire of repeating that it is "superrationalistic" in its vision of history and man. According to them, even though Marxism acknowledges the problem of man, it only views it as a sort of deduction made on the basis of general social premises. These allegations ignore what Marx called "human

nature" and disregard the distinctions between man as a personality and his existence as an individual and representative of the human race.

Marx attached great importance to the natural biological factors of man's existence and development and to his biological nature. His initial use of the human nature notion was later supplemented with the concept of combined requirements and instincts. In *Capital* he elaborated on the thesis concerning the interaction between the "external" and intrinsic nature of man, which leads to changes in both.¹⁰ Marx's definition of the essence of man as a sum total of social relations was intrinsically related to his idea of man as a sensuous being whose individual peculiarities and impulses (passions, etc.) Marx described as his "essential forces". He wrote: "Man is directly a natural being. As a natural being... he is... furnished with natural powers of life—he is an active natural being. These forces exist in him as tendencies and abilities—as impulses."¹¹

Engels fully substantiated and elaborated upon this approach in his works. The historic significance of the discovery of man's social essence is that it made possible a definitive rejection of one-sided anthropologism. The latter saw problems of man, his liberation and development in an absolutised, "monatomic" form and was coupled with an abstract-philosophical or biosocial reductionism. Marx's formula linked organically this problem area to the materialist understanding of history and the proletariat's class struggle and to the theory of revolution and the teaching of socialism and communism as a human society in which a person finds social forms of self-fulfilment appropriate to his essence.

From the very outset, Marxism related the essence of man to work activities and production and if Marx's interpretation of the dialectics of production and consumption is to be applied to the mediation and transformation of the natural-biological by the social, then it can be stated that "either appears to be a means for the other and is mediated by it, which is expressed in their mutual interdependence".¹² In this light, of particular importance today is Marx's doctrine according to which objective activities of man as a social being are at the centre of the unity and interaction of the natural-biological and the social.

According to Marx, "man appropriates his total essence in a total manner, that is to say, as a whole man. Each of his human relations to the world—seeing, hearing, tasting, feeling, thinking, being aware, sensing, wanting, acting, loving—...are in their objective orientation or in their orientation to the object, the appropriation of that object".¹³ It is a question of "the appropriation of the human world".¹⁴ This Marxian formula is, in my opinion, a key to understanding man's individual and historical development. It also helps resolve the problem of the relationship between social and biological factors in his development projecting it into the future on a scientific basis.

* * *

The Marxist approach to the problems of human studies as they stand today reveals that, for all the importance of direct scientific research into problems of man's life and death, perfection of his biological organisation, etc., we do not answer the principal question—what is it all for? These problems, which were traditionally dealt with by religion and then also by idealist philosophy, are emerging today in the forefront of the ideological struggle. Which is why Marxist philosophers have been giving them much attention of late. The alliance between science and materialist philosophy is called upon to provide effective answers to the eternal questions of human existence which constitute what could be termed moral human philosophy or scientific, real humanism.

For instance, take the relationship between social and biological factors in man's development. How many various projects are devised today, e.g. those involving the need to use man's latent potentialities (including psychophysiological), his genotype reserves, etc. Noteworthy, even serious works discuss but very rarely problems of an ethico-humanistic nature, in particular that caution and wisdom are required in that area. Perhaps, if these potentialities and reserves of the body do exist, they were meant to remain as such? What will manipulations with the genotype or with the human brain lead to? They could cause imbalances that would eventually lead to a tragedy. Such manipulations are all the more dangerous since the projected new methods of warfare involve the use of weapons developed on the basis of applying such technologies as genetic engineering, etc.

When dealing with man, exploring his potentialities, including psychophysiological, touching on problems involved in human experiments, it is necessary, according to many scientists, to create a new ethos to match the development level of sciences (in particular, the science of man) that just begins to emerge. We may well ask: Do we, perhaps, explore inadequately what follows from a combination of social and socio-ethical factors with "pure" cognition? And does the latter exist in the above form?

"The philosophers have only interpreted the world, in various ways; the point, however, is to change it."¹⁵ This well-known Thesis 11 from *Theses on Feuerbach*, reflecting as it does the essence of the new humanistic world outlook—Marxist philosophy—acquires today a new meaning and a new life. Philosophy today is in its prime not only because, by addressing man or restoring its interest in him, it regains its initial lofty purpose of providing spiritual support for both the individual and society as a whole. Fully in accordance with the spirit of Marxism, philosophy today becomes an active force that explains as well as transforms the world. Philosophic propositions translated into the language of political solutions become principles

which states abide by in their activities, and a foundation for international relations. Ideas of real humanism were embodied in the conclusions of the 27th CPSU Congress on the contradictory but interdependent and largely integral world, and in the concept of new political thinking. Our country's appeal to all peoples and governments of the world to learn to think and act in a new way is based on the conclusions reached long ago by science, in particular philosophy.

Scientists were the first to realise, not only the senselessness of wars in general, but also the explosive nature of the world situation in the latter half of the 20th century.

On January 31, 1955, French physicist Frédéric Joliot-Curie, member of the Communist Party, then President of the World Federation of Scientific Workers, addressed a letter to prominent British philosopher Bertrand Russell, in which he emphasised the danger of the nuclear holocaust hanging over humanity and the need for scientists to pool efforts in a joint statement on the subject. According to Joliot-Curie, the statement had to be formulated and signed by indisputable scientific authorities, albeit with different philosophic leanings. Russell supported Joliot-Curie's proposal, and also made it clear that persons signing the statement need not have the same political leanings, contrariwise, they should represent the opinions of the most diverse sections of society. This approach formed the basis of the manifesto written by Russell and signed by eminent scientists of both capitalist and socialist countries. Albert Einstein's signature came first (he died two days later), then the manifesto was signed by Joliot-Curie, Max Born, Linus Pauling and others.

On July 9, 1955, at a press-conference Russell announced the scientists' statement (referred to subsequently as the Russell-Einstein Manifesto). The Manifesto marked the beginning of the now famous Pugwash movement for peace and disarmament. It stressed the tragic situation in the world following the advent of nuclear weapons: "We appeal, as human beings, to human beings: remember your humanity and forget the rest. In view of the fact that in any future world war nuclear weapons will certainly be employed, and that such weapons threaten the continued existence of mankind, we urge the Governments of the world to realise, and to acknowledge publicly, that their purpose cannot be furthered by a world war, and we urge them, consequently, to find peaceful means for the settlement of all matters of dispute between them."

The scientists' growing concern for the future of humanity and the world at large manifests itself in the emergence, since the publication of the Manifesto, of numerous anti-war, anti-nuclear movements—those of physicians, environmentalists, etc. (the Pugwash movement unites mainly physicists).

An ever larger number of progressively-minded scientists oppose the nuclear folly and militarisation of space and science. Of course, many Western scientists use their talents and knowledge to serve the military-industrial complex and cannot be bothered with moral dilemmas. The specific features of science today complicate the situation extremely since the intellectual and moral standards of those in the scientific orbit are disparate, problems are tackled on a shared basis, and the final results of research and especially possible technological applications are far removed from the researchers. We are well aware that the number of scientific workers engaged in research with a clearly military orientation is far greater than the number of "concerned" scientists, to say nothing of those who actively work for peace and disarmament. However, humanity's hopes for a better future have always been connected with what is the best in man, with reason and humanism.

It is this vanguard which maps out humanistic approaches to the fundamental issue of our time, that of peace, as well as to the sum total (or, to be more exact, system) of global problems of human civilisation's present and future.

The Soviet Union has put forward a programme designed to do away with nuclear weapons by the year 2000. It was formulated in the January 15, 1986 Statement by Mikhail Gorbachev, General Secretary of the CPSU CC. The 27th Congress of the CPSU wrote it clearly and definitively into its policy documents.

The global threat to humanity is opposed by a global peace strategy in the implementation of which all nations and states must participate, regardless of their geographic location, socio-economic system, or philosophy.

This may usher in a new stage in the development of mankind. Now we are discussing not so much the increasing material and scientific and technological potential as, most important of all, mankind's ways of thinking and mentality, value orientations and humanistic aspirations. Why are these most important of all? Simply because anything else suppresses rather than liberates the main thing in man and mankind—his intelligence, humanism, and elementary sense of self-preservation.

Let us not forget the simple and eternal truths on which the life of the human race is based. They are not measured in megatons of wicked and senseless destructive power, but it is they that can oppose this power. It is intelligence coupled with humanism that was, at all times, called wisdom which is so indispensable in our age of harnessing the atom's awesome forces (a dangerous and not always successful endeavour). This is perhaps that principal thing that is meant when discussing the urgency of new thinking and a new political mentality.

This involves concrete, scientifically based studies of the world situation and constructive proposals, generally comprising the global

peace strategy. The programme offers a stage-by-stage solution of nuclear disarmament problems, which means that it presupposes an evolution in our thinking and political mentality, and their adaptation to new conditions and their dynamics. The latter is largely determined by mounting cooperation, confidence-building on a world scale and educational efforts in a spirit of peace.

The new Soviet proposals, heeding all this, focus on the need for international cooperation and new thinking to preserve peace and secure safe use of nuclear energy for peaceful purposes. This means that the programme our country offers will itself cultivate the soil in which it grows, by contrasting realism based on reason and constructive efforts with wicked, deadly non-reason.

The new proposals of the Soviet government are addressed to all. International cooperation is indispensable to preserve peace on Earth. The programme for doing away with nuclear weapons by the year 2000 is a prerequisite for solving other ever more sharpening global issues, including environmental. It is only in the general context of such problems and mankind's present-day and future concerns about securing peaceful development, overcoming backwardness, eradicating hunger and poverty, conserving nature, etc., that ideas are crystallised which constitute the global peace strategy, new thinking and new political mentality adjusted to cooperation, an honest dialogue of mutual interest, and joint action.

This also applies largely to what is called environmental thinking, an indispensable element providing a sound basis for man's activities as regards nature, including both favourable and detrimental technological impacts. According to economic estimates, in the last two decades of the 20th century national allocations for environmental protection will average 3 to 5 per cent of the GNP (i.e. no less than 150 billion dollars) annually.

Much is done nowadays to resolve the environmental problem technologically and practically. However, all efforts in this field can be nullified because of the threat of a thermonuclear catastrophe, which would mean the death of every living thing on Earth. That is why the relationship between ecology and politics and the social meaning and importance of the struggle for Earth's pure biosphere become increasingly obvious today. In this connection, of great importance is the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques, signed in Geneva by representatives of 33 states, including the USSR and the USA.

Global problems already weigh heavily on every aspect of man's life—the material sphere, culture, philosophy and ethics. This can only increase drastically as time goes by. The historical fate of all humankind depends on whether we find, in the shortest possible time, ways and means of solving them successfully, if not fully, at least partially, or lessening their danger.

This applies likewise to scientific and technical progress, the alternatives of which pose many challenging problems. Today, facing the challenges and dilemmas of nuclear energy, we are learning to think and act in a new way. However, looming up ahead are new, even more complicated problems and dilemmas posed by high technology (microelectronics, informatics, robotics, biotechnology) and also the new benefits and dangers involved in applying genetic engineering to man. New technology implies a high contiguity with man, society and nature. There must be new thinking, acknowledging the interests of the individual and society, the advance of cognition and the security of mankind. It is not without reason that attention centres today on what is called science ethics, a branch concerned with social-ethical regulation of the cognition process as regards man and life in general.

In reply to a letter from Professor Maurice Marois, who heads the Life Institute, Mikhail Gorbachev stressed: "The Life Institute is working on the subjects such as the consequences for man in the use of high technology, food resources and food, the environment and the animal world, ethics and biomedicine, science, education, television and the future of humanity. These subjects evolve life itself and become more vital with every passing year at times posing urgent and burning questions. Perhaps not everyone is aware of this yet, but sooner or later everyone will come to feel and realise this—and certainly this will be no later than the beginning of the next millennium."¹⁶

Readiness for large-scale cooperation and a pooling of efforts in using the achievements of science and technology in the interests of peace and human progress is an integral element of the Soviet Union's foreign policy. As Mikhail Gorbachev made it clear during the meeting with a delegation of the Nobel Prize Winners' Congress in November 1985, "we are for an essentially different way of speeding up progress in science and technology. We are for competition in technology and constructive cooperation in conditions of durable and just peace".¹⁷ The 27th Congress of the CPSU and subsequent Party decisions were no less conclusive on that score.

Obviously, such an approach adds much to the concept of peaceful coexistence. The New Edition of the Programme of the CPSU defines it as follows: "This does not merely mean the absence of wars. It is an international order under which good-neighbourliness and cooperation rather than armed force would prevail, and a broad exchange of the achievements of science and technology and cultural values would be carried out for the good of all nations."¹⁸

Extensive international cooperation of scientists becomes an indispensable element of international life, and an important social prerequisite for consolidating tendencies towards mankind's self-preservation.

Two concepts form the basis of the new political thinking. One describes the modern world as a contradictory one split into opposed socio-economic systems, yet interdependent and integral. In this sense one can speak of a single world civilisation, of humanity and of the human race. The second concept concerns the range of priorities of the universal values in relation to all the other values, at a moment when the very existence of humanity is at stake. This does not mean that we abandon our ideals, our ideology and the class positions. Quite the contrary, we emphasise a profound dialectical relationship between them and the general values of humanity.

Addressing the Moscow International Forum "For a Nuclear-Free World, for the Survival of Humanity", in February 1987 Mikhail Gorbachev said: "It could be said that we took the hard way to acquire a new outlook which is being called upon to bridge the gap between political practice and universal moral and ethical standards.... We forced ourselves to face the fact that with the stockpiling and sophistication of nuclear armaments, the human race is no longer immortal. Its immortality can be regained only if nuclear weapons are destroyed.... The nuclear powers must overstep their nuclear shadow and enter into a nuclear-free world, thus ending politics' isolation from the general ethical standards of humanity."¹⁹

A new outlook implies a new, higher level of mutual confidence. While adhering to its own lifestyle and way of thinking, each party should nevertheless build bridges of mutual understanding to meet half-way in order to save the globe from nuclear suicide and environmental degradation. This was the major topic of discussion for ecologists and perhaps for all those taking part in the Moscow Forum. But building such bridges is not an easy task.

Because of the need for cooperation in tackling global problems, there is a mounting internationalisation of mankind's life, proceeding in step with the internationalisation of economic and cultural development. In the long run, it will be the basis for the development of civilisation.

In my view, those are the favourable opportunities open to humanity in the light of the New Soviet initiatives that are of great political and philosophical significance. The Soviet Union counterposes a conception of genuinely universal, global thinking to the neoglobalist doctrines, being spread in the United States, which are actually a philosophy of global hegemonism. The Soviet conception is based on acknowledging the independence of all countries and peoples, as well as the common nature of their interests and the unity of the human race in face of the global thermonuclear threat and exacerbating global problems of today and tomorrow.

Such a philosophy and an outlook work towards consolidating a new ethos of science and lead to the emergence of new forms of practical and political actions aimed at strengthening the world potential of the forces of peace.

The teaching that proclaims, to quote Marx and Engels, the development of human natures' richness as an end in itself, free development of every individual as a condition for free development for all and the absolute human progress, is essentially humanistic. And it cannot fail ultimately to gain the upper hand because it appeals to the reason and humaneness of rational and humane man. Naturally, true Marxist humanism will continue to develop and be enriched in the process, drawing, among other things, on global, universal approaches.

New, real humanism is not only future-oriented. It is necessary today, in conditions of rapid scientific and technological development and the sharpening of global problems, as a foundation for a unified strategy projected into the future, and for a new ethos and a new type of science, serving humanistic purposes of man's development. This can clearly be seen in reviewing real problems and moral dilemmas, arising from them, and in the way global problems of today and tomorrow are being tackled. The progress of sciences dealing with man and life, which has been increasingly fast all the time, poses ever new, pressing questions, especially delicate ones of a socio-ethical nature, which should be given the closest attention.

NOTES

- ¹ *Resolution of the 27th Congress of the Communist Party of the Soviet Union on the Political Report of the Central Committee of the CPSU*, Moscow, 1986, p. 5.
- ² K. Marx, *Economic and Philosophic Manuscripts of 1844*, Moscow, 1967, p. 95.
- ³ Mikhail Gorbachev, *Political Report of the CPSU Central Committee to the 27th Party Congress*, Moscow, 1986, p. 25.
- ⁴ K. Marx and F. Engels, *Collected Works*, Moscow, Vol. 3, p. 182.
- ⁵ Mikhail Gorbachev, *Political Report...*, pp. 24-25.
- ⁶ K. Marx and F. Engels, *The German Ideology*, Moscow, 1968, pp. 93-94.
- ⁷ K. Marx, *Capital*, Vol. 1, Moscow, 1969, p. 458.
- ⁸ K. Marx, *Economic and Philosophic Manuscripts of 1844*, p. 97.
- ⁹ V. I. Lenin, *Collected Works*, Moscow, Vol. 1, p. 159.
- ¹⁰ K. Marx, *Capital*, Vol. 1, pp. 173-174.
- ¹¹ K. Marx, *Economic and Philosophic Manuscripts of 1844*, p. 144.
- ¹² Karl Marx, *Grundrisse der Kritik der Politischen Ökonomie (Rohentwurf), 1857-1858*, Berlin, 1974, p. 14.
- ¹³ K. Marx, *Economic and Philosophic Manuscripts of 1844*, p. 99.
- ¹⁴ *Ibidem*.
- ¹⁵ K. Marx and F. Engels, *Selected Works*, Vol. 1, Moscow, 1969, p. 15.
- ¹⁶ Mikhail Gorbachev, *For a Nuclear-Free World*, Moscow, 1987, p. 55.
- ¹⁷ *Supplement to Moscow News*, No. 48, 1985, p. 8.
- ¹⁸ *The Programme of the Communist Party of the Soviet Union. A New Edition*, Moscow, 1986, p. 23.
- ¹⁹ Mikhail Gorbachev, *For the Sake of Preserving Human Civilisation*, Moscow, 1987, pp. 8-9.

The Human. The Specifically Human

Theodor OIZERMAN

According to Benjamin Franklin's profound definition, of which the great significance was stressed by Karl Marx, man is an animal producing labour implements. The paradoxical nature of this definition is clear from the fact that animals do not produce tools. It follows that animals which produce tools are not animals. The paradox, however, rests not so much in the definition as in life itself. Man is indeed an animal and at the same time no longer an animal. This contradiction cannot be resolved by referring to the fact that man is an animal in one respect and a non-animal in another. It is all much more complicated than that, for both relations are highly essential, and underestimation of man's biological characteristics is incompatible not only with natural science but also with the real humanist worldview, of which Marxism-Leninism is the only authentic, scientific form.

Some Marxist researchers believe that it would be more correct to define man as a biosocial rather than social being. I don't hold with this view, for man's biological, species characteristics, however essential they may be, do not constitute his *differentia specifica*. That does not of course mean that the social and the biological in man are isolated from each other. The specific and the non-specific, inasmuch as the latter is essential, necessarily form a dialectical unity. That is particularly true of man, since the biological in man is of course specific in nature. The biological in man has been largely transformed (in its forms, if not in content) by social development.

From this standpoint, it would be more correct to speak of the dialectics of identity and difference, thoroughly studied for the first time by Hegel. Identity contains difference; difference contains identity. Identity and difference thus form a unity of contradictions. There is obviously no sense in considering whether identity or

difference prevails in this unity of the human and the animal (the biological), both identity and difference being qualitative rather than quantitative in nature in this case. Both differences and identities are significant here. Moreover, the more essential the difference, the more essential the identity, too. Herein lies, properly speaking, the largely mysterious unity of the human and the animal, the social and the biological, characterising man and man only.

A reservation must be made here, though: man is an animal, but he is not an animal in the everyday sense of the word. In everyday life, the word "animal" is used, without much reason, as a derogatory term. In science, the word has quite a different, positive sense. "The study of men's social life," says a school textbook of biology, "is the subject-matter of the social sciences. Biology studies the structure and life activity of the human organism. A thorough study of man as an animal organism is of great significance for the care of public health, for improving living standards and the solution of many social problems."¹ This emphasis on the social significance of studies in the biology of man appears to us to be highly appropriate. Neglect for the biological properties of man may, and often does, lead to sad consequences difficult to conceive.

Man occupies a definite place in the generally accepted classification of animals divided into types, classes, orders, species, etc. "In terms of his anatomical features," says the same textbook, "man belongs to the Chordata type of animals, to the class of Mammalia and the order of Primates. Man therefore has all the basic features that characterise the Primates."² The Primates include various species of apes, some of which are called anthropoid. The special and essentially unique place which man occupies in the order of the Primates is determined by the fact that he is not an ape, not even an anthropoid ape. Nevertheless man's difference from anthropoid apes, just as the differences between the latter, is a *species difference* from the biological standpoint which is not only justifiable but also correctly reflects, within certain limits, a definite fragment of reality. The statement of this biological fact arouses entirely justified indignation, for species differences are the least and the most stable differences between living beings reproduced from generation to generation. Of this nature are differences between the horse and the donkey, the violet and the pansy. If we remain within the framework of biology (it is a different matter that this aspect, despite all its significance, does not characterise man in a specific manner), the difference between the anthropoid orang-outang and the horse will appear greater than that between the orang-outang and man. In actual fact, however, the orang-outang is closer to the horse than to man, as the characteristics of both the horse and the orang-outang are exhausted by the ensemble of their biological characters, while the characteristic of man as a biological organism merely points to his biological difference from other animals. We may repeat as much as

we like that man is, of course, an animal, but that which distinguishes man from other Primates is not a species difference only. That difference is much more essential and fundamental; in a sense, it goes beyond any difference in the animal world, even the vast difference between the elephant and the amoeba. That means that the difference between man and all the other animals (considered, of course, *in the entire fullness* of its historically evolved content) breaks through all the biological barriers and definitenesses. There are "parameters" of the human being that make it incommensurable with any other living beings.

Marx calls man a *species being*, referring not to his biological definiteness but to man's *social essence*, i.e. the fact that the human individual is a personification of humanity. The thinkers of the Renaissance spoke of the unity, of the essential identity of the microcosm and the macrocosm. In this sense, the human individual and mankind as a whole stand in the same relation to each other as the microcosm and the macrocosm. An animal belongs to a definite species, family, genus, etc. But it is not a species being, if we refer to the concept, of course, which Marx had in mind contrasting man and animal. Man, wrote Marx, "is not merely a natural being: he is a *human* natural being. That is to say, he is a being for himself. Therefore he is a *species being*".³

What is this being existing for itself? It is apparently a being that is capable of transforming all other beings, just as objects of external nature, into means of the realisation of its own nature. One of these means is *social* production, which is impossible as an activity of a separate, isolated individual. Another means of this type is labour—a specifically human activity determined by its goal. Its immediate goal is the production of an object, while its ultimate goal, purpose or calling, usually unrealised by the separate individuals, is the creation of man himself as a member of society.

Through production, men change external nature, creating not only "human" things but also producing their own needs, thus changing not only external but also their own, human nature. To the extent to which man is capable of purposefully changing both types of nature he indeed exists for himself. We ignore here the contradictions of this process and the tendencies and forces opposing it, which must be considered separately. The main point here is the fact that man's essence is not his species (i.e. biological) difference from other animals. True, the biologist who points to the differences between man and animal, does not usually have in mind some tape-worm but highly developed members of the animal world endowed with a psyche. Outside biology, however, even this approach becomes entirely inadequate, for we are then dealing with the problem of man's difference from that which constitutes the essence of animals in general, that which is common to both the tape-worm and the fully anthropoid gorilla. Man differs from animal

not only in the fact that he transcends the limitations of his species difference from other Primates but also the limitations of the entire range of the animal mode of existence. "An animal," says Marx, "forms things in accordance with the standard and the need of the species to which it belongs, whilst man knows how to produce in accordance with the standard of every species, and knows how to apply everywhere the inherent standard to the object. Man therefore also forms things in accordance with the laws of beauty."⁴

Aristotle defined man as a *social animal*. This definition, which was not systematically elaborated in the pre-Marxian epoch on the scientific, philosophical and sociological planes, is just as contradictory and paradoxical as Franklin's definition cited above. Essentially, an animal is not a social being. Below, an attempt will be made to substantiate this proposition, frequently disputed by researchers studying bees, ants and other animals. For the time being we shall merely note that any definition, as was acutely pointed out by Spinoza, is essentially a negation, i.e. a negation of its own inevitable limitations, of its abstractness and one-sidedness. It is therefore not surprising that some researchers, restricting themselves to a one-sided characteristic of sociality, to a description of its biological analogues (which is quite justified beyond the limits of the science of society) speak of various "social animals", referring not only to bees and ants but also to gregarious animals, colonies of birds, etc. Thus the well-known ornithologist Niko Tinbergen insists that "a gull colony is not a haphazard accumulation of gulls, but that it must be an intricate social structure, organised according to some sort of plan".⁵ Researchers in bees often speak of the existence of bee "states", of the division of the population of a bee-hive into "classes" or "castes", of the existence of the "social" division of labour, etc. In the process, certain extremely significant facts are stated and described, but the question is, *how* they are explained and interpreted.

The term "society" is not applied to any form whatever of coexistence of and interaction between separate individuals, organised and differentiated in a certain manner. If we accept such an abstract concept of society, it will be applicable not only to certain kinds of animals but also to some vegetable organisms. The concept of the social being must therefore be concretised. Not all living beings which, owing to their inherent *natural properties*, cannot exist in isolation, are to be called social. Sociality, in the specific and essential sense of this term, which we do not intend to thrust on zoologists and botanists, is not a natural property at all. The social in man is suprabiological and in this sense "supranatural", although it is not devoid of biological premises either. There is no *a priori* sociality. The social is not innate in man, it is formed and developed through communication among human individuals owing to which the human being, in the course of its individual development, including

biological development, becomes a member of society. As for the animal, features inherent in it as a separate individual are a realisation of a hereditary programme. A gull colony, to use Tinbergen's example, is a specific form of the realisation of a genotype. A gull "community" does not create anything new or significantly differing from that which is contained in the hereditary substance. That is why gulls, just as all other animals, are the same now as they were several millennia ago.

As distinct from animals, man is a *product* of the interaction among human individuals which creates society. In other words, the human being, unlike any animal, is a product of society, of its history and culture. That is precisely why Marx says that the human essence is the totality of all the social relations. Can the essence of an animal be said to be the totality of all the biological relations? Of course not.

We know that the human individual develops from embryonic plasma. (We again recur to the biological in man. It must never be lost sight of.) Man's body, as Ludwig Feuerbach correctly noted, also belongs to his essence. The overall trend of the ontogenesis, writes Henri Wallon, "is the realisation of that which the *genotype*, or the individual's embryo, potentially possesses.... The history of a living being is dominated by its genotype and constituted by its phenotype".⁶ The point is, however, that man is not born a social being. A newborn baby is in this sense man "in himself", to use an expression of Hegel. His difference from the animal also exists "in itself" at first, that is to say, it can only develop into a specifically human social property through education and instruction, through the entire range of forms of inter-individual communication and social influences. *Social being* produces man as a *social being*. That implies that only the materialist conception of history provides an answer to the question of differences between the social and the biological, between man and animal. Anthropology as a natural-scientific study of the specificity of the human being discovers and studies the facts characterising this specificity. The human as a social phenomenon does not lie within its cognizance. From this standpoint, anthropology is the zoology of man, and the significance of anthropological research is determined by the fact that man is also an animal—a fact that is unavoidable but quite insufficient to understand man.

The formation of the human as a process of individual development, possible only in society and only thanks to society, is also studied to some extent by natural science. In particular, it has been established that the difference itself between man and animal is not only a result of mankind's anthropological evolution which lasted many thousands of years but also a consequence of the development of each human individual belonging from birth to species called *Homo sapiens*. "Some of the essential differences between man and animal are accumulated gradually during man's individual life,"

writes U. R. Roitman. "Being *capable* of learning to speak, to read and to write, he acquires, in a certain symbolic environment, tools and resources which significantly expand the range of the things he knows and of actions of which he is capable.... In other words, the ensemble of differences between man and the higher animals, fairly limited at first, evolves in the course of man's individual development into a system of skills and abilities significantly differing from an analogous system in animals which lack man's ability to handle symbols."⁷ Thus the term "social", used by the biologist to characterise certain species of animals, merely indicates certain biological, species features. But man's difference from animals (not only higher animals but all animals in general) is not a particular or species difference but a general one, manifested in everything and essential in all respects. The concept of the social in this sense is only applicable to man.

We began with the statement that man is an animal producing tools and, for this very reason, no longer an animal. Further consideration of the question led us to the conclusion that man differs from animal in that he is a *social* being. Both of these substantive characteristics of man ultimately coincide. Material production is social production; it is realised through definite social relations of production which constitute its social form. The ensemble of production relations forms the economic structure of society. The emergence of production is also the development of man and the formation of society. All these processes form a single whole. Production is social production; it is consequently also production (and, respectively, reproduction) of society. Production is a social process—the determining basis of the entire diversity of social processes.

Referring to the production of tools as man's distinctive feature, we must naturally avoid oversimplification. In a developed society with its diversity of human occupations and division of labour, not all individuals, of course, are engaged in the production of tools, in material production in general. Man's differences from animal are varied. They grow deeper and more varied in the course of social development owing to the historical process which changes man. "Men can be distinguished from animals," write Marx and Engels, "by consciousness, by religion or anything else you like. They themselves begin to distinguish themselves from animals as soon as they begin to *produce* their means of subsistence, a step which is conditioned by their physical organisation. By producing their means of subsistence men are indirectly producing their actual material life."⁸ This definition stresses the diversity of the differences between man and animal, singling out at the same time the primary difference which constitutes the basic feature of anthropogenesis. The realisation of their difference from animals emerges in men as a result of the fact that they begin to differ indeed from the latter

through their instrumental activity, which strengthens from the very outset their natural, biological organs. Marx and Engels point to the specific features of man's *physical organisation*, to the biological premises of the emergence of non-biological, specifically human, social characteristics. These premises are studied by anthropology, archaeology, and other sciences. V. Gordon Childe, a British anthropologist, states that "to the archaeologist man is the tool-making animal. Man makes tools because he has to".⁹

Production of even the simplest tools implies knowledge and skills. In other words, a tool is objectified knowledge and skills.

Labour and production as methodical, purposefully organised, activities, formulation and solution of definite tasks and achievement of goals ideally anticipating the results of labour—these are all activities of a being capable of cognition and possessing reason or consciousness. These premises of labour are a result of its development and perfection, that is to say, originally they were a consequence and later became a premise. That implies that labour was not a conscious activity from the very outset; it came into being as an instinctive activity of animals building their dwellings, hunting other animals, and procuring food in various ways. Labour as a specifically human activity could not have arisen in the absence of prototypes of this activity in the animal world. Accordingly, here too the difference between man and animal contains an element of identity.

Beavers today build exactly the same kind of dams as their ancestors a thousand years ago. Their skill or, if you wish, art, has remained just as immutable as all the basic species characteristics of beavers. There are no grounds to assume that they know or understand what they do. Eels which migrate from Europe to America along the most convenient and the shortest route across the ocean have no knowledge of navigation, and neither have birds of passage. Unlike animals, man cannot make any object without knowing *how* it is made, without some conception of its structure and component parts. This "defect" in man, as compared to animals which need no knowledge to create that which they create in accordance with their species definiteness, later becomes man's advantage.

In order to know how a certain thing is to be made, one must either have it as a model or possess some other thing that may be altered or refashioned in a suitable manner. This contradiction between knowledge and creation characterises their undeveloped forms that are not yet separated from each other and have not attained a relative independence, forms that are apparently characteristic of the first stages of the existence of humanity. In order to make a hammer, it is necessary to have some other hammer. The first hammer was obviously made without the use of a hammer and therefore was not yet a real hammer. The relationship between

knowledge and labour is the same; only humanity's long historical evolution formed labour as a specifically human activity in which knowledge and creation are differentiated and defined in their relative independence from each other but at the same time merge in the unitary process of creation.

Cognition is thus rooted in the very basis of human, social life. The growing difference between man and his highly developed and, in their own way, perfect animal ancestors is the source of knowledge and of the ability itself to know—a difference that must be seen as the process of the evolution of labour as a conscious, practical, man-forming activity which may be equally well defined both as man's decisive advantage over his animal ancestors and as a sort of imperfection of man implying the need for perfection of labour activity, i.e. for negation of the negation of imperfection. In his substantive definiteness, man is a toiling and therefore cognising being, and this definition retains its fundamental significance despite the subsequent division of mental and physical labour, a division that assumed the nature of a social opposition.

Thus cognition, just as practice with which it is connected partly directly, partly in a mediated fashion, characterises the whole of human activity, all the stages of man's individual development. The question, however, is: to what extent does cognition specifically characterise man? Or, putting it differently, does cognition as activity distinguishing man from animal exist?

In Descartes' view, animals are automata which, unlike man, have no soul, they do not think or possess consciousness, however perfect their actions might be. Descartes introduced into science the concept of reflex, which he used in his attempt to explain the purposeful behaviour of "soulless" animals. Subsequent studies in the physiology of animals, especially in their inherent forms of behaviour, became the basis for the development of a theory of reflex mechanisms in higher nervous activity, which were discovered not only in animals but also in man. The theory of conditional reflexes evolved by Ivan Pavlov and his followers permitted a delimitation of innate behaviour (unconditional reflexes) from the animal's purposive actions which develop on the basis of its own experience, in particular through training. Zoopsychology and the science of the behaviour of animals, or ethology, which developed on its basis, partly confirm the classical notion of animals' unconscious, stereotype behaviour, and partly bring to light new features of their behaviour conditioned, as has now been proved, by the individual animal's cognitive activity, by "personal" experience and training.

In a study devoted to the behaviour of gulls, Tinbergen, whom we have cited above, comes to the conclusion that the main features of that behaviour are innate. "The most obvious thing about the gulls' behaviour," he writes, "is the lack of insight into the ends served by their activities, and into the way their own behaviour serves

these ends. A rigid almost automatic dependence on internal and external conditions is revealed every time an analysis is made."¹⁰ Tinbergen criticises researchers attempting to explain animal behaviour in terms of human behaviour. Animals are seen in this case as poor imitations of man trying to act in the same way as a human being would and naturally not succeeding. Tinbergen characterises this methodological position as naive and self-satisfied anthropocentrism ignoring the specific characteristics of animal behaviour. In the view of the Dutch researcher, "the learning capacity of a Herring Gull is excellent. Yet it is only applied in special cases and not in others."¹¹ Still, the behaviour of adult birds shows that they learn a great deal during their life. From this standpoint, innate behaviour is merely the foundation on which the diverse acquired reflexes rest. Some of these distinguish one bird from another, i.e. they are not "standard" species characteristics. "The reactions of adult birds to their mates—and to their chicks once they have learned to know them—become so selective that no other individual can release them. This can only mean that after this learning process they are sensitive to such fine details that the very slight differences between the birds' own mate and other birds, and between their own chicks and strange chicks, are sufficient to prevent responses to strangers."¹² The ability for learning, inherent in almost all animals, shows that their adaptation to their habitat largely takes place after birth, i.e. it is a result of individual development. And yet it is mostly determined by innate forms of behaviour. One can subscribe to Tinbergen's view, applicable *mutatis mutandi* to other animals as well, that "behaviour, however variable it may seem to be at first sight, is dependent on mechanisms in the nervous system, mechanisms with strictly limited functions. Here, as in so many other cases, nature has only developed what is necessary, and no more."¹³ This rigid restriction of knowledge to the really necessary is its biological characteristic. The development of "what is necessary, and no more" is a formulation which aptly defines the biological or biologically determined forms of behaviour. In man, however, even those forms that are biologically "predetermined", are never reduced to "what is necessary, and no more". In general, man has no innate forms of behaviour, despite the dependence of his individual features on hereditary abilities. Thus erect posture is undoubtedly biologically inherent in man, just as articulate speech. But if the child is not taught either of these forms of behaviour, he will never master his natural abilities.

Spinoza had good reason to call man *res cogitandi*. And yet he erred here, for cognition in the broad sense, implying above all elementary cognitive acts (such as the identification of objects) is not inherent in man alone. Some modern researchers regard elementary cognitive acts as unconscious reactions inherent even in the Protozoa, inasmuch as they possess the ability for adapting to their environment. The ability of plants for excitation is from this standpoint

proto-knowledge, if not knowledge as such. The difference between the varied, specialised, and to some extent even autonomous cognitive activity of men and these elementary acts biochemically established is colossal, of course. But the dialectics of identity and difference, of the general and the particular manifests itself here, too.

The untenability of the anthropocentrist model of explaining animal behaviour is obvious, but just as untenable is the absolute, non-dialectical opposition of man and animal, of the social and the biological, since man's cognitive activity assumes the existence of the central nervous system which is highly developed—at least in the higher animals. "We have in common with animals," wrote Engels, "all activity of the understanding: *induction, deduction*, and hence also *abstraction...*, *analysis* of unknown objects (even the cracking of a nut is a beginning of analysis), *synthesis* (in animal tricks), and, as a union of both, *experiment* (in the case of new obstacles and unfamiliar situations). In their nature all these modes of procedure—hence all means of scientific investigation that ordinary logic recognises—are absolutely the same in men and the higher animals. They differ only in degree (of development of the method in each case)."¹⁴ This conclusion, summarising the scientific data of Engels' times and the age-long everyday life experiences of men who come in contact with animals, is confirmed by the latest natural-scientific research which enriches and concretises our understanding of the psyche and of animals' cognitive actions, sweeping away at the same time some analogy-based conceptions of everyday consciousness. Animals differ in their ability to register significant and insignificant differences between objects and to identify these differences in a changed situation. Memory, quick-wittedness, and inventiveness also vary in animals of different species and to some extent in individuals belonging to one species. However, all these abilities are determined and limited beforehand by the basic species characteristics of a given animal.

Numerous descriptions of animals' life show the way in which adult individuals teach their young everything that is necessary for the life of the given species. In some cases they teach the ability to hunt, in others, the ability to use certain features of the terrain to hide from dangerous enemies, and in all cases, the ability to react adequately to certain objects. The training of animals shows that their innate cognitive abilities are amenable to improvement within a fairly broad spectrum. The conditional-reflex character of animal actions does not preclude their cognitive nature. In man, too, many actions based on knowledge ultimately become not merely customary but essentially reflexive. A driver will slow down before traffic lights quite automatically, although at first that action was in the nature of a conscious effort.

L. Krushinsky, a researcher in ethology, believed that opposition between man as a being endowed with reason and animals as beings devoid of reason is nothing but a survival of the idealist and religious views of man. But how justified is the linking with idealism and religion of the conception of a radical difference between man and animal, a conception which emerged in an epoch when that difference indeed became fundamental? And is not man indeed a unique being? In his article "Do Animals Have Reason?" Krushinsky gave a basically positive answer to this question, proceeding on the operational definition of reason as an ensemble of definite purposive actions performed for the attainment of a more or less obvious goal. "Recognising the ability for complex abstract operations like generalisation (and extrapolation as a special case of generalisation)," wrote Krushinsky, "and for non-standard use of a personal skill as an expression of elementary intellectual activity, we must state the manifestation of this ability in bees, too."¹⁵

In our view, based, as any philosophical view, on a theoretical summing up of historical development of knowledge and practice, the question of the ability of animals to think has not been solved yet. An operational definition of thinking is undoubtedly necessary for an objective study of animal psyche, but what such an operation ignores is precisely the psyche, whereas thinking (at any rate in the form in which it has best been studied by science—in the form of human thinking) assumes the existence not only of the psyche but also of consciousness, i.e. of the most developed form of the psychical. True, behaviourist psychology rejects the existence of consciousness in general, attempting to explain thinking merely as an ensemble of more or less expedient actions. This reduction of thinking or consciousness to behaviour only ignores the fact that action in man is almost always a result of previous reflection, of weighing motives, and of choice, and it is the existence of this preliminary stage, i.e. the specificity of motivation, and in particular the existence of various considerations and assumptions as the basis for action, that substantively characterises human behaviour. The behaviour of animals having a well-developed central nervous system is not reduced to reflex responses to stimuli coming from the outside. The point here is not just the inner stereotype of behaviour, so to speak, which is inherent in an animal and independent from external influences. That is why they respond in different ways to identical outside stimuli. Animals' ability for cognition of certain objects and properties, and the fact that they often display in the process a highly developed ability for identifying various phenomena, cannot be explained without assuming something similar to thinking, consciousness, and reason. Of course, human thinking and consciousness imply the existence not only of the brain but also of a social environment. However, biological thinking is a function of the brain, and human thinking is apparently preceded phylogenetically by

similar forms of psychical orientation, something like proto-consciousness, proto-thinking, proto-reason.

Leibnitz insisted that the feature which distinguishes man from animal is his ability for *a priori* thinking. This proposition (if we disregard the idealist interpretation of the *a priori*) apparently means that only highly developed, logical thinking specifically characterises man.

A scientific explanation of animal "thinking" is apparently possible without assuming their performing logical operations, i.e. drawing conclusions from generalisations and concepts. In an animal, the basis for "inference" is sensation or perception of some fact which, according to an internal (basically species-determined) stereotype signifies the hunted quarry, danger, or simply something unknown, causing suspicion, etc.

There is no basis for the view that animals realise what they "know"; they hardly have the least inkling that something is incomprehensible to them. They simply perceive the unknown where it happens to be the object of perception, but this identification of an object is not at the same time the subject's self-identification. True, man also is unaware, as often as not, of what he knows, what was imprinted, e.g. on his memory without any cognitive effort whatsoever, i.e. without any study, observation, or conscious registering. That is why man sometimes recalls facts of which he has no notion at all, as far as he can say.

Comparison of man's cognitive activity with similar functions in animals clearly shows the fundamental differences between them only when this comparison goes beyond the framework of biological research. In other words, this comparison assumes analysis of cognition of a historically developing process, and a social process at that, each stage of which implements the results of the activity of many generations. Thus as far back as thousands of years ago the history of mankind demonstrated clearly the fundamental difference between human cognition and the cognitive activity of animals. The conviction that animals have no consciousness, that they do not think or cognise things, a conviction to which not only idealists but also materialists adhered, is not so much evidence of human arrogance as a definite, if not quite adequate, explanation of the fact that men continually come to know, discover and study ever new objects, constantly extending the boundaries of their knowledge and achieving through this obvious practical successes, whereas animals merely repeat from generation to generation their former way of life without revealing any noticeable ability for its improvement. The question naturally arises whether this rigidly restricted stock of knowledge, mostly determined by the animal's species characteristics, is compatible with the concept of cognition, consciousness, and thinking.

Cognition in the human sense of the word is reproduction of knowledge on an enlarged scale, the rate of this reproduction continually accelerating and overcoming the physiological limitations of the human sense organs. It is precisely for this reason that man's cognition depends on the level of society's development, of its productive forces, culture, perfection of technological research instruments, etc. rather than on his biological (species) definiteness.

The parallel between production of objects and production of knowledge is quite justified despite the fact that in its very nature the latter cannot be the same continuous, planned, organised and standardised process as production of objects. Production of objects requires the production of a definite type of knowledge—applied knowledge. The latter is worked out through cognition of phenomena which are, in the great majority of cases, outside production, constituting the entire object world accessible to cognition (under given historical conditions). It is just as significant that production of objects is a multidimensional alteration of natural phenomena, which brings them within the range of cognition, as it were. Therefore success of cognition, indirectly if not directly, depends on the production of things. We refer here not so much to scientific cognition as to cognition as a whole, in all its forms. As for scientific cognition, material production also provides research instruments for it.

The development of material production assumes first of all the inheriting by each successive generation of men of the level of the productive forces attained by the previous generations. Not only the instruments of production but also its technology and organisation are handed down to each new generation as wealth that is to be further increased. All this, as well as the items produced, whose variety increases along with progress in production, constitutes not only the implementation of labour but also objectified human knowledge which is fully amenable to dereification.

Of course, human knowledge is preserved through objectification not only in the objects of labour but also in the more specific form amenable to more or less direct assimilation, being recorded in language, expounded in books, and handed down to the younger generation.

Thus the principal fact that makes cognition a historically developing, and thereby a specifically human, process is the storage, accumulation, and augmentation of knowledge through its reification and, generally, objectification. Some researchers call this process *social inheritance*, thus distinguishing it from heredity as a biological process. Genetic information transmitted to the descendants does not contain any knowledge, not even in coded form, since knowledge acquired by a living being in the course of its individual development is not inherited by its descendants. Training, which occurs in an animal's individual development, is assimilation of certain experiences

of the older generation. But the extent of this knowledge and skill remains invariable owing to the absence in animals of the means of objectification of that knowledge, not to mention the means of dereification of objectified knowledge. That is why not only the principal features of the animal's behaviour but also the knowledge of objects which it acquires are merely a realisation of the genotype. Positive or negative deviations in the phenotype are in no way expressed in the later generations. The changes in the genotype through mutations have no bearing on the knowledge and skills available to the living being. Where genetic heredity is the only type of connection between generations, development of cognition is excluded. Only historical continuity as a specific social process makes progressive development of cognition possible.

Since knowledge inherent in animals remains invariable, the development of knowledge proves a human, a specifically human process. An animal's knowledge coincides with the skills acquired by it, this knowledge is inseparable from them, whereas human knowledge is substantively independent from its employment. The development of knowledge significantly changes its forms and content, extends the objective boundaries of cognition, and produces diversity of knowledge. Already at the dawn of civilisation, the social division of labour gave rise to cognition as a specialised form of spiritual activity qualitatively different from everyday human cognition. In consequence of this, inquisitiveness, which is apparently inherent in some animals, too, developed into an organic need for cognition, and a specialised cognition at that—mathematical, natural-scientific, philosophical, etc. This formed the basis for the illusion of "pure knowledge", knowledge for the sake of knowledge, which in actual fact expresses merely the assertion of research activity as a specific form of socially useful labour. When Plato insists that "the unexamined life is not worth living",¹⁶ he merely states, in the spirit of an idealist interpretation of cognition, this historical fact and a realisation of this fact, which is also an indisputable fact.

Cognition became a specialised organic need; satisfying that need gives a special kind of pleasure—intellectual delight. This specific characteristic of scientific cognition, of research, was fully evident already under the conditions of slave-owning society, in which labour became a slave's activity unworthy of free man. The antagonistic opposition between free men and slaves found a parallel in the opposition, asserted at that time, between cognition as satisfaction of an organic need and physical labour as forced and even hateful activity inseparable from coercion. The formation of the opposition between mental and manual labour is thus closely bound up with this basic antagonism of slave-owning society. That does not mean, of course, that intellectual activity was the occupation of slave-owners only. Most members of that exploiting class were of course devoid of scientific inquisitiveness. The point we want to make here is that only

free subjects belonging to that class had the privilege of enjoying the exalted occupation of cognition.

Thus mental labour, intellectual cognition, activity unconnected directly with the exploitation of man by man, emerges for the first time as alienated activity contrasting with and consciously opposed to productive labour. The opposition of theory and practice is thus produced by civilisation itself, by the emergence of private ownership of the means of production and by the splitting of society into antagonistic classes. In developed capitalist society, in which theoretical activity fully reveals its significance for practice (which undoubtedly discredits the idealistic opposition of theory and practice), alienation of cognition is expressed in mystified form in reactionary philosophical theories of the irrationalist variety. For instance, Arthur Schopenhauer sees the fact itself of specialised cognitive activity as perversion of human nature. "...Cognition becomes the main thing, the *purpose* of the whole life; while one's own existence, contrariwise, is reduced to something secondary, to a mere *means*; the normal relationship is thus entirely reversed."¹⁷ The normal relationship, in Schopenhauer's view, would be the existence of cognition only as a *means* subordinated to will. Interestingly, this reversal of the normal relationship, which must apparently be avoided, is defined as genius. True, the highest development of man's intellectual capacity is not slighted, but it is regarded as an obvious abnormality.

The opposition of cognition and life, the belittling of cognition in its most developed specialised forms, clearly discernible in Schopenhauer, were taken to an extreme by such thinkers, close to Schopenhauer, as Friedrich Nietzsche and Henri Bergson, who regarded genius as irrational domination of elemental life over "pure" need for knowledge alleged to be alien to life, not as one-sided development of intellect to the detriment of the other vital functions. The untenability of the irrationalist opposition of life and cognition lies in the fact that the opposition between specialised, professional intellectual activity and the diversity of human life is raised to an absolute through an anti-intellectualist interpretation of life. In reality, even in its specialised forms directed towards specific goals ultimately satisfying certain needs of social practice, cognition is of course not only a means but also an end—the spiritual development of the human individual. We can accept Einstein's view that the product of our labour is not the ultimate end. The ultimate end of man is of course man himself. The fact that in exploiting society a vast mass of people happens to be a means of producing surplus value, does not destroy the basic definiteness of human nature, however it may deform it. Alienation of the human essence, including alienation of cognitive activity, is a historically transient form of the development and enrichment of man's essence. That is precisely the point made by Marx in his summary of the development of the capitalist formation: "Indeed, if we discard the limited

bourgeois form, what else is wealth if not universality of the individuals' needs, abilities, means of consumption, productive forces, etc., a universality created by universal exchange?.. What else is wealth if not an absolute manifestation of man's creative gifts, without any other premises except for previous historical development making an end-in-itself out of this integrality of development, i.e. of development of all the human forces as such, regardless of any *previously established scale*."¹⁸

Reason as well-developed and constantly developing thinking enriched with ever new knowledge is inherent in man only. However, only a reasonable being is capable of performing unreasonable acts. Only man has the capacity for choice, and this capacity, raising man above all the other living beings, makes him responsible for preserving life on Earth.

The development of humanity today makes the fundamental problems of human life global problems involving the whole of humanity. The realisation of this fact helps to grasp the only alternative of the present-day historical situation threatening the existence of man, a situation without precedent which expresses (let this not be seen as a paradox) the uniqueness of human being and cognition.

NOTES

- 1 *Biology*, ed. by Prof. B. A. Kuznetsov, Moscow, 1977, p. 205 (in Russian).
- 2 *Ibidem*.
- 3 K. Marx, *Economic and Philosophic Manuscripts of 1844*, Moscow, 1967, p. 146.
- 4 *Ibid.*, p. 72.
- 5 N. Tinbergen, *The Herring Gull's World*, London, 1953, p. XIV.
- 6 H. Wallon, *L'évolution psychologique de l'enfant*, Paris, 1968, p. 33.
- 7 U. R. Roitman, *Cognition and Thinking. Modelling at the Information Processes Level*, Moscow, 1968, p. 51 (in Russian).
- 8 K. Marx and F. Engels, *The German Ideology*, Moscow, 1968, p. 31.
- 9 V. G. Childe, *Society and Knowledge*, London, 1956, p. 9.
- 10 N. Tinbergen, *op. cit.*, p. 232.
- 11 *Ibid.*, p. 234.
- 12 *Ibid.*, p. 233.
- 13 *Ibid.*, p. 234.
- 14 F. Engels, *Dialectics of Nature*, Moscow, 1964, p. 226.
- 15 L. V. Krushinsky, "Do Animals Have Reason?", *Priroda*, No. 8, 1968, p. 62.
- 16 Plato, *The Apology*, Loeb Classical Library, No. 36, Harvard, 1977.
- 17 A. Schopenhauer, *Sämtliche Werke*, Vol. 6, Leipzig, 1877, p. 74.
- 18 K. Marx, *Grundrisse der Kritik der politischen Ökonomie (Rohentwurf), 1857-1858*, Berlin, 1974, p. 387.

Philosophy, Politics, Man

Vladimir MSHVENIERADZE

One of the major premises for a philosophical study of the problem of man, of his role, place and purpose in the modern world is, in my view, resort to new political thinking which affords a better grasp of the new social and political situation which has taken shape towards the second half of the 1980s, towards the end of this nuclear and cosmic century. The methodology of scientific analysis on which new political thinking is based comprises the following elements.

Firstly, every individual and mankind as a whole are regarded as the highest political, cultural and philosophical value of civilisation, while scientism and technocratic conceptions belittling the role of man are rejected.

Secondly, the fact is taken into account that, regardless of the division of states into various groups, blocs and alliances, they constitute an integral system in which each state, in order to exist, must peacefully coexist with other states. The security of mankind can only be *universal*; the security of one people directly depends on the security of others.

Thirdly, all men and each separate individual are seen as belonging to one human species. Of course, each individual as a member of a given social organisation belongs to a definite class, party, ethnic or national group, and professes his own ideology, religion or worldview. But in the situation of nuclear confrontation the concept of man acquires paramount significance.

Fourthly and finally, the indubitable fact must be realised that at present literally all spheres of human activity are rapidly politicised. The world of political realities has vastly grown, as numerous objects, phenomena, events and forms of human relations have acquired political qualities and come to be measured against a political frame of reference. An important role is played here by the rationalisation

of politics and of political relations, their humanisation and subordination to the vital interests of man and mankind.

As the most adequate mode of analysis and evaluation of the objects and phenomena of reality, and an expression of an allround interest for the needs of man, new political thinking grew on the borderline between philosophy and politics. It is a logical result of the politicisation of philosophy, and it meets the requirement of a deeper philosophical approach to politics. The problem of new relationships between philosophy and politics corresponding to present-day reality thus has two mutually connected facets—a growth of the practical significance of philosophy and a deeper rationalisation of politics. These processes will be instrumental in filling both philosophy and politics with humanist content, in gaining a deeper insight in man's philosophical essence, and in making a significant contribution to the realisation of the paramount task of mankind's survival, of ensuring political freedom and the individual's allround development. The present article will deal with these links between philosophy and politics.

* * *

Philosophical studies in the problems of politics are an essential feature of Marxist-Leninist theory. Developing the best traditions of previous philosophical and political thought, Marxism-Leninism raised both philosophy and political thought to a new stage, lending them a truly scientific character and establishing an organic relationship between them which is based on a materialist conception of history, on a dialectical interpretation of the phenomena of social and political life.

The links between philosophy and politics stand out quite clearly throughout the history of philosophy from antiquity to the present days.

For instance, classical philosophy comprised all the branches of natural-scientific and social knowledge. The latter was only beginning then to separate off from philosophy, and the elements of separate sciences were only beginning to emerge. Philosophical and political views of the Sophists, Socrates, Plato or Aristotle were so closely and even inalienably interwoven that their separation can only be tentative. There are two basic causes for the fact that ancient Greek philosophers went down in history primarily as philosophers. First, in objective terms philosophy then acted as a universal system of knowledge. Its unlimited sway was due to the fact that the emphasis in those times was on philosophical problems proper (the essence of the Universe, its knowability, man's place in the world, the meaning of life, etc.), as well as to insufficient development and differentiation of other fields of knowledge. Second, the doctrines of the thinkers mentioned above have mostly been analysed by philosophers, whose

professional bias naturally led to greater attention for the philosophical aspects.

But an indepth comprehensive analysis of the political (as well as legal, sociological, economic, and other) views of ancient Greek thinkers, especially of Plato and Aristotle, is as important and topical as the study of their philosophical systems. Moreover, their philosophy, just as any other, cannot be correctly understood and assessed unless it is linked up with the political realities of their times and their theoretical reflections in the views of the ancient thinkers.

There has hardly been a single philosopher of any stature in the whole of the history of philosophy whose writings did not touch, in one way or another, on problems of politics, that is, on power relations in society, or one whose writings were not used to reveal certain objective laws of the political process. Philosophers used wisdom as an instrument of overcoming everyday consciousness, limited to empirical statements of the apparent diversity of things, in order to penetrate into their essence, to find the substance, the "universal in the particular", to prove the *unity* of diversity, i.e. the law-governed cohesion of various phenomena, including political relations. It was no accident that philosophers—such thinkers as Confucius, Plato or Aristotle—were the originators of political science (true, only to the extent to which the studies of those times were scientific at all).

This tradition was continued in ancient Rome by such thinkers as Cicero, Lucretius, Seneca, Marcus Aurelius, and others.

The above also largely applies to the political thought of the Middle Ages, of the Modern Times, and of the present day. In the Middle Ages, the relationship between philosophy and politics was mediated by religion, which almost completely engulfed all the spheres of social consciousness and activity. Still, there were a number of major figures in religious and secular philosophical and political literature of the epoch who formulated some well-known ideas in the field of political philosophy. Suffice it to mention here St. Augustine, St. Anselm of Canterbury, Abelard, Thomas Aquinas, Duns Scotus, and William Occam.

The Modern Times were marked by an upsurge in political philosophy. In this period, political thought detached itself from philosophy, acquiring a fully independent status. That process was marked by some distinctive features. Three types of works came into being in philosophy and political thought. The first category included predominantly philosophical works, whose authors (like René Descartes, Francis Bacon, Søren Kierkegaard, Ludwig Feuerbach, or Alfred Whitehead) wanted to study "pure" philosophy, leaving political problems aside. This tendency of "leaving philosophy for science" was fairly strong in Western philosophy until the Second World War. Today, the situation has changed. Hardly a single philosophical trend can be found that does not touch, directly or

indirectly, on political problems. The politicisation of philosophy, regardless of the degree of realisation of this process by individual philosophers, is an indubitable fact. A typical example is the philosophical career of Bertrand Russell. His logical and logico-mathematical studies of the 1900s and 1910s were followed in 1938 by his famous treatise *Power. A New Social Analysis*, which has gone through numerous editions.

The second category includes studies which were largely political in character, and which can be included under the heading of political philosophy. Such authors can be mentioned in this respect as Nicholò Machiavelli, Tommaso Campanella, Nicolas Malebranche, Charles Montesquieu, Jean-Jacques Rousseau, Edmund Burke, Henri Saint Simon, Alexis de Tocqueville and John Stuart Mill. Works of the third type were political and philosophical simultaneously; their authors did not shun politics, believing that politics must not be divorced from philosophy, or the other way round. Thomas Hobbes and John Locke; Immanuel Kant and Georg Wilhelm Friedrich Hegel, these most outstanding proponents of German classical idealism; the French materialists; the Russian revolutionary democrats, especially Alexander Herzen and Nikolai Chernyshevsky; Bertrand Russell and Karl Popper—all these and other thinkers combined philosophical and political approaches in more or less equal shares, although to varying extent and in pursuit of different, sometimes opposite, goals.

The separation of politics from philosophy, which was not, of course, a single act but a more or less lengthy process, raised the problem of links between philosophy and politics to a new level, where their fusion and syncretism were ruled out while the independence of sufficiently well-developed branches of knowledge were assumed. To solve that problem, both philosophy and politics had to be raised to the level of true science, and for each of them the sphere of objective laws of reality constituting their specific subject-matter had to be identified and defined.

The emergence of Marxism marked a revolutionary change both in philosophy and in political thought.

The development of philosophy and politics into scientifically substantiated forms of cognitive and practical activity radically transformed their functions and purpose, facilitating scientific interpretation of some old categories and introduction of new ones. Both philosophy and politics ceased to be the preserve of loners or narrow groups of professionals. They became the spiritual weapon of millions. As Lenin stressed, "politics begin where millions of men and women are; where there are not thousands, but millions, that is where serious politics begin".¹

A dialectical-materialist conception of reality, including political processes, permitted a new interpretation and explanation of the most important categories of political science. The traditional

interpretations of power based on the principle of estate-hierarchical societal structure, aristocracy, monarchism or elitism, on recognition of the immutability of the primacy of private property, were replaced by a new, dynamic and revolutionary view—through proletarian dictatorship towards social self-government.

The materialist view of the fundamental question of philosophy signified at the same time sweeping revolutionary changes in political theory and practice. "On closer consideration," wrote Engels in this connection, "it is, however, immediately evident that this apparently simple proposition, that the consciousness of men depends on their being and not *vice versa*, and in its first consequences, runs directly counter to all idealism, even the most concealed. All traditional and customary outlooks on everything historical are negated by it. The whole traditional mode of political reasoning falls to the ground."²

The relationship between philosophy and politics is dialectical, historically concrete, and subject to change depending on the existing conditions; now one, now the other side of it is emphasised: the stress is now on the need for a political substantiation of philosophy, now on a philosophical substantiation of politics. These corrections are natural, being objectively dictated by the changing conditions of the alignment of class and political forces, by the need for an adequate reflection of social and political realities in the forms of social consciousness and activity. In order to correctly understand this relationship, it is necessary to clarify, in each specific case, its distinctive features both through the study of political questions of philosophy and through analysis of the philosophical problems of politics. Insisting on the inalienable links between philosophy and politics, Marx wrote of Ludwig Feuerbach's *Philosophical Aphorisms* that they seemed to him to be "incorrect only in one respect, that he refers too much to nature and too little to politics. That, however, is the only alliance by which present-day philosophy can become truth."³ Marx's assessment of the decisive influence of politics on philosophy is not a remark *in passim*. It reflects the very essence of his understanding of the role and purpose of philosophy: truth acquires its genuine meaning only when it is implemented in real life. Marx's famous thesis—"The philosophers have only interpreted the world, in various ways; the point, however, is to change it"—implies not only, and not so much, a condemnation of the self-sufficient character of previous philosophy as an indication of the need to imbue philosophy with effectiveness, real meaning, and goal-directedness, i.e. an orientation towards a conscious socio-economic and political transformation of reality, an active and effective impact of philosophy on politics.

Lenin also pointed out that it is important to take into account, under all circumstances, the mutual conditioning of political actions and the need for their profound philosophical substantiation. Recurring to this theme again and again, Lenin stressed that "in this

question, too, the political line of Marxism is inseparably bound up with its philosophical principles".⁴ A policy that is not guided by tested principles of a scientific-philosophical worldview, that does not rely on an allround conception of the objective dialectics of social being and social consciousness, and disregards the material laws of the political process—such a policy is blind and fraught with adventurism. It is incapable of fulfilling the prognostic function, of correctly predicting political events, and thus cannot lay any claims to reasonable control of the political activity of state and society.

Today, a clear orientation towards explicit statement of the political significance of philosophical studies, as well as deeper philosophical substantiation of theoretical and practical political activity, are especially topical. This process has now assumed a new and vital dimension. In these days of nuclear confrontation of two world systems—of capitalism and socialism, at a time of aggravation of the struggle between bourgeois and Marxist-Leninist ideology, of growing anti-imperialist national liberation struggle and mass democratic movements, politics cover an ever expanding area of international and interpersonal relationships. The objective course of the historical process itself did not only make politics more prominent than other forms of social consciousness—to a large extent it politicised the latter, while political regulation of emerging conflict situations and other acute problems became a decisive form of international relations, the only one that can remove the threat of nuclear disaster to civilisation.

The identification of philosophical problems of politics as a special form of scientific cognitive activity has been prompted by three factors. First, enough empirical data have been accumulated in the sphere of politics which require philosophical generalisation; also, a number of new problems have arisen on the borderline between philosophy and politics—problems pertaining to the interrelations between political being and political consciousness, to political epistemology. Second, the need arose in this nuclear age to give up the old traditional modes of interpretation of the phenomena of political life and to work out a new way of political thinking, a new philosophical conception of politics corresponding to the objective tasks of present-day political reality. Third, political decisions taken in our times go far beyond political relations proper. They have far-reaching consequences, sometimes exerting a decisive influence on various spheres of men's consciousness and life activity, and in some cases even on the possibility itself of preserving life on Earth.

Underlying practical politics there is always a definite form of philosophical worldview. That worldview can be subjective idealism, leading as a rule to exaggeration of the subjective factor and therefore always containing voluntarist and adventurist elements; or it can be objective idealism, mostly covering theological doctrines regarding religious faith as the only lever for moral renewal of the

individual; finally, this worldview can be dialectical materialism, which adequately reflects the material laws of the political process and works out the basic policy lines in accordance with these laws. Of course, there are a great many marginal and eclectic worldviews apart from the basic ones; they combine various elements of the latter in different proportions.

Practical experience has shown Marxist materialist dialectics to be the scientific-methodological premise for all research, including research in political relations; it demands that any phenomenon must be considered historically, in its development, in its connections with other phenomena and objects and in comparison with them, and that the whole, taken in its integral interaction, must reflect the unified process of forward movement. It is highly important to be able to describe the context of this interaction not only in space ("horizontally") but also in time ("vertically"), proceeding from the principle of the unity of the historical and the logical.

The history of the human community is a complex process, contradictory and at the same time unified in its diversity, of transition from lower forms to higher ones, of gradual improvement of all the aspects of life—material and non-material: economic, scientific, cultural, and political. Underlying this unity-in-diversity lie objective material laws of the development of reality, natural, social and spiritual. "World developments confirm the fundamental Marxist-Leninist conclusion that the history of society is not a sum of fortuitous elements, that it is not a disorderly 'Brownian motion', but a law-governed onward process."⁵

Socialism is regarded as the highest form of political organisation of society achieved by modern civilisation. Analysis of the most advanced form of any phenomenon, in this case analysis of a political organisation, permits a comprehensive and sufficiently profound treatment of its previous stages, a treatment in which the accidents of history are ignored, though they may have appeared at one time to be law-governed and promising; as a result, a more or less consistent and logically substantiated line of progressive advancement is obtained.

One of the starting points of the theory of materialist dialectics is the principle of unity of the historical and the logical. It is universal in character, permitting as it does to trace scientifically the history of any object of research. Only if this principle is strictly observed can a well-substantiated theoretical system of origin and development, free from subjective influences, be constructed, a system that would combine a presentation of the historical *unfolding of the object* in varied concrete forms with the need for its mental reproduction in the form of a definite stage of objective development whose direction is determined by law. The historical forms of the *development of an object* inevitably succeed one another, but each of them introduces

elements of its own in its further improvement, thereby lending it the feature of *universality*.

Each subsequent historical form includes the previous one, but never in its entirety. The new form rejects the old, retaining only those of its properties, qualities and features which are necessary for its further development. Other features are discarded as irrelevant and accidental. The retaining of the necessary and rejection of the accidental are an objective process which is not regulated by the subject. It follows that the principle of the historical and the logical, expressing the relation of the unfolding of an object to its development, in the sense indicated above, expresses an *objective connection* (the logical is also objective, and it requires an analysis of the object not only on the basis of facts pertaining to previous historical forms but also on the basis of comparison with facts arising at the highest stage of maturity of the same object). The logical method of research is, according to Engels, "nothing else but the historical method, only divested of its historical form and disturbing fortuities".⁶

This principle is applicable not only to the study of socio-political and economic phenomena but also to the cognitive process itself, to theoretical knowledge in which these phenomena are reflected.

Western studies of the history of political ideas are dominated by the ideographic approach on which ideas are evaluated as self-sufficient entities of the same order, ultimately without a true logical connection and outside historical development. It is assumed on this approach that revealing the real meaning of any given doctrine of the past requires not only a mental transference into the content of the process itself but also *incapsulation* in it without any links being established between the meaningful characteristics of past ideas with the present day. Any projection of present-day evaluations on the past is said to distort history, for the researcher in this case, first, assesses the analysed ideas and doctrines in terms of his own limited subjective viewpoint, and second, inevitably divorces these ideas from their proper historical context, modernising and thus distorting them.

These views have long been widespread in Western historical, historico-philosophical and political works. Rather often they acquire an agnostic colouring, stating the fundamental unknowability of historical phenomena. Generalising the theories of Western philosophers on the historical process, Dan Nimmo and James Combs, the American politologists, stress their principal feature—the elimination from it of objective laws of movement and development. "Academic philosophers of history," they write, "vigorously debate how history works. Most scholars speak of history as blind, as a chaotic succession of events over time, as a process of impersonal forces and chance elements that propel history onward toward no discernible goal."⁷

In Western social theories, the problem of adequate reflection, evaluation and cognition of the historical fact, in the sphere of real events or ideology, has always been and still remains an insuperable methodological difficulty. The English politologist A. Lawton thus describes the typical situation of non-Marxian historico-political thought: "The intention is to confront the problem of historicism, or the problem of how the interpreter can transcend the influence of his own subjectivity and historical circumstances and gain an adequate understanding of the past and the actual meaning of historical texts rather than merely assess their significance from the perspective of the present."⁸

An adequate understanding of the historical fact, just as an unambiguous interpretation of texts, is indeed a difficult task confronting the scholar, but no true scientific research is possible without them. It should be pointed out at the same time that the real difficulty does not consist only in the aspects pointed out by Lawton. His statement itself must be assessed in terms of theoretical formulation of the question and on a definite socio-political plane.

An adequate understanding of the past (and of historical texts) is unjustifiably opposed by Lawton to the assessment of their significance from the perspective of the present. On a truly scientific approach, this opposition does not appear to be correct. But if it is to be considered in the context of present-day bourgeois ideology and the biased assessments of the facts of history suggested by it, this opposition has some sense. Let us amplify these two points.

Any historical event, texts included, can be correctly assessed, first, if it is analytically compared with previous phenomena and theories; second, if it is established to what extent a given theory or idea correctly reflect the object which it claims to explain; third, if the essential connections of the given object with other phenomena (or of a given theory with other ideas and views) are comprehensively and profoundly identified; fourth, if a given fact is considered in its development; fifth, if an integral approach is implemented which is based on recognition of the objective material laws of the historical and socio-political process (and of corresponding ideas). It is this law that acts as the objective criterion, reducing subjectivism, where possible, to nil.

The lower forms of development can only be correctly outlined in the light of today, i.e. on the basis of the study of higher forms of development. True, this approach assumes a distortion of the natural course of history, as it were, but that is not surprising, for scientific analysis is not reducible to mere chronological descriptiveness. "Man's reflections on the forms of social life," notes Marx in *Capital*, "and consequently, also, his scientific analysis of those forms, take a course directly opposite to that of their actual historical development. He begins, post festum, with the results of the process of development ready to hand before him."⁹

Let us also cite Marx's analysis, which is of great methodological significance, of bourgeois society, an analysis demonstrating a perfect application of the unity of the historical and the logical. "Bourgeois society," writes Marx, "is the most highly developed and the most varied historical organisation of production. That is why the categories expressing its relations, and an understanding of its structure, give at the same time a chance to consider the structure and production relations of all those dead forms of society out of the fragments and elements of which it was constructed. Some of the survivals of these fragments and elements, not yet overcome, continue to drag out their existence within bourgeois society, while that which existed as a mere hint in previous societal forms now developed to its full fruition, etc. The anatomy of man is the key to the anatomy of ape."¹⁰ This proposition is of fundamental importance for the scientific study of the history of political relations.

Lawton's statement cited above is also characteristic in another respect. It is easy to understand the concern of many sober-minded Western political scientists who run at every step into subjectivist falsifications of historical facts and a great number of consciously apologist theories, especially in the political sphere. These theories arbitrarily adjust historical facts to fit present-day policies, while the ideas of, say, Plato or Aristotle are cited as arguments confirming the correctness of the political orientation of a given president's administration. A great many books of this kind appear in the USA and other NATO countries.

It is not surprising that this sort of pseudo-scientific analysis gives rise to opposite views. The stronger the apologist tendency, the stronger the opposition. The latter, however, leads to the other extreme—a complete refusal to consider history "from the perspective of the present". In their search for objectivity, scholars insist on abandoning politics for political science. The motive is understandable but the path chosen cannot be justified. It is not politics that must be abandoned: a scientific approach to politics itself must be taken. The ideographic approach to history, which reduces it to mere chronology and sets it entirely in the past, is also unacceptable. The facts and concepts pertaining to the highest stage of the object under study in themselves contain the history of its emergence, formation and development.

History must not be reduced to mere chronology or relegated entirely to the past. In a strictly scientific sense, the course of history is measured not so much in time as in the process of change itself—the development of the phenomena of reality which, in its turn, takes place in space and time. Human society is too complex, many-sided and multidimensional a structure to be able to develop in a uniform and rectilinear fashion, presenting a single front, so to speak, without emphasis on certain aspects as opposed to others, without zigzags, reversals and even temporary backward movement.

At all times, progressive and historically obsolete forms of societal social, economic and political organisation have coexisted and still coexist. It would be an error to study various societies and social phenomena without recognising a general law of historical movement which has definite stages in the development of a unified and integral, though internally contradictory and multiform, system. "The prevailing dialectics of present-day development consists in a combination of competition and confrontation between the two systems and a growing tendency towards interdependence of the countries of the world community. This is precisely the way, through the struggle of opposites, through arduous effort, groping in the dark to some extent, as it were, that the controversial but *interdependent and in many ways integral world* is taking shape."¹¹

Cognition of the truth in some sphere of reality—natural or social—always requires defining the specific and true paths of cognition, i.e. concretisation, with regard to the object under study, of the principal epistemological categories of philosophy, and creation of new ones. Kant's idea of the need to study the possibilities of human knowledge, of careful elaboration and improvement of the instruments of cognition themselves, contained an important and rational kernel. The methods of cognition are prompted by the object of study itself. The general laws and categories of Marxist philosophy are the quintessence of the attainments of the human reason, of the entire scientific-cognitive process in various fields of science and practical life. To be effectively applied, these laws and categories require a specification, concretisation and knowledge of the field in which they are to be applied. Identical general laws and categories are differently manifested in different spheres of nature, social life, and practice. Defining this specificity, finding the true path of cognition, is one of the most important aspects of the Marxist methodology of study, for "truth includes not only the result but also the path to it".¹²

The study of the dialectics of the general, the particular and the singular in a concrete cognitive process is a necessary condition of adequate reflection of this aspect of objective reality. As far as the study of political phenomena is concerned, that means, first, defining the general fundamental methodological position; and second, defining the specificity of the area under study. Here, we restrict ourselves only to the problem of political relations—the problem of power, as it is connected more than any other with man, determining his position in the sphere of political relations.

Politics is subject, probably more than other areas, to the influence of accidents. This is explained by the fact that a political situation is affected by too great a number of variables which, to make matters even more difficult, belong not only to the political sphere but also to non-political ones. Besides, political relations cover an extremely broad range of issues on which decisions are taken at

different levels. These levels consist of many components, often of a very subjective nature. In other words, there is as a rule a multilevel "inner" political space between decision-makers and those who put it into effect. In a normally functioning political system the situation is as follows: the higher the level at which a decision is taken, the greater the number of executive personnel involved, the deeper the extent of their involvement and, consequently, the greater the space. Each level must act in a way according with its purpose. That means that at each of the levels the general decision is interpreted and concretely specified in a way suitable to that level; in the process, the possibility can never be excluded of a distortion of the true meaning of the decision (which may be accidental, that is, due to an incorrect interpretation, or intentional and rooted in certain causes), which results in defects in practical work. The greater the number of mediating levels, the higher the probability of errors, for which the executive personnel must not always be held responsible.

Coordination of the content of all decisions without exception, and especially their implementation according to a master plan, is an extremely difficult task. To this should be added that decision-making and the mapping of a political course by no means always follow from the principles, laws and categories of political science. It should be noted at the same time that application of political science to practical politics is a necessary but not sufficient condition for error-free action. Other factors include the political skills of leaders at all levels and their "personal influence".¹³

The existence of a strong personal element considerably expands the sphere of the working of chance. That is one of the prime reasons for the fact that Western political science actually deals not with science, which must by definition contain objective laws, but with a theory in which chance plays the principal role. That is what politics are sometimes called—a "play of chance", in which only probabilistic predictions are possible.

The fundamental question is: what must our attitude to politics be? Should we treat it as a play of accidental forces that are not subject to strict theoretical generalisations—or as a specific area of social activity governed by objective laws that can be cognised and subordinated to the interests of society and personality, their elemental impact tamed? Should we treat it, in fact, as science? This is a crucial point. It determines whether we engage in a search for certain objective principles ensuring the rationalisation of political relations, control and conduct, or whether each of us makes up his own rules of the game imposing them on the other side, which leads to an endless and potentially dangerous confrontation.

Lenin did not have even the shadow of a doubt that our starting point must be "the materialist theory of politics",¹⁴ i.e. the view that politics are conditioned by the objective laws of political relations. He stressed that "politics have their own objective logic, irrespective of

what persons or parties plan in advance".¹⁵ This most important proposition of political science means that politics, despite their exceptional complexity and exposure to chance, and probably because of these factors, can and must be treated as a science.

Most contemporary Western politologists and politicians hold the opposite view, but there is an important distinction to be made here. It is one thing when a politologist who does not take a direct part in decision-making regards politics as a game, invoking in support of this view the simple observation that, in their real political activity, bourgeois governments and political parties often adopt the adventurist policy, unjustifiable by any rational arguments and not subject to any effective control, of playing with fire, pursuing with varying success narrow selfish goals and short-term interests, while their leaders become embroiled, ever so often, in various internal and external machinations, trusting to chance, like gamblers, that they will not be exposed, and blaming the exposure, when it comes, on chance again. In this case, it can be a question of theoretical delusions of an academic politologist.

It is quite a different matter, though, that politics are treated as a game by leaders who make decisions and by the advisers and experts who stand close to the leaders. The situation here is basically different, for politics becomes an area of active speculation, it is consciously used precisely as a gamble, and unfounded and unattainable tasks are posed for which there is no other justification than the egoistic narrow class interest. Political reality is not perceived and assessed objectively, as it exists in actual fact, but only with reference to those changes that take place in the consciousness of the political subject and are prompted by his will and desire. This kind of subjectivist vision of the world is fraught with real danger.

This is the path that was chosen some thirty years ago by the well-known anti-Communist and Sovietologist Zbigniew Brzezinski, who has been unswervingly following along that path ever since. With his frantic defence of the interests of US "national security" or, to be more precise, of US imperialism, he far outstripped, in his anti-Soviet theoretical and practical activity, many right-wing Americans, finding himself in the position of a Roman Catholic who is holier than the Pope himself.

In 1986, he published his latest book, *Game Plan: A Geostrategic Framework for the Conduct of the U.S.-Soviet Contest*.¹⁶ Let us make this reservation here that we do not set ourselves the task of analysing all the questions discussed in it, which in themselves are a reflection of the life experiences of the author's eventful life.¹⁷ Neither shall we touch on the personal motives for his Thirty Years War against the Soviet state and world socialism. Brzezinski's book should be studied not for its profound theoretical calculations or realistic predictions (which are so conspicuously absent in his books) but because of his undoubted and sufficiently strong influence on the US Administra-

tion and consequently on the working out of foreign policy. Many politicians see the history and politics of the Soviet Union through Brzezinski's eyes. His views and evaluations may be said to have become typical of the political hawks now standing at the helm of US politics. And that is a harsh political reality that has to be taken into account.

Let us single out certain principal aspects of Brzezinski's arguments (which on the whole reflect the official views of the US Administration): the methodology of political analysis and possible practical consequences; the interpretation of the world political process and the attitude to the nuclear conflict; the interpretation of the problem of power in international relations, which is expressed in the concept of "world domination"; the role of ideology and philosophy in the present-day political situation. The author's primary goal is to find the most promising ways for the USA to achieve world hegemony. "This book is based," Brzezinski writes, "on a central proposition: the American-Soviet contest is not some temporary aberration but a historical rivalry that will long endure. This rivalry is global in scope but it has clear geopolitical priorities, and to prevail the United States must wage it on the basis of a consistent and broad strategic perspective."¹⁸

Although this proposition is, at first sight, a statement of fact, it does not hold water either logically or methodologically. Whether the author realises this or not, the proposition which he intends as the basis for constructing a certain system of views (or theories) is logically defective, stimulating further methodologically absurd theoretical constructions. Ultimately it leads neither to search and analysis nor new knowledge but to a previously evolved, predetermined result inserted in the premise from the outset and entailing deleterious practical consequences.

Indeed, Brzezinski's basic proposition, on which the whole of the book is founded and which is supposed to have been substantiated, is by no means a self-evident truth—it is a "truth" that has to be proved yet. This applies to any of the premises explicitly contained in the thesis as irrefutable assertions, e.g. that the USA-USSR confrontation is "a historical rivalry that will long endure". For such assumptions to become the *basis* of research, they must naturally be proved first. Otherwise the whole of the system of knowledge constructed on them may collapse.

We can point out, for instance, what there were promising periods of cooperation in the history of mutual relations between these two countries. Why, then is the present state to be prolonged indefinitely? Of course, if one is to ignore the strict requirements of constructing a scientific system of knowledge, one can formulate any proposition one likes, but if the very foundation is fraught with a lie, the building thus constructed is not much of a housing facility—it is rather a house of cards. In other words, Brzezinski's fundamental

proposition, both in its meaning and structure, is far from irrefutable and unsubstantiated. A false premise determines, as a rule, a false process of proof. That is why the author embarks on long-winded, unconvincing, and often casuistic arguments, endeavouring to find proof "in hindsight", so to speak.

Thus he asserts in retrospect that "Soviet intentions derive from the historical Russian desire to achieve a pre-eminent global standing".¹⁹ Just as the Western mass media, Brzezinski does not breathe a word about the peace-loving policy inherently characteristic of the Soviet state, a policy that has been consistently implemented since its very emergence to the present day, or about the Soviet Union's peaceful initiative. He ignores completely the revolutionary changes in the social, political, economic and cultural spheres as a result of which tsarist Russia with its backward outlying regions turned into the Union of Soviet Socialist Republics of today. Brzezinski's curious treatment of history has for its sole task the impregnation of the minds of Americans with the idea that the USSR is an aggressive state, and that the conflict between the Soviet Union and the United States is insurmountable.

Brzezinski does not recognise objective laws of historical development. He even speaks of them in an almost ironical way "the ideological component of the Soviet worldview emphasizes the notion that all of humanity is governed by certain 'iron laws of history'".²⁰ All of history and politics, including the USA-USSR confrontation, is a game in which "each side plays according to its own rules and keeps its own score".²¹ Amplifying on the idea, Brzezinski explains that the game is not a goal in itself: "Not to lose is the first objective; to score points according to one's own scoring system (or values) is the second; to prevail is the ultimate but remote goal."²²

The view of international politics, and in particular of the relations between the USSR and the USA, as a game naturally pushes into the foreground the problem of finding the means by which the opponent can be outmanoeuvred, outwitted, deceived, nonplussed and ultimately defeated. And all this is to be achieved in this nuclear age through the stationing of nuclear weapons in space! "In our age," he declares, "military control over space is similarly becoming a potential source of decisive leverage for exacting geopolitical compliance on earth."²³ It follows that the programme of the "strategic defence initiative" must be adopted, as it will ensure "U.S. preponderance in space".²⁴ The world political process is reduced to a global confrontation of two superpowers. To Brzezinski, the developing countries are merely an object of manipulation or of direct aggression, if the latter is prompted by the interests of US national security. In a word, he advocates complicated political gamesmanship.

This approach has another aspect, no less sinister than the first one: everything that the assumed adversary does is also declared to

be a "game", a dirty trick, a deception, etc. without going to the root of the matter. That is exactly the way many important initiatives of the Soviet state are received. True, awkward attempts are sometimes made to cover it all up with pacifist rhetoric which the speakers themselves can hardly take seriously.

Assuming that the core of international relations is the confrontation between the USA and the USSR, Brzezinski proposes a definite game plan for the United States. That is the whole purpose of his book, of which he says that it "is not an argument about the evils of the Soviet system compared with the merits of American democracy, but a practical guide to action".²⁵

Of the 12 scenarios for Soviet-American contest for the next ten years which he suggests there is not a single one that would take into account or envisage developing peaceful coexistence or detente with certain elements of partnership, goodneighbour relations, or cooperation on mutually advantageous conditions. Neither is the author concerned with solutions for the most difficult problems of modern times, such as the problem of avoiding a nuclear conflict. All he does is compute and play out various models or scenarios of nuclear and non-nuclear conflicts. According to Brzezinski, the game must include intensive measures for the economic attrition and ideological degeneration of the USSR and other socialist countries. He absolutely rules out any possibility or necessity for changes in the political and economic system of the USA and other NATO countries.

To achieve US hegemony over the world, he proposes the following steps. *First*, arms control must be rejected. Brzezinski believes that US world hegemony can only be secured through strength. It is strength that underlies the functioning of imperialist power. The USA must therefore take measures to cool the enthusiasm of those who advocate an end to the arms race, i.e. those who advocate control over armaments, and to damp the zeal of the masses fighting for universal disarmament. "The contamination of strategy by pacifism," he says, "is the key danger for the United States inherent in crusading arms control."²⁶ Using the "dangers of disarmament" to intimidate the Americans, he writes that even the idea of arms control may "someday render the United States strategically impotent".²⁷

In the meantime, more and more Americans are coming from under the influence of the political "hawks" pushing the world to the brink of nuclear disaster; they clamour more and more insistently for an end to the arms race and for establishment of effective controls over armaments. According to the Gallup poll, the number of such Americans reached 80 per cent of the population in March 1987. The gulf is growing more unbridgeable between the official policies of the US Administration aimed at achieving a military superiority over the Soviet Union, and the desire of the overwhelming majority

of Americans to establish peaceful relations with the USSR. In recent years only, a number of international and national organisations have emerged advocating an end to the arms race, prevention of the threat of nuclear war, and establishment of friendly and neighbourly relations with the Soviet Union. Among these are International Philosophers for Prevention of Nuclear Omnicide, Concerned Philosophers for Peace, Beyond War, and many others actively fighting for peace. What is Brzezinski's reaction to all this? He rejects the idea of a pledge not to be the first side to strike a nuclear blow, and would very much like to air the notorious slogan of "better dead than red". That is exactly what he does, in fact, only in an indirect and camouflaged form: playing on chauvinistic attitudes, he insists that pacifism in "its most simplistic manifestation is represented by the willingness to disarm unilaterally in the proclaimed belief 'better red than dead'".²⁸

Second, Brzezinski calls on the Western mass media, especially on the broadcasting companies beamed at the USSR and other socialist countries, to step up the campaign aimed at undermining the population's belief in socialism, boosting anti-Soviet attitudes, and fanning the nationalistic tendencies among the peoples inhabiting the Soviet Union. This orientation has a two-fold objective. On the one hand, it is supposed to weaken the Soviet Union's potential on the international scene, and on the other, to increase the inner pressure within it. It is this course that the United States must actively support and encourage, hindering the implementation in the Soviet Union of the "economic reforms that might enhance the Soviet capacity to compete with the United States".²⁹

Curiously, Brzezinski refers to the goal-directed campaign waged by the Western mass media and based on the administration's lies as a "critical factor" in the ideological struggle, and in the same breath asserts that in contrast to socialist countries "the United States has a system of open political competition reinforced by free mass media". But this is by no means the only or even the principal of the contradictions of which the former National Security Adviser is guilty. In his attempts to denigrate the Soviet political system, he talks himself into absolute absurdity, declaring, for instance, that "the Soviet Union has subordinated the church to the state... in order to promote state-sponsored atheism".³⁰ He must really regard his readers as a bunch of ignoramuses, to offer this sort of bunkum.

The main point, however, is that, objectively speaking, Brzezinski rejects the logic of peaceful coexistence, of survival of mankind in a nuclear age. Having easily assimilated the old, traditional imperial way of thinking, he cannot or will not go beyond its framework. His intention to "prompt a contraction of the bloated Soviet empire" is nothing but an irresponsible sally.³¹ This irresponsibility comes across

even in the very choice of words used in the book ("curtail", "suppress", "oppose", etc.). Each of Brzezinski's sentences is an attempt to solve the *problem of power*, to create the conditions for US domination over the world community.

Ignoring the opinions and the vital interests of the American people, and discarding the views of many sober-minded politicians, philosophers and politologists, Brzezinski shows no concern for the search of a way for strengthening trust between the USSR and the USA, for consolidating political, commercial, economic, scientific, technological, cultural and other links. He does not see the nuclear arsenals accumulated in the world as enemies of contemporary civilisation but rather as potential allies in various situations that may arise in the path of prolonged geostrategic rivalry of the two superpowers that will lead to historical attrition.

However, all of the now existing states, more than 180 of them, including the great powers, have a great number of strategic problems *in common*, which can be resolved only by joint efforts. These problems include, first of all, saving civilisation from the impending threat of total annihilation; the switching of industry, of the whole of the national economy and science, to peaceful channels; raising the population's living standards; the liberation of social creativity and intellectual activity from the needs of militarism; joint struggle against illiteracy, and diseases, for the protection of the environment, and many other social, economic, cultural and ecological problems.

In formulating the US position, Brzezinski takes as his starting point the basically false premise that "Soviet military threat" exists, presenting the Soviet Union in terms of various combinations of ideological features not only as a rival but precisely as a multidimensional enemy, although he makes the special reservation that the USSR is a "unidimensional" adversary developing in the military sphere only. He is not to be satisfied by differences in the ideologies. Subject to no limitations imposed by science or scholarly ethics, he demands a change in "Soviet philosophy", decentralisation of political power and introduction of pluralism, interpreting the latter as spontaneous action of the system and ideological anarchism.

Of the 10 features which he uses as points of reference for opposing the USA and the USSR, philosophy occupies one of the first positions. The two powers, Brzezinski writes, differ "in the philosophical values that either shape the national outlook or are formalized through an ideology".³² If we disregard the vagueness of such expressions as "the national outlook", the question arises: why does someone who advocates "pluralism" rule out the possibility of philosophical and ideological differences? These differences can be overcome by philosophical and ideological means. Why should they lead to a nuclear disaster?

The situation existing in the present-day world, not to mention the profound historical roots of the democratic traditions of various peoples, including those of the USSR and the USA, insistently demands that differences and contradictions must be solved peacefully. Other countries must be regarded as partners in world economic and cultural links, and anything that may lead to a nuclear conflict must be decisively opposed.

True, the two superpowers today confront each other as rivals. But cannot the goodwill of the peoples and governments of these two nations change the relationship for the better? The fact is that there were periods when the two countries worked together. The fact is that the rivalry was not prompted by a supranatural force but emerged through certain human actions. Anything that men did can be changed by men themselves, the more so that such a change for the better would promote universal progress and agree with the objective needs of political relations.

Of course, the political leader wielding power (head of state, government, party, or class) can, through incompetence or irresponsibility, ignore the laws of political science. History abounds in examples of this kind. But this entails a crisis both in domestic and foreign policy. History avenges such a slighting attitude to science. True, it is not every error that is accompanied by an immediate crisis, for crises have stages of their own (inception, deepening, etc.). The art of the political subject consists in taking notice of the elements of an emergent crisis and preventing it from expanding by changing the policy. Fundamentally, any political crisis is a crisis of power.

The view of politics as a science assumes profound study of the objective laws of political relations (domestic and foreign) of the functioning of the society's political system, state apparatus, parties, social organisations, the mechanism of power and democracy, political culture, etc. as well as modes of interaction between governments, parties, states, systems, blocs, state confederations, international organisations and movements.

Besides, the links of politics with the other elements of the superstructure and its dialectical interrelations with the economy must also be fully taken into account. The extremely complex character of the political process can only be understood in the entirety of all of its component parts. The scientific methodology of the study of politics excludes in principle a fragmentary approach, substantiation of theory by reducing it to separate examples or a mechanical agglomeration of such examples, however great their significance in history. Such an approach conceals the danger of exaggeration of their role and neglect for the overall trend of development, i. e. for the objective historical law, to illustrate which is the only purpose of the examples. "What this calls for above all,"

stressed Lenin, "and more so than in any other sphere—is a picture of the process *as a whole*, with all the trends taken into account and summed up in the form of a resultant."³³

Just as any other sphere of control, politics calls not only for knowledge but also for skills, habits, will, and art. The art of the political subject consists in the welding of most important components of political relations (the leader, political figures, parties, social groups, classes, masses) in a single rationally directed interaction, "into one indivisible whole with the class and the masses"³⁴ The leader wielding political power must be able to mobilise the masses, to convince them, to make them follow him, to concentrate their efforts on solving the vital tasks posed by a given situation, being guided in all this by the scientific principles of political theory. It is no accident that Lenin stressed that "politics is a science and an art."³⁵

Marxist-Leninist political science makes possible scientific planning and forecasting of political development, as well as action in accordance with the objective laws of political relations and control over the relations. Cognised political necessity, and the ability to take correct political decisions on the basis of knowledge of that necessity, is true *political* freedom.

NOTES

- 1 V. I. Lenin, *Collected Works*, Moscow, Vol. 27, p. 100.
- 2 K. Marx, F. Engels, *Selected Works*, Vol. 1, Moscow, 1969, p. 509.
- 3 K. Marx, F. Engels, *Collected Works*, Vol. 1, Moscow, 1975, p. 400.
- 4 V. I. Lenin, *Collected Works*, Vol. 15, p. 405.
- 5 Mikhail Gorbachev, *Political Report of the CPSU Central Committee to the 27th Party Congress*, Moscow, 1986, p. 7.
- 6 K. Marx, F. Engels, *Selected Works*, Vol. 1, p. 514.
- 7 D. Nimmo, J. Combs, *Mediated Political Realities*, New York, 1983, p. 211.
- 8 A. Lawton, *Political Theory. Introducing Political Science*, Ed. by L. Robins, London-New York, 1985, p. 20.
- 9 K. Marx, *Capital*, Vol. 1, Moscow, 1969, p. 80.
- 10 *Grundrisse der Kritik der politischen Ökonomie (Rohentwurf). 1857-1858*, Berlin, 1974, pp. 25, 26.
- 11 Mikhail Gorbachev, op. cit., p. 24.
- 12 K. Marx, F. Engels, *Collected Works*, Vol. 1, p. 113.
- 13 V. I. Lenin, *Collected Works*, Vol. 34, p. 325.
- 14 *Ibid.*, Vol. 17, p. 554.
- 15 *Ibid.*, Vol. 11, p. 379.
- 16 Z. Brzezinski, *Game Plan: A Geostrategic Framework for the Conduct of the U.S.-Soviet Contest*, Boston-New York, 1986.
- 17 During his career, Brzezinski held several extremely responsible political and administrative appointments, which were secured in a large measure owing to his extremely anti-Soviet, right-wing, conservative positions. In the 1960s, he was a

member of the State Department's Policy Planning Council; in the 1970s, he headed the all-powerful Trilateral Commission of the USA, Western Europe and Japan; between 1977 and 1981, he filled the key post of the Assistant to President Carter for National Security Affairs. At present, he is Counselor to the Center for Strategic and International Studies at Georgetown University, Washington, D. C.

¹⁸ Z. Brzezinski, *op. cit.*, p. XIII.

¹⁹ *Ibid.*, p. 99.

²⁰ *Ibid.*, p. 21.

²¹ *Ibid.*, p. XIV.

²² *Ibidem.*

²³ *Ibid.*, p. 147.

²⁴ *Ibid.*, p. 185.

²⁵ *Ibid.*, p. XIII.

²⁶ *Ibid.*, p. 148.

²⁷ *Ibidem.*

²⁸ *Ibidem.*

²⁹ *Ibid.*, p. 237.

³⁰ *Ibid.*, p. 13.

³¹ *Ibid.*, p. 145.

³² *Ibid.*, p. 13.

³³ V. I. Lenin, *Collected Works*, Vol. 22, p. 72.

³⁴ *Ibid.*, Vol. 31, p. 50.

³⁵ *Ibid.*, p. 80.

Philosophical Aspects of Innovative Activity

Nikolai LAPIN

The present stage in the history of mankind is an epoch of great change and renewal along several dimensions. The source of renovation in all of these dimensions is man's innovative activity. What changes, marking a turning-point in history, do we have in mind here?

Above all, we refer to the scientific and technological revolution now triumphantly sweeping through all countries and continents. Its first wave, which has brought about automation of production, has been followed by a second one—the wave of computerisation entailing radical transformation of all information processes. Fresh waves of the scientific and technological revolution, much more gigantic than the previous ones, are now gaining momentum.

This is what forms the basis for profound structural changes in the economy of all the countries of the world. The primary sectors of the economy (agriculture, fishing, hunting) are more and more ousted, in terms of the numbers of people gainfully employed in them, by secondary and tertiary sectors (industry, the sphere of the services) while in the industrially developed countries the quaternary sector (informatics) has developed, claiming an increasing share of the gainfully employed population. We are witnessing changes in the priorities of economic development in favour of intensive, science-consuming parameters.

A historic change is taking place in the structure of mankind in terms of the socio-economic formations. The October 1917 Revolution in Russia was the first step in the transition from antagonism between labour and capital to cooperation between labour organisations and the individual on the basis of varied forms of social, collective and personal property. At present, there is an unpre-

cedented variety of social structures in the world: along with the socialist and capitalist countries, there is a broad spectrum of developing nations, whose socio-economic and socio-political orientations are varied and by no means stable.

Fundamental differences in social structure do not exclude interaction between the groups of countries with such differences. The development of national economies is accompanied by a growing internationalisation of economic structures and processes. The growing acuteness of global problems, especially of the problem of mankind's survival in our nuclear age, increases the interdependence of all the countries and regions on each other. "The prevailing dialectics of present-day development consists in a combination of competition and confrontation between the two systems and in a growing tendency towards interdependence of the countries of the world community. This is precisely the way, through the struggle of opposites, through arduous effort, groping in the dark to some extent, as it were, that the controversial *but interdependent and in many ways integral world* is taking shape."¹

Fundamental and truly revolutionary changes are taking place in science and culture. A new scientific picture of the world is taking shape as new aesthetic and moral values, as well as new thinking—political, ecological, etc.—evolve.

Underlying all these and other changes, which form in their totality substance of the turning-point in history, are the objective laws of the development of mankind, of its material, social and cultural progress. These laws, however, do not function by themselves as an autonomous "programme" fully determining the movements of the "automation"; they function through the operational mode of dialogue with man who has to take into account the "programme" compiled and imparted to the "computer" by other individuals. He can, however, himself develop such a "programme" and introduce essential changes into it, creating new "programmes" of his being. Man is subject to the action of the objective laws of his being, and he is in a position to create new conditions of their action, of which the totality can lead to a renovation of the manifestation of laws and at times to a renewal of their very content, to the formation of new being with its new laws. Herein lies the specificity of history as object-subject activity.

How is this renewal possible, and why? The whole of man's life is *activity*, and man's social being itself is a result of human activity—the activity of the individual, his contemporaries and previous generations. However, it is not any activity that leads to a renovation of being and of man himself but only a special kind of it—*innovative activity*. It is this activity that constitutes the source of goal-oriented changes realised by man in the world and in himself. A direct form of the manifestation of this activity is innovations of different kinds.

The quality and volume of innovative activity, as well as its role in history, vary in different epochs. On the whole, there is a tendency towards their growth. Innovative activity grows immeasurably in scope during revolutions in the implements and modes of labour, in social system, science and culture. In this epoch of radical change, when revolutionary upheavals are taking place in all the principal spheres of the activities of man, of the peoples and of the whole mankind, we observe a kind of explosion of people's innovative activities—not of hundreds or thousands but of millions. Mass scope of innovative activity is a characteristic feature of our times. The successes and failures of individuals and organisations, of peoples and societies increasingly depend on their ability to create and accept various innovations.

The terms "innovative activity" and "innovation" are not yet part and parcel of the philosophical lexicon, but they are extremely essential for a philosophical understanding of history, of social and cultural processes, of the essence and perspectives of man as a whole and of contemporary man in particular. They also have a definite philosophical content.

What is innovative activity?

The concept of activity is fundamental to the dialectical-materialist conception of history. It is instrumental in understanding the essence and profound source of the self-development of man, society, and the whole of humankind's culture. Many of the aspects of this concept have been worked out in Marxist literature.

Taking activity as an explanatory principle, we arrive at the conclusion that, of all the diverse types and forms of activity, the division of activity into productive and reproductive is the most fundamental. *Reproductive activity* is based on repetition of already developed schemata of action and is aimed at obtaining a result that is already known, by employing familiar means. *Productive activity* assumes the working out of new goals and corresponding means or the attainment of familiar goals by new means; therefore its necessary component is creativity.²

Each type of activity meets a definite need of society as an integral, organic system: reproductive activity corresponds to society's need for stability, for a stable functioning of all its mechanisms and subsystems; productive activity realises the need for changes and development in society, for its transition from one qualitative state to another.

Just as the needs themselves, both these types of activity are mutually connected. Being opposites, they interact with each other, functioning as meta-activity in relation to each other. Productive activity is the progressive side in this interaction: it does not simply stand side by side with reproductive activity but transforms concrete types of the latter, ousting out and often completely eliminating them. This interaction produces a manyfold intensification and

acceleration of the processes of development and renovation triggered off by productive activity. Contrariwise, the reverse impact on it on the part of reproductive activity hinders changes and slows down development, preserving the routine mechanisms of the processes of functioning, stressing their stagnant character.

Innovative activity is productive meta-activity of which the content is the creation, spreading and employment of various innovations, and which has as a necessary condition and consequence changes in the routine components constituting the environment in which innovative activity takes place. As a meta-activity, it ultimately has for its object other kinds of activity—those that evolved previously and became by the given moment reproductive in character, while their means and modes became routine in a given community of men. Innovative activity is ultimately directed towards changes in the routine means and modes of reproductive activity. In this connection, “innovated activity” is identified as an object of innovative activity.³

This determines the primary function of innovative activity in society—that of renovation and development of the modes and mechanisms of its operation in all the spheres of its life activity. In the broad sense, it is the function of the development of culture as an ensemble of modes of man’s life activity. Innovative activity is intended to satisfy human needs, which change under the impact of law-governed tendencies and processes of society’s development.

The starting-point and the nucleus of innovative activity is a *novelty*—a novel idea or value, product or technology, norm of behaviour or organisational structure. Of the greatest significance is the potential of the novelty, i. e. the totality of changes which can be realised to meet the demand for this novel element. The socio-cultural and organisational adaptability of the novelty, the possibility of its assimilation by concrete participants in innovative activity, and the probability of its integration in the socio-cultural environment must be taken into account. The potential of novelty is also characterised by the possibility of modification of the novelty itself, of its ability for renovation and self-development.

In terms of their potential, novel elements are divided into basic and modifying ones (the latter are referred to as “improvement”). The former mark a radical breakthrough in the sphere of activity in question (a major scientific or technological discovery, etc.), followed by the creation of new types of activity. The latter signify more or less substantial improvements in that which exists: they may be modifications of a fundamental novel phenomenon facilitating its wide spreading, or they may be modifications of something obsolete which serves to extend the life of those obsolete elements. Underlying different types of novel phenomena are different types of innovative activity, significantly differing in their structure and mechanism. These differences lie in the interval between fundamental-innovative and routine-reproductive activity. Routine-modifying

activity, of which the principal mode is element-by-element improvement of an old routine, stands closest to routine reproductive activity.

The creation of a novel element, even a modifying one, is always a unique process. Innovative activity is in this sense basically unique. But that does not mean that it is unique from beginning to end; rather, cases of innovative activity that would be unique from beginning to end are in themselves unique. More frequently, the situation is quite different: in order to meet a need, a novel phenomenon must be produced in a sufficient number of copies over a fairly long period of time, not in one copy at a single moment of time. It follows that innovative activity, unique at the moment of its origin, must become in the course of time reproducible, functioning in accordance with the mechanisms of reproduction which existed previously or were created by this innovative activity itself. In other words, these mechanisms and these new modes of activity themselves must become customary in a certain community; that is to say, innovative activity, unique at the outset, is, as a rule, “routinised” in the course of time. A routinisation of the unique constitutes an internal contradiction of the being of innovative activity.

A novelty and its fate in a corresponding environment (that of economic production, social organisation or culture) constitutes the core or focus of a definite sphere of innovative activity. A concrete form of its manifestation is an innovation, of which innovative activity is the essence.

On the general theoretical plane, an *innovation* is a form of organisation of men’s innovative activity. The overall mass and quality of innovations implemented in a given society over a certain period of time are indications of the correlation of the productive and reproductive types of activity in this society, and one of the indices of the character of its culture.

Since innovation is a highly practical phenomenon, it is not enough to formulate its general theoretical definition characterising its essence. This definition must be complemented by a characteristic of concrete and empirically manifested features of innovations as practical innovative activities.

On this applied plane, an innovation is a complex process of creation, spreading and employment of a novelty—a novel practical means developed to meet a new need, or to satisfy a well-known need better; at the same time it is a process of changes conditioned by the potential of a given novelty in the social and material environment in which it runs through its life cycle. Depending on the potential of a novelty, a distinction is drawn between fundamental (radical) and modifying (improving) innovations; in terms of their material content, they are divided into technological, socio-organisational, cultural, and other innovations. Most innovations include both

technical and social components; that is to say, they are complex. Their effectiveness is also of a complex nature.⁴

An innovation is an integral and internally contradictory system. On the dynamic plane, it appears above all as an innovation process, i. e. as a process of creation, spreading and employment of a novelty. The structure of this process is determined by the inner substantive logic of innovation activity, from the moment of emergence of an idea for a novelty to its use by the ultimate consumers. Two basic forms of reproduction of innovative processes are distinguished: simple reproduction is characterised by the fact that a novel element is only produced where it was first assimilated; reproduction on an expanded scale means the spreading of the processes of creation of a novelty to an extent sufficient to meet the need for it fully. The transition from simple reproduction to extended reproduction constitutes a critical phase the overcoming of which determines the effectiveness and completeness of an innovation.⁵

The dynamics of interaction between the innovative process and different subsystems of its environment are expressed through the concept of the innovation's life cycle. This concept characterises the level of development of the innovation process and its effectiveness in regard to the individuals and organisations participating in it. Five principal stages of the life cycle of an innovation are distinguished: start, rapid growth, maturity, complete satisfaction of the need for a novelty, finish. The replacement of one of these stages by the next in succession is brought about by the contradictory relationship between the two principal elements of the effectiveness: the peak of the attractiveness of a novelty for the consumer comes much earlier than the peak of the process of production of this novelty. The dynamics of the novelty's consumer attractiveness must therefore serve as a guide for controlling the dynamics of its production, including the passing of decisions on the cessation of the production.

Innovative activities are subject to the division of labour in society. Consider technological innovations; here, some individuals make discoveries and invent things, others develop these technological innovations, still others produce them, the fourth category of individuals ensure that they reach consumers, the fifth, consume them in appropriate production processes, the sixth, utilise the waste materials resulting from consumption. In other words, different groups of individuals and different organisations perform different roles in the innovation process. The success of this innovation assumes a definite integration of all of its participants, a coordination of their goals, interests and actions.

However, not infrequently this coordination does not exist. The complex process of innovation ceases to be integral; its development sometimes aggravates the differences between the goals and interests of its participants; the differences may range from spontaneously

promoting a given innovation to persistent opposition to its implementation.⁶

The opposition is the greater the more radical are the changes introduced by the innovation. A radical innovation infrequently emerges in an alien organisational structure, circumventing this structure and developing in spite of it—through informal relations between its initiators and active participants.⁷ On the contrary, modifying innovations, implying element-by-element improvement of that which exists (the deep-rooted new or the old and the routine), are as a rule easily incorporated in existing organisational structures. Therefore modifying activity, along with routine one, often forms a difficult obstacle in the way of radical innovative activity. Just as the best is an enemy of the good, a modification is an enemy of the radical. True, this "enmity" is relative: as soon as the tree of a radical or fundamental innovation takes root, a whole stream of innovations comes into being. A fundamental novelty like the microprocessor gave rise to a great many innovation flows such as microelectronics and its varied applications.

The success of an innovation is substantively affected by its cultural genesis: it may arise on the basis of cultural achievements of the given people, the given society, or it may be borrowed from a different culture. Culturally endogenous innovations are more easily perceived by the participants of innovative processes, they are better integrated and, in a word, they are more likely to succeed than culturally exogenous innovations; the latter are often rejected by the local culture and wither away.

The principal factor of the success of innovations is the quality of innovative activity of its direct participants. This properly *human factor of innovations* includes the structure of interests, incentives and motives, existing in a given society, for labour in general and innovative activity in particular; perceptiveness to innovations which differs significantly among different individuals, organisations and cultures; the structure and composition of the general and special knowledge and labour skills of gainfully employed population; the structure of values and norms in society and its socio-professional groups; and the characteristics of communication channels and information sources.

Different aspects of the above characteristic of innovative activity and innovations can be amplified and specified. The most important of these aspects is the emergent need for the *intensification of innovative processes*.⁸ This is a complex need—economic, social, cultural and, ultimately, human. It reflects the challenges of our epoch—challenges addressed to society and man and insistently calling for their renovation through self-development. The emergence of this need is an indication of a sufficiently high level of development of the human community and of the even more considerable possibilities opening up before it. The realisation of

these possibilities imposes on mankind and the individuals and societies constituting it a demand for great energy and skill.

On the one hand, there is the *demand imposed on societies*, their institutions, organisations and other macrostructures to create an increasingly growing interest and axiological-normative orientation of a possibly greater number of their members, of greater and greater masses of the working people, towards active participation in radical innovations in technology, production, social organisation and culture. This interest and orientation must accord with the possibility for their active participation in radical innovative processes, including guarantees of the right to labour, creation of the "innovation reserve" of resources at the disposal of the innovators, formation of a network of innovative production organisations, etc. Societies and their macrostructures can only count on success in the present-day dynamic world if they take the path of intensification of all the internal sources of self-development.

On the other hand, intensification of innovation processes imposes just as significant *demands on man*. In terms of receptiveness to innovations, men fall into five categories: innovators, early recipients of innovations, the early majority of followers, the later majority, and the stragglers.⁹ According to some statistics, the first two categories cover only about 16 per cent of the total number of recipients. However, that is not some kind of biological constant but a magnitude determined on culture and education. Although there are no reliable statistics to confirm the above thesis, there are quite a few successful experiments and schools which ensure increased receptiveness of personnel towards innovations and development of their innovative capacity.¹⁰

In the USSR, innovation games have been worked out and are successfully applied, permitting experimental realisation, over a short period of time, of interaction between potential participants of the innovation process.¹¹ A special feature of innovation games is that they allow simultaneous solution of three interconnected tasks: formation of methods for the solution of innovative problems, and study and practical development of man's capacity for innovative activity.

A most important premise of the formation of innovative qualities in man is his *need for self-development*. At the same time that need itself is consolidated and perfected in the process of concrete innovation activity. That is not, however, a closed circle but a spiral of which the guiding reference-points are two vector parameters: a rise in the share of gainfully employed population actively participating in innovation, and better quality of the innovation activity itself (intensification of the innovation processes). These are contradictory parameters with a negative feedback link between them (if they are considered separately). But if the need for self-development assumes mass scope, simultaneous rise in both parameters becomes possible.

The realisation of such a possibility is an indication of progressive development of society and man himself.

Creation of optimal conditions for an increasing involvement of the popular masses in innovation activity and for the intensification of innovation processes is one of the deep-lying needs of the present epoch, one which various societies, their institutions and organisations face as a *vital imperative*. This is a truly *humanist imperative*, since freely unfolding innovative activity really promotes the self-development of man as an individual and as the subject of social and cultural progress.

NOTES

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- 2 E. G. Yudin, *The Systems Approach and the Activity Principle*, Moscow, 1978 (in Russian).
- 3 B. V. Sazonov, "An Activity-Oriented Approach to Innovations", *The Social Factors of Innovations in Organisational Systems*, Moscow, 1980 (in Russian).
- 4 The literature on theoretical and applied problems of innovations is extensive; see e. g. G. Mensch, *Das technologische Patent*, Frankfurt-on-the-Main, 1975; E. Gee, Ch. Tyler, *Managing Innovation*, New York, 1976.
- 5 For details see N. I. Lapin, "Problems in the Systems Study of Innovations", *Upravleniye i nauchno-tehnicheskiiy progress*, No. 5, 1982.
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- 9 E. M. Rogers, *Diffusion of Innovation*, New York, 1962, pp. 168-171.
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Interdisciplinary Study of Consciousness

Evgeni VELIKHOV,
Vladimir ZINCHENKO,
Vladislav LEKTORSKY

An ever greater number of sciences are being involved in the study of consciousness. Philosophers, anthropologists, sociologists, psychologists, economists, physiologists, physicists, and specialists in the technical sciences and informatics are conducting research in this field.

There are two basic reasons for the growing interest in the study of consciousness. The first is an expanding interdisciplinary, comprehensive study of man, characterised primarily by the fact that he is the subject of conscious, purposeful (unfortunately, not always purpose-oriented) activities. None of the disciplines exploring man and his activity could possibly view him as an unconscious being. As a result, each discipline, wittingly or unwittingly, when dealing with the phenomena of consciousness begins to isolate them as an object of study. The second reason, closely related to the first, originates from the fact that there was a continuous expansion of the ontology of consciousness phenomena, following the works of Marx. Having analysed this process in depth, Mamardashvili showed how the object of the study of consciousness has outgrown social and psychological analysis of intuitional conceptions [see his article "Analysis of Consciousness in Marx's Works" in *Social Sciences*, No. 2, 1987—Ed.].

Consequently, the expanding ontology of consciousness phenomena and the involvement of many disciplines in their study is a natural process in the onward march of science and philosophy. It creates favourable conditions for the organisation and conduct of interdisciplinary study of consciousness. It will be shown, however, that the organisation of such studies faces a whole range of fundamental and complex methodological and procedural problems. Their analysis is

quite instructive as similar difficulties are met within the organisation of integrated studies of man and his activities.

The nature of these problems derives from the fact that each of the sciences studies its own range of consciousness phenomena, which it isolated historically (or intuitively); itself defines its object of study. The isolated circles of consciousness phenomena are sometimes quite remote from each other and are not related to consciousness as an integral phenomenon. More often than not no line is drawn between the forms, states, structures, properties and mechanisms of consciousness. Each of the disciplines uses its own methodological patterns, is guided by its own (both classical and non-classical) ideals of rationality and determinism, and its own criteria of objectivity, strictness and scholarly approach. Thus, the research of consciousness employs a monodisciplinary rather than an interdisciplinary approach: it is increasingly frequent, however, that the results of such research are gathered together under one cover. We believe that an appreciation of this situation may help organise truly interdisciplinary study of consciousness which is called forth both by the logic of science and practical tasks of studying the human factor.

The following is an attempt to find a possible conceptual basis for such research.

* * *

Consciousness or consciousness phenomena are a reality of a special kind. It is common to call it subjective. One could go along with that, provided it were not contrasted to objective reality, which results in a reproduction of epiphenomenalistic treatment of consciousness. This is manifested in that consciousness is viewed as a reality of a secondary rating, some sort of a "social metaphor". It is forgotten that the juxtaposition of the subjective and objective outside of epistemology is erroneous.

Consequently, the first thesis to be clearly defined is that consciousness as a subjective reality is no less objective than any other objective reality. The above is a paraphrase of an idea expressed by prominent Russian physiologist A. Ukhtomsky to the effect that the subjective methods of research provide results no less objective than those obtained by what is called the objective methods. There are, however, questions which have no simple answers, such as: where is this reality located and what should be the language used to describe it? The answers to the first question, as a rule, lie in a range between social and neurophysiological matter. The distribution of answers across this range is reflected in the description language of consciousness phenomena.

The problem of the ontological status of consciousness is viewed differently in philosophy. This is understandable as the issue of the relationship between consciousness and being has been and remains

the main issue of any philosophical conception. In the focus of philosophical thought are the problems of man's place in the world, his relation to the world, and of the world's relation to man, of the limits of human cognition and action. Consciousness is man's peculiarity which determines his special position in the world and his special ontological status. It is important to emphasise here that the basic issue of philosophy is not reduced to what is primary and what is secondary but includes the research of all variable and historically changing types and forms of relations between consciousness and being. For this reason, it is not only the basic but also the eternal issue of philosophy.

Philosophy studies consciousness primarily from the point of view of its ontological status, its place in the structure of being, both natural and social. It isolates some main types of relations of consciousness to the world: cognition, activity, axiological attitude. Philosophy studies complex, ambiguous, often contradictory and dramatic relations between different types of consciousness (cognition and morals, goodness and beauty, cognition and usefulness, etc.). It is interested in the problem of the relationship between the individual and public consciousness, between the subjective consciousness and the consciousness objectivised in the form of special objects—items of culture. Thus, the specificity of the philosophical approach to consciousness is characterised by the interest in specific borderline problems: consciousness and being, consciousness and morals, individual and public consciousness, etc.

Some social sciences study separate forms of public consciousness in connection with certain forms of social activities (legal consciousness, political consciousness, economic consciousness, artistic consciousness, etc.).

Lev Vygotsky in his study of the philosophical understanding of the ontology of consciousness wrote that two layers can be isolated both in consciousness and in thought—consciousness for consciousness and being in consciousness.¹ The isolation of the being layer is needed for it is impossible to describe many acts of conduct and activities through the conscious presence of the individual subject and his will in them. This is particularly distinct in free actions. It is especially difficult to comprehend. Just as in physics the idea of relativity presents great difficulty, it is equally difficult to assimilate the idea that two types of phenomena within consciousness itself can be differentiated: (1) phenomena, controlled and used by consciousness and will (they may be termed ideal-constructive), and (2) phenomena and links, which though being active in consciousness itself, are not evident in relation to it and, in this sense, are not controlled by the subject. Many of the latter phenomena are more frequently considered what is called the altered states of consciousness.² We emphasise that we are discussing the distinctions between the contents within consciousness, since something in that conscious-

ness possesses characteristics of being (lending themselves to objective analysis), in relation to consciousness in terms of the individual psychological reality.³ Going somewhat ahead, we would like to note that the source of the characteristics of being is "aggregate" human action (both social and subjective) and this is the true essence of the well-known principle of the unity of consciousness and activity. From here on, the two isolated layers of consciousness will be referred to as the *being* and the *reflexive*. The conventional character of these terms is connected with the fact that the being layer also possesses reflexive components, very much like the reflexive layer, which is truly individual and psychological, possesses components of the being type.

The reflexive layer of consciousness is a relation *to* reality. The being layer a relation *in* reality. Obviously, there are major differences and real contradictions between these two main types of human relations to the world, which are not easy to remove particularly when there is a profound gap between consciousness and reality, thought and word, word and action. Thus, the organic unity of consciousness and activity is not given from the outset. It is a sort of prescription to be followed.

Expanding the ontology of consciousness to being and isolating the being layer in it, leads to a need for expanding the descriptive language of consciousness phenomena. It should also include the descriptive language of human activities and actions. The opposite is also true. The descriptive language of the latter likewise should be expanded, due to the inclusion of the descriptive language of consciousness and, in a broader sense, of psyche. The degree and measure of manifestation (or action, if you like) of being in consciousness is in inverse proportion to the degree and measure of reflection by it of its own act, marked by its own "I", and its objects in the world. It is clear that in this context the notions of "physical action", "objective" (independent of consciousness), "external", "spatial" and others must be reviewed and expanded.

In other words, today we see (especially in psychology) not only an expansion of the ontology of consciousness, but also that of action for which the traditional descriptive language used in the reflexive, stimulus-reactive, behavioural, and even sociological schemes of describing man and *socium*, is inadequate. As always, the main requirement of the descriptive language is that it should not screen with its body what it describes.

Before discussing the feasibility of moulding a single conceptual basis for the interdisciplinary study of consciousness, let us record the situation in this sphere as it is: at present several disciplines can be isolated in the study of consciousness. The social sciences, including psychology, study the forms of social and individual consciousness. The natural sciences, to which psychology is often referred, mainly study the states of individual consciousness and their material

substrate (mechanisms). The technical sciences study and simulate certain functions of consciousness, which include image recognition, memory, intellect, etc. These functions are also studied in psychology. The above division is not meant to be precise or complete. There are overlapping spheres of study, which is most apparent in the example of psychology where the objects of study include both forms and states, mechanisms and functions of consciousness. It's another matter how closely psychological studies are related to each other and to other sciences. Most likely, not very closely.

Nevertheless, according to its range of problems, psychology should in principle act as a link, or some sort of a conceptual bridge, in organising interdisciplinary studies of consciousness.

We have isolated only the key dominants and central problems which are being investigated by respective disciplines. In reality, however, there is some confusion of forms, states, mechanisms and functions of consciousness, its being and reflexive layers in research. The regular outcome of this is that some aspects become absolutised while others are totally disregarded. There is no science studying consciousness as such. This is illustrated by the fact that great efforts are being expanded to classify and understand the nature and causes of the altered states of consciousness (the number of which grows steadily). At the same time the understanding of what is consciousness, its norm, etc. is distressingly vague. Take, for instance, psychology—in the last decade it seems to have forgotten about the existence of the problem of consciousness.

The current situation in the study of consciousness can hardly be assessed in terms of "good" or "bad". An assessment should, however, serve as justification for interdisciplinary research and closer contacts between the social, natural and technical sciences in this sphere. It is evident that the general strategy of such study should support "two-way traffic". Social sciences should "feed" the content of the notion of consciousness which takes shape within the natural and technical sciences. The latter should develop methods of study and simulation of phenomena of consciousness, test and verify hypotheses born in the social sciences, specify the concepts of the material roots and material substrate of consciousness, etc. Such strategy requires one indispensable condition: an approach shared by the social, natural and technical sciences, in their treatment of consciousness phenomena, which could make up a single platform for the interdisciplinary study of consciousness. We believe there are sound scholarly premises for the identification of such common approach. We shall try to explicate them.

* * *

Let us begin with the study of the consciousness forms in the social sciences. Marx viewed the development of society as a natural

historical process and compared it with the development of an organic system. The latter creates the missing organs in the process of its evolution. That is how there appear multiple forms of individual, group, collective, class, national, mythological, religious, scientific, legal, professional, political, etc. consciousness. Each form of social consciousness develops, transforms, involutes; it is, in a word, a socio-historical category. The appearing forms of social consciousness become institutionalised and turn into functional organs which ensure the life of society. They may also become with time (and sometimes do) an obstacle on the path of such development.

The trend of the forms of consciousness to institutionalisation, automation, and symbolisation of its processes and results fully justifies the conclusion about the objectiveness of conscious (subjective) phenomena.

The above is true not only with respect to the forms of social consciousness. Marx described many phenomena of man's individual consciousness as functional organs: "Each of his human attitudes to the world—vision, hearing, olfaction, taste, tactus, thinking, contemplation, perception, wishing, activity, love—in a word, all organs of his individuality .. exist as social organs, are in their *objective* attitude, or in their *attitude* to an object, the acquisition of the latter, the acquisition of human activity."⁴ This passage contains ideas, vital to our account. First, a whole range of psychic processes, often identified as the functions of consciousness (perception, thinking) or as the states of consciousness (wishing, love) are called the organs of individuality. Second, Marx understood the organs of individuality not as anatomic and morphological formations, but as attitudes to the world, to the object, or as functional organs. Third, they are social organs. The latter is extremely important for expanding interdisciplinary research not only of consciousness, but also for integrated studies of man. Marx wrote on numerous occasions that man was a natural and objective creature. He did not use the concept of biological creature with respect to man, nor did he juxtapose the biological and the social. (Varied and complex forms of social life are well known in the animal kingdom.) Marx spoke about the corporeality of the individual living in the objective world created by humanity and called this world man's second nature. Far too often we have to admit with bitterness that his second nature influences man's development much stronger than the first, from which he removes yet farther and which he destroys (in the poet's words: "There's less nature, there's more environment"). Furthermore, the animal as a creature of nature lives in the biosphere, while man as a natural, objective and social creature creates the noosphere—a sphere of reason becoming a geological force (V. Vernadsky). This is, probably, the main feature of the "phenomenon of man".

Then, what are these formations like: a functional organ, social matter, noosphere, consciousness? What is the mechanism of their action? The simplest answer is that the organs of the nervous system act as functional organs. The search for consciousness in the brain continues to this day despite the fact that a number of foremost neurophysiologists of this century maintain that the search for the phenomena of consciousness and its specific characteristics should not be reduced even to a most detailed study of the intimate mechanisms of nervous activity as a whole or of individual neurons, ion currents, accompanying the synaptic transference, morphological peculiarities, etc. Let's not forget that Charles Sherrington has localised the higher psychic functions such as memory and mental ability in action rather than in the mind. Similarly, Ivan Sechenov also included in the elements of thought not only the sensual rows but also the "rows of individual action".

Surprising as it may seem, the answer to the question of what the functional organs are like belongs not to philosophers or psychologists but to physiologist Ukhtomsky. He is the author of the theoretical construction that gives adequate reflection of the reality of the psychic and opens up new possibilities for combining this reality with physiological, corporeal reality. The foundation of this construction lies in the concept of the "functional organ of the nervous system" or the "mobile organ of the brain", introduced into physiology by Ukhtomsky and later developed, as applied to psychology, by A. Zaporozhets, A. Leontiev, A. Luria, among others. As examples of such organs, Ukhtomsky pointed to parabiosis and dominant or, in other words, to certain flowing functional states of the organism and characterised them as some "integral whole", "complex symptomocomplex". Upon close scrutiny of the texts about these phenomena, one discovers that the dominant is described either in the language of physiology (as a rather stable excitation which occurs in the centres at a given moment and becomes a dominating factor in the work of the centres), or in the language of behaviour, or even psychology. According to Ukhtomsky, the external expression of the dominant is stationarily maintained work, or the working posture of the organism supported at a given moment by various stimulations and precluding other works and postures at the given moment.⁵ The work also notes a special internal expression of the dominant, living through the dominant in the form of a reduced symbol (psychological recollection). "In this connection the former dominant is lived through in a very reduced form, with a rather low inertia—only by cerebral components, or it is lived through with all the former inertia, occupying the work of the centres for a long time and forcing out of them other reactions."

The dominant is not only a normal working principle of the nervous centres; it also has an important role to play in the process of forming reactions to the medium.

Thus, Ukhtomsky characterises the dominant as a temporary functional organ. This organ is extracerebral, external with relation to the brain; it controls the brain and affects the nervous centres. The brain, on its part, can also fight the dominants "without attacking them directly, but creating new compensating dominants in the centres".⁶

Introducing the concept of a mobile organ, Ukhtomsky warned against the customary association of this concept with the idea of the morphologically stable, statically permanent formation. He wrote that "any temporary combination of forces capable of a certain achievement can be an organ".⁷

Still, there was a certain trace of duality in Ukhtomsky's descriptions. He viewed one and the same reality both as the physiological, so to say, the substrate, and as the psychological which is a purely functional formation. This duality, more often than not, brought researchers back to the previous attempts of direct correlation (overlapping) of the structure and function.

The Soviet scholar N. Bernstein made a major contribution to advancing the idea of functional organs in physiology in his theory of movement construction. He included in the functional organs live movement and objective action. Living movement in his theory is viewed not only as a function of the skeletal-muscular apparatus but also as a special functional organ with its own morphological properties (biodynamic tissue) and reactivity properties (Zaporozhets later discovered also the properties of sensitivity in movement), which is subject to the laws of evolution and involution.

In psychology, the idea of functional organs was further advanced by Leontiev who described some of their typical important properties. According to Leontiev, they "function like common morphological permanent organs; they differ from the latter, however, in that they are new formations appearing in the process of individual (ontogenetic) development".⁸ A specific feature of these new formations is that, once established, they continue to function as a single whole; they are strong and stable. Leontiev gives a clearer differentiation of the psychic functioning of the respective organs and of their material substrate. His idea is that the formation of higher, specifically human, psychic processes takes place simultaneously with the formation of functional organs of the brain performing them.

Thus, the understanding of the psychic as an organ, suggested by Ukhtomsky and Leontiev, should be considered a major step in evolving, if one may say so, anti-reductionist ideas of psyche as a reality of special kind. This reality should possess the properties of the organ with extracerebral characteristics and its own formation regularities, and should be supported by certain intracerebral mechanisms.

This solution retains, however, a possibility of a further divergence and overlapping (and maybe replacement) of psychological research of the higher psychic processes (which have an active extracerebral nature in a certain sense) and physiological mechanisms of the functional organs of the brain (intracerebral in their majority). A functional organ of the individual seems to be placed in the brain and, thus, acquires its morphological features and properties. In other words, the interrelationship between the functional organs of an individual and functional organs of the nervous system has not been fully explained. The latter are often identified with each other while the existence and psychological features of the former are altogether neglected. The functional organs of the nervous system are identified with psychic processes, functions, or abilities. According to this logic the neuron mechanisms of the brain are awarded the properties of the object, it is in them that the information-containing relations are sought for, the reality of the subjective, psychic is rejected, and the brain is declared a subject of psychology.

Meanwhile, the psychic, according to the meaning of the concept of organ of individuality and even mobile organ of the nervous system, must be interpreted not only as a function, but also as a developing functional organ which sets forth the task of theoretical construction of psyche (and consciousness) as reality. Such work is in progress.

* * *

The features of functional organs are manifested not only in acts of movement but also in the system of cognitive processes. For instance, memory or perception are also actions, both of them are reactive, with evolutions and involutions. True, it is far more difficult to observe these actions, to record and reproduce them than external movements. However, just as movement viewed as an organ must not be fully reduced to the motion organs (kinematic chains, skeletal muscles)—since movement is more than the motion organs—perception viewed as an action and a functional organ cannot be completely reduced to the “corporeal eye”. Different systems of sensory and perceptive training are aimed more at socio-cultural norms than the anatomo-morphological and physiological properties of the senses. It is no accident that in studies of motility and perception the most impressive results were obtained when the researchers departed from the morpho-physiological mechanism of these processes.

The results in studies of motions, perception, memory and thought are more often presented in the form of cognitive charts and structures, logical-mathematical constructions, and functional block-charts organised in hierarchical or heteroarchival form. All this bears witness that modern psychology is searching for a new language of expressing and describing psychic reality.

Consequently, not only the motor but also the cognitive sphere can be treated as an organ or organs organised into a more or less complex system. These organs are quite real, they develop, function, disintegrate and recover according to special laws. Nevertheless, they are characterised by objectivity (perception of something, memory of something, attention to something, thought of something). They are not tangible although, like the organs of work, they are part of our bodily system. The poet Osip Mandelshtam was justified in saying that images and ideas are just as much organs, as the liver or heart. We reiterate that all these organs possess properties of objectivity, intelligence, orientation and are characterised by space and time.

The introduction of the above concepts creates favourable conditions for the isolation, study, analysis, and construction of action (for instance, executive, cognitive) functions of consciousness and its states (for instance, affective) exactly as functional organs, systems and structures. The experience of the study of such functional organs as live motion, objective action, integral image, orientation, senses, has shown that they have an active nature; are characterised by a certain system of meanings (objective, operational, conceptual) and semantic structure; they have their own biodynamic, sensual and emotional fabric: have a history of their establishment and development, i.e. they evolute and involute; they are characterised by reactivity and sensitivity and possess their own spatial and temporal properties. Finally, there are very complex relationships in the development of these new formations taking shape in the course of life between the conservative (structural) and active, dynamic, flowing (functional) properties. In other words, psychological science has acquired its anatomy, morphology, syntax, semantics, semiotics and pragmatics. Psychic reality has caught up with, if not overtaken, physiological reality. It has manifested itself as a system of functional organs of the individual, a sort of “spiritual organism” with a no less complex composition, and which is a no less amazing and practically useful subject of study than the brain. Part of this spiritual organism is also the individual consciousness born in the aggregate activities of individuals and becoming an organ of these activities. At certain stages of development or under certain circumstances consciousness may separate, become autonomous of activities, of the socium which produced it. Like any other organ, consciousness can be healthy, sickly, serve activity better or worse, and parting from it, become its phantom or the phantom of the individual.

It does not mean, however, that such an interpretation of consciousness and psyche makes their study simpler. Rather, it opens up a new avenue in this study. Movement in it requires a special conceptual mechanism, new methodological and technical research instruments; computer technology, electrophysiological equipment, etc. It is necessary to affirm most emphatically that the understanding of the individual's functional organs is developed incomparably

better than the understanding of the physiological functional systems and organs realising them. In speaking of this, by no means do we wish to infer that the understanding of the latter is vague and amorphous. Physiological methods have advanced no less than psychological ones. All we wish to say is that the understanding of the individual's organs and of the organs of the nervous system develop relatively independent of each other. Conceptual bridges must be laid between them. We believe that the maturing new approach to the study of the states and functions of consciousness, and in a wider sense, to the study of the psychic reality promises fresh prospects and possibilities in the establishment of legitimate links inside a single corporeal and spiritual organism, and contributes to prevailing over the rude division of "body" and "soul". A prerequisite is the progress of the physiology of activity, neurophysiology, where extensive data have been collected about the work of physiological functional organs, systems and structures. It is time that the latter be correlated not with structureless and amorphous psychic states, processes, and functions but with real, live functional organs and structures of psychic activities.

The available experience of integrated study of psychological and physiological functional organs testifies that their joint work demonstrates an obvious complex unity of spiritual and corporeal forces. Objective movement and action are permeated with cognitive operations, including those of decision-making. Equally, a decision is permeated with orientation and motor operations.⁹ Both functional structures act as a distribution of activities in space and time, as a temporary combination of forces, capable of certain achievement. To further describe these "centauric" formations, a combined study is needed of both psychological functional organs and physiological functional systems, supporting their work. An essential condition for the productivity of available methods of recording the latter is their subordination to the analysis of objects of psychic reality. Under it the use of physiological indicators not only allows verification of the hypotheses about the structure of activities and types of combination of constituent components but proves exceptionally useful heuristically, in other words, serves to put forward new hypotheses.

In the context of consciousness studies one must avoid the common delusion that the physiological indicators allegedly provide objective information about subjective phenomena occurring inter-cerebrally and open to introspection, hence to control and verification. Actually, even functional organs may be interpreted disparately—either as intercerebral formations, or as they were understood by Ukhtomsky, Bernstein, and Leontiev, namely that these organs are extracerebral both in the methods of their origin, and in the methods of functioning (cf. the expression "the corporeal eye and the spiritual eye, or the eye of the soul"). But the main thing is to truly understand the particularly special corporeality of the "spiritual eye".

It is interesting that practical logic forced Sigmund Freud to consider even the unconscious as metapsychic (i.e. not localised naturally in the depths of an individual organism).

Let us recall in this connection Marx's idea that all these organs exist as "social organs". On that account, they cannot be submerged in the depths of the brain or the enigma of the unconscious although they are, of course, supported by appropriate physiological mechanisms and function not only on the conscious but also on the unconscious level. The social nature of the individual's functional organs at the same time marks their super-individual character. Marx said that "... the eye and ear [are] organs which take man away from his individuality and make him the mirror and echo of the universe"¹⁰. Consequently, functional organs are at the same time individual and super-individual, objective and ideal, sensory and super-sensory. Such are the features that characterise consciousness. This has to be taken into account by all sciences taking part in interdisciplinary studies of consciousness. The above also remains valid for the technical scientists who do a great deal in simulating individual functions of consciousness. Understanding of the functional organs by technical experts is quite natural. Moreover, it makes no difference to them in what material these organs or functions may be realised. They readily forsake one material for another, in order to get results. The question is how fully they understand the properties of the simulated organ (be it expedient movement, recognition of images, artificial intellect, etc.). Even naturalists are strongly tempted, by analogy with technical devices, to view one or another organ or function as a mechanism designed for particular work, i.e. out of the context of its vital functions. One example is the depressingly dismal similarity between the cognitive metaphors used in informatics and computer technology, on the one hand, and computer metaphors used in cognitive psychology, on the other. This gives the impression that the functions described with their help and the functional organs are truly identical. Of course, if consciousness is taken to mean the content of short-term memory then the computer has it.

* * *

Here we come to the last and most complex aspect of our deliberations. We shall deal with the composition or structure of consciousness. In other words, is it possible to contrast something formed to the stream of consciousness, in cases when we deal not with its dead but with its living forms?

When discussing this issue it is advisable to follow Leontiev who posed the question as to what makes consciousness. He described three of its components—sensory tissue of perception (or image), meaning and sense.¹¹ Their description is undoubtedly an achievement in the analysis of consciousness, particularly the inclusion of the

sensory tissue. Nonetheless, it must be noted that such an approach originates from the same traditional introspectional psychology. Leontiev included only those components which are more or less open to self-observation. Consciousness built on the above components is, if one may say so, insufficiently ontological. There is some contradiction: according to Leontiev, activity is a source of consciousness, whereas the former itself is not among its components.

However, the relationship between individual consciousness and being is secured by *sense* which itself is rooted in being, the same as the relationship between individual consciousness and social consciousness is secured by *meaning* which has social nature. Leontiev, however, has a different interpretation of sense, which is viewed not so much in its direct links with being, but more as a derivative of relations between motives and purpose or, in other words, as a derivative of indirect products of activity. Leontiev, feeling this discord, related motive both to activity and to an object. According to this logic, action related to purpose, also related only indirectly to the object and conditions of its existence. In his pattern of analysis of activity he related operations with the latter. Neither sense, nor the object have found their place in this pattern.

The concept of sense should indicate that individual consciousness is not reduced to impersonal knowledge, that due to its belonging to a living subject and its real involvement in the system of activities, it is always "passionate" or, briefly, that consciousness is not only knowledge, but also a relation to being, activities and to consciousness itself. On the other hand, the concept of meaning should fix the circumstance that man's consciousness develops not in isolation but inside some, historically crystallised experience of activity, communication and perception of the world, which an individual must not only gain but also develop creatively.

Continuing Vygotsky and Leontiev's line of study aimed at ontologisation of the phenomena of consciousness (for instance, the introduction of the sensual tissue into the number of its components) we deemed it necessary to include another component, that of biodynamic tissue of activities and action.

Meaning and sense in the new pattern form a reflexive (or reflexive-contemplative) layer of consciousness. According to Leontiev, the sensual tissue also takes part in the formation of consciousness, which in itself is indisputable. But in our opinion, it must belong to another layer, namely to the layer of being (or layer of event/activity). The latter is formed not only on the basis of sensual tissue, but also on the basis of biodynamic tissue of action or activity.

As a result, we get a two-layer or level-type structure of consciousness and four units of its analysis. The idea of the level structure of consciousness is not a new one, it dates back to Freud. What is new are the levels, with reference to which the differentia-

tion between conscious and unconscious is meaningless. New also is that they are filled with such formations or units, each of which in principle could be an object of study.

Let us briefly characterise the suggested structure and its components. The components are not independent. There are both functional and genetic links between them. Their common source of origin is an objective and social (aggregate) action. Action, characterised by the biodynamic and sensual tissue, produces images, objective and operational (verbal in communicative action) meanings and sense.¹² It is known that the method of action, to which movements are aimed, is a living reflection of the object. On the other hand, to feel the direction in which a thing is moving by itself, according to Heidegger means to see its sense.

We shall not analyse the structure of action, its generative features and conditions for evolving meanings and senses, which then acquire certain autonomy, thus giving reason to isolate a reflexive layer of consciousness. We will only note that in the action constituting the being layer of consciousness there is also a room for reflexive processes. Even in movement we find two types of sensitivity—sensitivity to situation, and sensitivity to the possibilities of performing the movement proper. The above types of sensitivity alternate with each other, with an interval of 150-200 msec, which makes it possible to evaluate and recognise current changes in the situation and possibilities for action. Sensory and biodynamic tissues, forming the being layer of consciousness, perform vital functions related not only to the understanding but also to the overcoming of time and space features of reality. This is occasioned by their reversibility. The biodynamic tissue of action opening up in time, i.e. an objective, time related picture of action, transforms into an object-spatial picture of image. It is this reversibility that allows the subject of action to rise above the situation, to evaluate it not in parts, but as a whole, and to perform not a situation-oriented but a sensible, "site-independent" action. It is natural that the sense aspects of activities are also represented in the being layer of consciousness.

It is known that actions solve tasks, meaningful for the subject. In this, sense contains some important features of the programme of action which is being evolved. This means that sense precedes the performance of a current action, all the more so, the construction of a new action. We can be more emphatic: the linkage of individual actions in behaviour and activities is supported not by thinking but by sense. When sense disappears, we get not full activity but semi-activity, its illusory and distorted forms.

Meaningful aspects of reality also form part of the being layer of consciousness in the form of objective, functional, situation-oriented and operational meanings. As distinct from sense, meaning rises out of action, or more precisely, from actions with objects, which is why meaning is generalised. In our opinion, this statement holds true

with respect to all forms of meaning, including the aesthetic form, which is difficult to describe in words.¹³

Here we proceed to the dynamic relationships between sense and meaning, which are observed in the reflexive layer of consciousness. Just as there are reflexive components in the being layer, there are active, being and activity-oriented components in the reflexive layer. Action in the reflexive layer is a link between sense and meaning, a means of transformation of one into the other. The implementation of a built programme results in the formation of meaning. If it is incomplete or inadequate this programme loses sense and relinquishes its place to new senses. When complex problems are solved there are opposing and cyclic processes which attribute meaning to senses and attribute senses to meaning (including the loss of sense). This is the main function of consciousness. It is not needed for "naked" (or absolute) sense, likewise it is not needed for absolute rationality which is devoid of errors and delusions. To attribute meaning to sense is to detain the implementation of the programme of action, to play it in one's mind, to think it over. Contrariwise, to attribute sense to meaning is to draw lessons from the implemented programme of action, to include it in one's "stock of actions" or to relinquish it, to begin looking for a new sense, and to build the programme of new action accordingly.

The problem is whether this system, which in the words of Vygotsky contains concealed layers, is open to objective scientific study. Let us consider from this point of view how observable (and self-observable) are the components of consciousness. What is the arsenal of methods available to science for their study? We begin with the being layer of consciousness, i.e. with the sensor and biodynamic tissue.

The sensory tissue of image is a generalised name for different perceptive categories which build the latter. For instance, the visual system is familiar with the sequence of their isolation in the microgenesis scale. There are interesting hypotheses about the processes of composition and decomposition of image etc. The sensory tissue of the image, however, is not open to an outside observer, although in itself, indubitably, it originates from reality.

Biodynamic tissue is a similar generalised name for different characteristics of living motion and objective action. At present there are numerous methods of recording trajectories, speeds, accelerations, and other characteristics of living motion. There is a functional and biodynamic classification of its types, there is a whole range of its functional, mathematical, imitational and even robototechnical models. Microstructural analysis produced its microdynamic characteristics, helped discover its wave and quantum properties. As distinct from the sensory tissue, biodynamic tissue is quite open to an outside observer, and to a lesser degree is open to self-observation. Let's not forget, however, that due to the transformation of sensory tissue into

biodynamic we can at least make indirect conclusions about the features of the former, which transforms from being for itself into being for another, including a product alien to its subject. Similar relations are present in the reflexive layer of consciousness. Sense, like the sensory tissue, is not open to an outside observer. It is being for itself, although in its origin it, no doubt, comes from the object and being. Of course, it is not always (or not completely) that sense is open to self-observation, otherwise we would not have the dramas of seeking sense and attributing meaning to it. But this is a drama that more often than not has no tragic ending. As opposed to sense, meaning (as biodynamic tissue as well) is open to an outside observer (when it is not hidden deliberately). It is also open to self-observation although, as with sensory tissue, there are possible illusions, false interpretations, etc.

Summing up, we get a picture of the structure of consciousness hard to understand and study. Each of its layers has components that are open to self-observation (sensory tissue and sense) and open to an outside observer and to registration (biodynamic tissue and meaning). This means that the unity of the subjective and objective are given in the composition of individual consciousness. Its layers seem to be penetrated by the "ontological vertical".

The study of consciousness should be simplified by the transformations of the subjective into the objective when being for oneself transforms into being for another. (True, we are fully aware that the study of the reversibility of sensory and biodynamic tissues, sense and meaning is not simple. It is very difficult to catch the act of "reversal" which evidently occurs like "lightning"; for, like the phase transformations in physics, it changes the state of consciousness of the subject.) It is natural that these transformations occur not only along the horizontals of the isolated layers of consciousness. They are also possible on the verticals, cross relations can also exist. Moreover, there is a possibility of in-depth transformations, i.e. from one sense to another, from one meaning to another, from one image to another, etc. It is also natural that different transformations contain different objective and/or social content.

We hold that the study of "phase transformations", their psychological conditions, and, possibly, of physiological mechanisms may help the analysis of creativity in various spheres of man's life, since it is in these moments that something new is born, a new action, image, a new vision of a situation, a new idea, sense, etc. As a matter of fact, these new states are irreversible, although an individual often exerts immense effort for their total removal. It is they that possess great power and strength of consciousness over the subject. This should be the source of pedagogical, or in a broader sense, of social optimism.¹⁴

In conclusion, let us return to the key problem raised at the beginning of this article. The general development of philosophical

thought aimed at ontologising social consciousness, as we see it, gradually finds its reflection also in the ontologisation of individual consciousness, which is a prerequisite of success of its interdisciplinary study. Despite the listed difficulties associated with the visualisation, understanding and study of this particular structure of consciousness, treated here as the most complex functional organ of the individual and socium, this treatment contains certain explanatory potential with relation to such classical problems as "being and consciousness", "observability of consciousness", "ex-temporariness and ex-spatiality of consciousness", "mechanisms of free action". We have barely touched this potential.

NOTES

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- ² D. Spivak, *Linguistics of the Altered States of Consciousness*, Leningrad, 1986 (in Russian).
- ³ V. Zinchenko, M. Mamardashvili, "Problems of the Objective Method in Psychology", *Voprosy filosofii*, No. 7, 1977.
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- ⁵ A. A. Ukhtomsky, "The Principle of the Dominant", *New Ideas in Reflexology and Physiology of the Nervous System*, Moscow, 1925, pp. 60-66 (in Russian).
- ⁶ Ibidem.
- ⁷ A. A. Ukhtomsky, "Parabiosis and the Dominant", A. Ukhtomsky, L. Vasiliev, M. Vinogradov, *A Theory of Parabiosis*, Moscow, 1927, p. 149 (in Russian).
- ⁸ A. N. Leontiev, *Problems of the Development of Psyche*, Moscow, 1972, p. 412 (in Russian).
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- ¹⁰ K. Marx, F. Engels, *Collected Works*, Vol. I, Moscow, 1975, p. 173.
- ¹¹ A. N. Leontiev, *Activity, Consciousness. Personality*, Moscow, 1977 (in Russian).
- ¹² V. P. Zinchenko and S. D. Smirnov, *The Methodological Problems of Psychology*, Moscow, 1983 (in Russian); V. P. Zinchenko, "On Correlation of Activity and Action", *Voprosy filosofii*, No. 5, 1985, p. 78.
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The Restructuring of the System and Methods of Planned Management

Leonid ABALKIN

An analysis of problems concerning the streamlining of the structure and methods of planned economic management should begin with some fundamentals, which alone provide a correct perspective for the evaluation of the processes that are under way and the changes that are long overdue. The 27th CPSU Congress (1986) set the task of the restructuring of the society, economy and science. The task was further elaborated by the January and June 1987 Plenary Meetings of the CPSU Central Committee. The planned measures are in effect revolutionary. This equally applies to the system of economic management, where, since it is no longer possible to do with partial changes, a radical reform was needed—a task of enormous complexity, whose implementation should be thoroughly prepared and is going to be a protracted process. Its results can neither be immediate nor short-term. In short, what it amounts to is a series of major transformations designed to completely overhaul the economic mechanism.

The process of reform that is presently under way has affected the very foundations of the USSR's economic system. Never before has the question of the need for profound change in the very foundations of our economic system, i.e. in the relations within the sphere of the *ownership of the means of production*, been put on the agenda. Nowadays, this need for change in the highly complex relations of ownership, including their economic manifestations, in which every individual, work collective and social stratum have a stake, has been posed squarely.

The current reform will affect the system of planned economic management. Although the existing forms of organisation, methods of planning and management have played their role in history, over the years they have evolved into an impediment to economic and social progress, economic intensification, better economic performance and prompt introduction of scientific and technological advances.

When we say that the reform should be a sweeping one we must be fully aware of the enormity of the task. What is the borderline between pro forma superficial changes, not infrequently resorted to in the past, and fundamental transformations affecting the sphere of production relations itself?

The question about the borderline is a pertinent one. Marxist theory says that in all economic systems production relations manifest themselves as *interests*. And unless change affects these interests, leaving people indifferent, this is a sure sign that the change is a pro forma one. In contrast, if it strongly affects interests, prompting millions of people to action, affects motivations in the economic sphere, this means that it really thoroughly transforms production relations.

Such an approach should be taken when discussing the balance between centralised control, on the one hand, and independence and greater democracy in society and the economy, on the other.

* * *

The problem is not a new one. It has been debated for several decades already. True, the conclusions drawn were not highly original. They mainly consisted in the fact that centralism and economic independence should not be opposed to each other but wisely combined. This view, however, is no longer sufficient.

The new approach to the problem calls for new scientific insights in the economic processes. Its solution calls, above all for a *qualitatively new* centralism and independence. Let us briefly recapitulate the original treatment of the problem by classics of Marxism-Leninism. Lenin proved that centralisation is dictated by the development of the productive forces and the appearance of large-scale machine production.¹ The orientation towards achieving the highest possible labour productivity and production performance represents the prime motive force for centralisation. In other words, the striving for efficiency, i.e. the economy of time, is, to cite Marx, the first economic law.²

It is public ownership of the means of production that makes centralised management possible. However, the possibilities of centralisation are not infinite. Centralism and independence are not *ends in themselves* in production development. They are needed to the extent to which they create conditions for increasing production

efficiency. *Both centralism and independence are not ends in themselves but means towards an end.*

The 27th Party Congress defined the main targets of the USSR's socio-economic development as the greater social orientation of economic growth, allround intensification, and prompt application of scientific and technological innovations to production. As a consequence, we need such a combination of centralism and independence that would facilitate the achievement of these goals.

Another new feature of today's conception of centralised management is that it can be carried out in a variety of forms and using a variety of means. This innovative view has been made possible by the 70 years of our own experience in socialist construction and the wealth of experience in the operation of socialist economies accumulated by a large group of countries.

For many years the only form of planned economic management was rather a simple one: it consisted in the assignment of centrally planned targets in kind to every producer. Over the years the objective content of planned management and the specific historical form of its manifestation began to be confused with each other, leading to one and the same theory sometimes producing absolutely opposite conclusions.

Nowadays, when the whole country is discussing the economic reform and several decisions of cardinal importance have been made by the USSR leadership (for example, by the June 1987 Plenary Meeting of the CPSU Central Committee) there are still managers and engineers who feel that centralised planning tends to curb scientific and technical progress. To make their case they recapitulate the chain of events involved in procuring a piece of machinery and equipment: first a written demand has to be compiled, then it is sent to the government agency in question, which sends it to the USSR Gosstab (the Supply Committee) which aggregates all the demands and sends them to the USSR Gosplan (the State Planning Committee), and so on. It sometimes took 2 to 3 years to complete the process, and there was no certainty that the demand would be met. The characteristic feature of this thinking is that centralised planning is seen as synonymous with bureaucratic abuse.

On the other hand, all attempts to revise the existing forms of centralised management and replace them with qualitatively different ones were frequently seen as attempts to undermine the system of planning, which forms the foundation of the socialist economy, and thus abandon socialism's basic principles. Proponents of this way of thinking reasoned that the existing form of planning is immutable. In this approach the given historical form of plan-governed management is confused with the essence of the process.

This confusion made it impossible to see that centralised planned management can and must assume a variety of forms, whose choice depends on the scale of the economy, the level of the development of

the productive forces, the rate of scientific and technical progress, the professional level of managers, and several other factors. What is needed is a qualitatively new centralised management system which operates primarily with the help of *the system of economic methods and levers* to achieve both the short- and long-term objectives of the state plan. Only such a system can take due account of the economic interests of people, of work collectives and other more complex social formations.

In contrast to the past, we now see enterprises and their staffs not only as targets of planning but also as participants in the planning exercise. The considerable growth in their number speaks of the *democratisation* of the planning process.

This, however, brings us to the problem of the balance between rights and responsibilities. Although a great deal has been said and written about the extension of the rights and independence of enterprises and work collectives we sometimes fail to grasp the true purport of this process. There is a tendency to view enterprises as advocates to independence and creative initiative and to disparage ministries and other government departments as seats of bureaucracy fighting hard to prevent greater independence for enterprises. This facile view has nothing in common with the real state of affairs, which is far more complex.

The first few, rather timid steps towards the extension of the independence of enterprises, that were taken at the time of the large-scale experiment in our industry, revealed a very different picture. It turned out that many enterprises would like to revert to the old system, in which they were told what to produce, where to deliver, how to pay, with every such step being properly documented. As soon as enterprises were given broader rights it became immediately obvious that greater independence also meant responsibility.

The real meaning of the current restructuring can be fully grasped only when the burden of responsibility is felt, with greater independence leading to greater responsibility. This is the only way to instil in people the feeling of responsibility for the results of their work, that is by placing on them the burden of decision-making, which alone is the hallmark of sound management.

One cannot be held accountable if one does not take part in decision-making. When decision-making is the prerogative of the manager and a small group of specialists, they are logically the ones to be held accountable for the results and consequences of their decisions. The rest of the staff remains indifferent in such a state of affairs.

The logic of today's reform makes it imperative not only for the managers but also for the workers to be aware of their full responsibility for their performance, including quality and continuing technical progress. Workers and other employees should take part in

the production process as real masters having the deciding vote. Today's experimenting with different combinations of centralisation and independence seeks to do just that.

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Let us now turn to the targets and methods of planning. The democratisation of the management system has concentrated planning activities in strategic, long-term areas and freed it from petty tutelage. Before we proceed with the examination of these matters let us first recapitulate some fundamental initial assumptions, primarily those concerning the structure of the economy.

The Soviet national economy is an integral system. Its constituent parts are socialist enterprises and associations, each of which enjoys a degree of economic independence.

The entire logic behind the current management reform is based on this dialectical combination of the integrity of the economy, on the one hand, and the relative economic independence of its constituents, on the other. Stereotyped thinking to the effect that the admission of the integrity of the economy rules out even a degree of independence, and conversely admission of a degree of independence in the use of resources and assets by enterprises rules out economic integrity is absolutely unacceptable today. It is at variance with the real state of affairs and the integrity of the economy does not rule out the existence of economically independent constituents. A complex system is not just a mechanical sum total of constituent parts. It has the new quality of integrity. The major economic proportions—those between accumulation and consumption funds, Group A and Group B industries, the remuneration fund and social consumption funds—cannot be arrived at by simply adding up the relative shares, for example, of accumulation and consumption, in the case of each individual enterprise or collective farm.

This brings us to the existence of two domains of plan-governed management and, as a consequence, two different meanings of the concept of planning, which tend to be frequently confused.

It is first of all the national economy as an integral organism that is the concern of planning. This planning function can be performed only by an economic centre and its agencies. It is the exclusive prerogative of this centre and cannot be delegated, because such delegation of authority would be both inefficient and economically unjustified. Planning of the national economy as a whole relies on specific methods, such as target planning, balance planning, normative planning, etc.

At the same time enterprises and associations—the basic units of the national economy—also constitute a part of planning. It is in this sphere that we can effect a sufficiently profound democratisation of management by giving enterprises broader rights and abandoning many traditional methods of planning their activity. For example,

one can visualise a system in which enterprises (all of them or at least those in certain industries) will not be given any centralised planned assignments for output in kind and in cash.

The light industry is the most obvious choice. In 1985 the USA, the FRG, Britain and France, whose combined population is 50 per cent greater than that of the USSR, produced 700 million pairs of footwear, against 788 million produced by the USSR. Our country does not need this amount, especially since its quality leaves much to be desired. It is not necessary to plan the production of poor-quality shoes. Let our enterprises manufacture footwear that is in demand and let our retailing organisations order only high-quality footwear at wholesale fairs.

Emphasis on quantitative growth has become one of the principal obstacles in the way of the economic restructuring and intensification. It has resulted in shortages, in economic dislocations and poor performance.

It is necessary to regulate economic growth with the help of economic methods, using prices and other economic levers of the mechanism of the distribution of profits, income formation and the remuneration of labour. The system of economic levers is becoming the main instrument of achieving the most important objectives of the state plan. Although this has made the system of planning more difficult in many respects, it has changed the substance of planning.

A number of problems have arisen in connection with the idea of the *state order* which was reflected in the Law on State Enterprise (Association) enacted in 1987 after a nationwide discussion. The idea needs to be thoroughly substantiated, and any attempt to use the state order as a new name for the old ways would hardly be justified.

The idea basically means that government procurement agencies will no longer just hand out assignments obeyed by enterprises without question but will enter into certain contractual relations with them, which presuppose mutual commitments.

However, under this arrangement the state is the priority customer, whose order must be filled by the producer without fail. This is what makes the state order different from other types of contractual relations. What is more, it is necessary to make state orders the most profitable type of order for enterprises. We cannot tolerate the situation when priority government orders are the least attractive for the producer. For example, in the agro-industrial complex the state and collective farms can sell 30 per cent of their planned output in the markets in big cities at somewhat higher prices. The remaining 70 per cent brings no extra-profit to the producer.

It follows that the state order system should be backed up with attractive prices, taxes, terms of the distribution of profit and the supply of material resources. Producers will vie for such economically attractive orders.

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The question of economic management methods that we are going to discuss now has a direct bearing on the concept of *economic competition* making part of the Law on State Enterprise (Association) and is a keystone in the theoretical concept of the restructuring of the system of planned management. The concept was also designed to put an end to the monopoly status of certain enterprises and invigorate the competitive spirit.

The main objective of economic competition is to achieve the supreme goal of production under socialism—to satisfy the needs of the population and to improve product quality with minimal inputs of resources. Victors in the economic contest should be provided with corresponding incentives and losers penalised for inability to meet the needs of society.

Competition is equally needed in the sphere of crediting. Credit should be open to those who can use it with a maximum return. A cardinal restructuring of the crediting sphere is therefore called for.

The idea of economic competition should further be extended to the sphere of research and development. This is going to be a fundamentally new development, for until recently the existence of R&D organisations working on similar projects was frowned on as overlapping and a waste of resources. We see now that such diversity is absolutely necessary for the choice of the most promising technological solutions.

Major decisions in the sphere of science and technology should be taken only after a comparison of all the possible variants within the framework of competitive bidding with all the consequences stemming from it.

It is time the decision-makers devised a system of special measures abridging the rights of enterprises as monopoly producers imposing their will on the customers.

In order to solve all these problems it is necessary to make broad use of economic management techniques, primarily those based on cost-accounting which provides direct incentives for workers, work collectives, teams, workshops and entire enterprises. Cost-accounting is a synthetic management technique affecting price formation, crediting, the taxation policy, pay for resources used and the distribution of profit. As a consequence, cost-accounting has the universality that justifies its future use as the main instrument of economic management.

The *point of departure* in the building of a new economic mechanism was the enterprise (association) as the basic unit of the national economy. This choice is not accidental. It is at enterprise level that national income is produced and scientific and technological advances introduced. After making the necessary changes in the basic units we can proceed further with the reform of planning, price

formation, crediting, effecting a transition from the distribution of resources to wholesale trade in the means of production. Progress from basic units to the economic whole is dictated by the logic of development and will largely determine our approach in the future.

What are the prospects for the introduction of complete cost-accounting? In 1986 two associations—the Sumy Engineering Works and the Volzhsky Automobile Plant—adopted complete cost-accounting. In early 1987 five industrial ministries as well as the Ministry of the Merchant Marine and the Ministry of Trade followed suit. In 1988 several ministries will be added to the scheme. However, in our view, this growth in the number of enterprises that have been switched to cost-accounting in 1987 has not yet brought them to the stage at which they can fully finance themselves. By definition this is “incomplete cost-accounting”. Since it is a synthetic technique it cannot be complete before it is complemented by a reform in price formation, in the relationship between enterprises and the fiscal and crediting institutions, and wholesale trade in the means of production is inaugurated. That is why cost-accounting will proceed in step with the overhaul of the management system, which is itself the central feature of the current radical economic reform.

Most economic methods of management presuppose the use of *commodity-money relations* in one form or another. The notion of these relations as something alien to socialism or incompatible with a planned economy is a thing of the past. Although we say that we need commodity-money relations we add that they are very different from those we inherited from 19th-century capitalism. Nowadays, commodity-money relations and levers have been made part and parcel of our planned economy. The most important thing now is to devise effective ways of using them.

In our discussion of complete cost-accounting, self-financing, price formation, etc. we have always checked our progress against the main point of reference—the integral and systemic character of our planned economy.

Here it is important to see the fallacy of looking for universal quick solutions to all problems. Examples of this tendency can be found both in the past and in the present: the solution of the food problem was at one time seen in the growing of maize all over the country, from the north to the south. By the same token there are some people today who hold up the team contract as a panacea against all our problems.

Or take cost-accounting and self-financing. There is no question that these mechanisms are highly progressive. But it would be very wrong to believe that an efficient and effective economic mechanism can be created by means of a few more decisions on the transfer of our ministries to complete cost-accounting and self-financing. Success will depend on changes in the structural policy, the work of

transport, a far-reaching monetary and prices reform and qualitative changes in planning.

Unfortunately we cannot solve all our problems at the same time, because we are not ready for comprehensive restructuring. At the same time, any delays would be intolerable. The situation in the economy is such that vigorous action is necessary. Lasting success would be possible only if we have a clear view of the whole system and base our actions on sound theoretical foundations.

NOTES

¹ V. I. Lenin, *Collected Works*, Moscow, Vol. 27, pp. 208-209.

² Karl Marx, *Grundrisse der Kritik der politischen Ökonomie (Rohentwurf), 1857-1858*, Berlin, 1974, p. 89.

Kiev and Constantinople: Cultural Ties Before the 13th Century

Zinaida UDALTSOVA

The question of the influence of Byzantine civilisation on the cultural development of Old Russia is very complex. The main task of this article is to re-examine, as one facet of this issue, the cultural ties linking Kiev with Constantinople. History itself dictates the chronological boundaries of our research to be between the 10th and early 13th centuries: in 1204 the Crusaders seized Constantinople, while Kiev fell to the Mongol-Tartars in 1237. After this, naturally, cultural ties between them were weakened. From the 10th to the 13th centuries relations between Kiev and Constantinople reached a peak in all spheres, whether economic, political or cultural. Russia's acceptance of Christianity from Byzantium is of great importance in understanding the nature and distinctive features of cultural ties between Kiev and Constantinople.

For a long period mediaeval Europe was not just a witness of the struggle between Rome and Constantinople: it also took an active part in the political, religious, cultural and ideological rivalry waged by the two world centres of East and West. The largest and most powerful state of Eastern Europe, Kievan Rus, was also drawn into this conflict. While the West looked to Rome, then Russia and the Balkans were oriented towards the "Second Rome", Constantinople. Relations between Kiev and Constantinople followed a long and difficult course. The Old Russian state was bound to the Byzantine capital by immemorial trading links. All the trade routes from Russia to the Mediterranean in the end met at the city on the Bosphorus. Paraphrasing the well-known classical saying, M. Tikhomirov wrote that "for the Russian traveller, all roads led to the 'New Rome'".¹ Tsargrad (the Russian name for Constantinople — *Ed.*) always drew

Russians of every trade and calling: diplomats, merchants, pilgrims, artists, scholars, and monks.

Old Russia's adoption of Christianity resulted not just from reasons of her inner development but also from international events that affected all of Europe. As the two competing centres of Christianity, Rome and Constantinople led their own, at times isolated, lives. The socio-economic and political development of Byzantium and the West often took a different course. Important differences between the Eastern (Orthodox) and Western (Catholic) churches were taking shape. In both Rome and Constantinople a nominal ecclesiastical unity was recognised, yet in practice a centuries-long struggle was fought out between the Papacy and the Patriarchs of Constantinople for religious and political leadership: at times it was open, at others disguised, but it never died out. The struggle abounded in dramatic clashes, and passionate dogmatic polemics between differing tendencies in theological and philosophical thought. Important divergences arose between the Eastern and Western churches which were socio-political as well as dogmatic and liturgical in character. Naturally, these divergences in many ways reflected the differences in the social structure and intellectual worlds of Byzantium and the West. The Orthodox church in Byzantium formed part of a centralised state and thus did not act as the bearer of universalist trends like the Papacy in the West. On the contrary, it preached the unity of church and state.

Rome and Constantinople constantly quarrelled over the primacy in the Christian world. Rome regarded Western Europe as its sphere of influence; Constantinople looked at the Balkans and Eastern Europe in the same way. The struggle between these two world capitals began in the 9th century and led two hundred years later to the division of the church. The extent of their influence was determined by the real balance of forces. Having kept hold of the Balkans, Constantinople tried to retain the Western Slav territories and Hungary. However, Rome proved the stronger in these countries. Constantinople found herself in difficulties, and became tied down in the East whence danger always threatened—first from the Arabs, then from the Turkic peoples. Cyril and Methodius achieved notable successes in Moravia but Orthodoxy then, as we know, suffered defeat there. The struggle in Poland and Hungary led to the same conclusion. Constantinople retreated.²

There remained the largest and most powerful Slav country, Kievan Rus. This was the last border on which Rome and Constantinople crossed swords in spiritual competition. The princes in Kiev tried to manoeuvre between them. Christianity had begun to spread in Kievan Rus long before the country's official conversion. Catholic influence also had penetrated the country. An echo of this, in particular, were the hagiographies translated from the Latin that were current in early Russian literature: the lives of St. Benedict of

Nursia, Anastasia the Roman woman, St. Vitus (a popular figure in the West), and others. Princess Olga's behaviour illustrates how both the "First" and the "Second Rome" tried to bring Kiev under their sway: she carried on discussions with both Rome and Constantinople over conversion to Christianity and appealed to the German king Otto I (936-973) to send Catholic clergy to Russia. One of the reasons that compelled Olga to turn to the Catholic West was the failure of her negotiations with Constantine VII Porphyrogenitus, the Byzantine Emperor, during her visit to Constantinople in 957. It can hardly be doubted that this mission was undertaken by a pagan princess who had not yet accepted Christianity.³

In contrast to the Slavs of the Elbe and the Western Slavs, however, the balance in Kiev tilted in favour of Orthodoxy. The struggle between Rome and Constantinople in Kievan Russia was fought out in different circumstances than those in other Slav lands. In the West, Rome found an ally in the figure of the German feudal lords and the local nobility. When Kievan Rus accepted Christianity it was already a powerful state with many towns and developed trade and crafts. Foreign merchants and diplomats called it "a land of towns" and the 11th- and 12th-century chronicles mentioned more than 220 urban centres, the greatest of which were Kiev, Chernigov, Pereyaslav, Vladimir Volynsky, Galich, Turov, Smolensk, Polotsk, Novgorod, Vladimir Suzdalsky, Suzdal and Ryazan.⁴ The military forces of the rulers of Kiev were also imposing. The capital, Kiev, was one of Europe's oldest and most beautiful cities, and occupied a leading place among the towns of the Old Russian state and, indeed, of all Eastern Europe. Kiev did justice to its title in the chronicles, "the mother of Russian cities". The economic and political centre of Old Russia was here. Adam of Bremen, an 11th-century German chronicler, called her the pearl of the East, a second Constantinople.⁵ The city's exceptionally favourable geographical and strategic position on the heights above the Dnieper ensured her dominance over the waterways linking north with south; it gave her open access to the Black Sea and the Sea of Azov, and also to rich countries like Byzantium, Danubian Bulgaria, the Crimea and Khazaria.

Kiev was the residence of a prince who exercised the rights of a suzerain. Feudal nobles, the princely court and its guard, skilled craftsmen and rich merchants all lived in the capital of Old Russia. The prince of Kiev guarded his independence,⁶ and neither Byzantine soldiers nor German knights then stood before his gates. However, the princes were faced with the problem of strengthening their monarchic rule. Prince Vladimir Svyatoslavich (980-1015) at first tried to do so by maintaining paganism but then turned to Christianity. However, like Princess Olga, he was forced to choose which Christianity to adopt, the Western or the Eastern version. It can be confidently stated that Vladimir was under strong diplomatic pressure from both Rome and Constantinople in taking his decision.

The famous account by the Russian chronicler of how Vladimir chose his faith is not as naive a legend as it may appear. The tale truly reflected Russia's international position at the time. If the Western Slavs already had no choice in the matter, Russia did. It was more advantageous for Kiev to deal with Constantinople, for she controlled the river route "from the Varangians to the Greeks" and long-established economic and political relations existed with Byzantium, if not always of a peaceful kind. Kiev had been in contact with Constantinople for centuries: ties with the West were weaker.

The conversion of the Old Russian state to Christianity was a lengthy and complex process. It began almost a century before the official baptism of Russia and proceeded in conflict with pagan religion. Russia evidently did not adopt Christianity as a state religion during Princess Olga's reign due to the efforts of Byzantium to reduce a converted Russia to a vassal state. The advantages of getting closer to Christian countries like Byzantium and Orthodox Bulgaria were so great that Prince Vladimir again took up this plan. His choice was dictated by the state interests of Kievan Rus.

An alliance with the dangerous and deceptive Greek overlord was preferable to the constant wars and exhausting naval expeditions that hindered economic and cultural relations with the great Byzantine power. The sad experience of the Western Slav lands was also taken into account. They had been brought Catholicism on the spears of the German knights, a conversion that was part of the Teutonic "Drang nach Osten" (Push to the East) and was spread with fire and sword.⁷ Dynastic considerations also played a certain part in Vladimir's decision. He was struggling for power with his brother Yaropolk: the latter was oriented towards the West, to an alliance with Poland and the Papacy, and favoured the conversion of Russia to Catholicism. The aggressive nature of the Catholic West and the Popes' very active efforts to convert Russia aroused suspicion and discontent within the country. Vladimir's attempt to unite the state around paganism was unsuccessful, for paganism was a thing of the past. The adoption of Christianity permitted Russia to be much more active internationally. Byzantium needed Russia, after all, as a counterweight in the struggle against Khazaria and the Muslim rulers of the Caucasus, and also as an ally in its resistance to the Arabs.

Vladimir chose a very opportune moment to reach agreement with the Empire. Byzantium might have been weakened by fighting on two fronts, against the Bulgarians and against the usurper Bardas Phocas, who had raised a rebellion in Asia Minor. In need of military aid, Emperor Basil II ("slayer of Bulgarians") agreed for Vladimir to marry his sister Anna. However, once the Russian forces had destroyed the usurper's army and saved him, Basil was slow to conclude an alliance with Russia. In reply to Basil's failure to keep his word, Vladimir invaded the Crimea, captured Chersonesus (Korsun) and forced Byzantium to fulfil its promises.

Around the year 988 (or 989) the Kievan Prince married into the imperial family by taking Anna as his wife, and converted to Christianity. "In such circumstances," writes Academician Rybakov, "there could be no talk of any vassal status." After the prince's baptism, the nobles and the inhabitants of Kiev and other Russian cities were also baptised. "Formally Russia became Christian. The burial pyres on which killed female slaves had been burnt were extinguished; the fires of [the god] Perun, who had demanded human sacrifice like the classical Minotaur, died out."⁸ However, the pagan gods continued to be secretly worshipped for a long while yet and paganism only gradually merged with Christianity. In Kiev the baptisms were accompanied by series of clashes with the pagans. "As we know, this ended with the spectacular execution of the old gods by Byzantine Christianity on the famous hill behind the palace courtyard. This vengeance was carried out before the eyes of the protesting people."⁹

The consequences of accepting Christianity from Byzantium were varied and at times contradictory. Russia benefited from its alliance with Byzantium in dealing with other nations: she now was on equal terms with the other influential Christian states of mediaeval Europe. At the same time, Russia had to constantly oppose the political and ecclesiastical claims of the Byzantine empire which, following the conversion, tried to subordinate Russia to its leadership. For a time the adoption of Orthodoxy complicated relations with the West, especially with the Papal See. Yet perhaps the most important consequence of the adoption of Christianity was that it stimulated Russia to get to know Byzantine culture. Through Byzantium the heritage of the classical world and of the Middle East began to reach Russia.¹⁰

After the adoption of Christianity in Russia and closer ecclesiastical and political relations were established between Byzantium and the Russian state the ties between the two began to be much more intensive. The penetration of Byzantine learning into Russia and the understanding there in the 11th to 13th centuries of the elements of Byzantine civilisation enabled Russian feudal society to progress further: this met the society's inner needs and enriched its culture. It was no haphazard process that close cultural ties were established between Old Russia and Byzantium. Both sides were fully aware of what was happening and gave it their mutual consent.

For the ruling class of Old Russia this meant turning to the culture of the most advanced European country of the time, and following the most elevated, complex and refined models. The Russian people, for their part, were sufficiently mature to appreciate this culture which answered the highest demands of their development. For Byzantium the spread of its cultural influence in Russia was an active business with definite goals, and it formed one link in the empire's general policy towards neighbouring countries. Byzan-

tium set itself the task of subordinating the Russian state to its political influence and ecclesiastical hegemony; and strove to use the tried weapon of intellectual and cultural influence to do so. Therefore the Byzantine cultural influence on Russia, and for that matter on other countries, was in no way a spontaneous or passive phenomenon. It was expertly and firmly guided by Byzantium's politicians, church leaders, and diplomats. Nevertheless, we should neither under- nor overestimate the strength and scale of this influence.

In Byzantine studies there are diametrically opposed points of view when it comes to assessing the nature, extent and significance of the empire's influence on Russian culture. Some specialists consider that Byzantine civilisation was almost the only source of Old Russian culture, and that the early Russian arts were just a provincial offshoot of the refined art of the imperial capital. Others insist that Old Russian culture was entirely self-sufficient and discount any external influences. I believe that the truth, as is often the case, lies somewhere in the middle.

Over recent years our knowledge of the culture of Old Russia has widened to an extraordinary extent. This is thanks to research by Soviet specialists, the multi-disciplinary study of different types of culture, and to new discoveries of historic landmarks, works of art and fine craftsmanship; there have been new finds by archaeologists, numismatists and sigillographers, and new research methods have been applied. In addition, Soviet scholars have had considerable success in studying Byzantine civilisation. The distinctive typological features of Byzantine culture have become much clearer, as have the dynamics of its development, and the role of Byzantium in establishing the moral and intellectual values of mediaeval society. The old view that Byzantine culture was stagnant, inert and supposedly backward by comparison with classical civilisation has been abandoned. It has become quite clear that Byzantine culture forms an important and natural stage in the development of world culture.

These two lines of research, blended together, have helped modern scholarship to abandon certain preconceived judgements and mistaken points of view concerning the complex issue of Byzantine influence on Old Russian culture. The negative assessment that Byzantine culture was only the transmitter of conservatism and a rigid ecclesiasticism has been discarded and its progressive traits have been revealed. Another preconception about Byzantine culture has also been abandoned. Instead of being the preserver of classical traditions handed on to other peoples, Byzantine society has been shown to have had distinctive philosophical, ethical and aesthetic views of its own which influenced the intellectual and moral life of Old Russia.¹¹

We must not forget when studying the question of Byzantine influence that the official imperial doctrine of Russia's subordination to Byzantine political and ecclesiastical authority in fact proved untenable. Neither did the empire achieve its intentions in the cultural sphere. Thanks to the creative appreciation of Byzantine civilisation in Russia, Byzantine models were very quickly reworked and rethought to suit the social conditions and moral and aesthetic needs of Russian society. Furthermore, Byzantine influence frequently encountered serious resistance when it became an obstacle to the further progressive development of indigenous Russian culture.

However paradoxical it may seem at first glance, Byzantium in a sense created a rival to herself in Russia, not only in political matters but also in the cultural sphere. Byzantine attempts to dominate Russia morally and intellectually led to the growth of Russian national self-awareness. This found its clearest expressions in Illarion's famous *Discourse on Law and Grace*; in the creation, against the will of the Constantinople Patriarchate, of a pantheon of Russian saints and the canonisation of Boris and Gleb; and in the lavish buildings erected by the princes and the town authorities in Kiev and other cities. Under Yaroslav the Wise the Russians built their own Golden Gate (now fully restored) and their own splendid St. Sophia Cathedral in Kiev, as if challenging the famed buildings of Tsargrad.

Many different influences met and sometimes fought one another in the culture of 11th to 13th-century Russia. Some came from Byzantium or the Southern or Western Slavs, others from Scandinavia or distant lands to the East, or finally from Western Europe. Cultural ties with the Southern Slavs were of particular importance to Russia; it was through them, incidentally, that the classic works of Byzantine culture first reached the early Russian state. For a long time the centres where the Byzantines and the Slavs (Southern and Eastern) met were Constantinople, Salonica, Mount Athos, Jerusalem, Bithynian Olympus and, later on, Tirnavos. In the 11th and 12th centuries the Byzantines also made contact with the Russians through Tmutarakan.

It is very revealing that Byzantine influence varied in intensity, depending on the particular sphere of material or non-material culture. At times it was more effective and rapidly amalgamated with the local Russian culture. Elsewhere it was more superficial, like a thin layer covering the original Russian culture. As a rule, the intensity with which Byzantine influence penetrated Russian culture did not only depend on the activity of the Byzantine state and church. More important was the level attained by the pre-Christian popular culture in any particular sphere of learning by the time Byzantine influence began to enter the country. The higher the level, the more firmly traditions of the pagan popular arts were retained in

Russian popular culture and the less influence Byzantine culture exerted.

The brilliance of Byzantine civilisation astonished contemporaries with its spirituality, inner nobility, the elegance of its forms and its high technical achievements. The latest research by Soviet scholars shows that, in the final analysis, it was one of the foundations on which Old Russian and other East and South-East European countries built up their own original national cultures. However, Byzantine aesthetic and moral values underwent a profound transformation when they were transferred to this foreign soil. It was as if its other-worldly church doctrines and philosophy, its ideology, ethics and aesthetics began a new life and took on quite different features under the influence of national artistic principles.¹² This was clearest in the representative and applied arts of Old Russia.

Although Byzantium did play an important role in the development of the Old Russian arts its influence here was neither all-embracing nor constant, but changed over time and space. Contacts with Byzantium were most intense and fruitful in the south and south-west regions of Russia; to the north and the north-east they were weaker. Naturally, Byzantine cultural influence was much more intense in the upper layers of the various countries' social systems: the princes and feudal lords of South-East and East European states adopted Byzantine court etiquette, and aspects of the daily life and customs of Constantinople. Among the broad strata of the ordinary people, on the other hand, Byzantine influence had taken root to an incomparably lesser degree.

At various stages in the development of Old Russian culture the level of Byzantine influence waxed and waned. There were periods of intimacy and estrangement, of a temporary extinction of cultural ties followed by their intense revival. The art of Byzantium's master craftsmen evoked a far from uniform response in the different types of Russian art. The most intense period of active artistic contact between Russia and Byzantium was from the late 10th to the 12th century.¹³

Kiev became the centre of such cultural contacts at that time. The city was directly linked to Constantinople and it was to the capital on the Dnieper that diplomatic missions came from Tsargrad, bearing rich gifts from the emperors, and Greek clergy carrying messages from the Patriarch of Constantinople. Caravans of Greek merchants arrived, loaded with rare luxury items and works of Byzantine applied art. The princes of Kiev were the first to invite Greek craftsmen from Byzantium: architects, painters, stone sculptors, jewellers and mosaic-makers. It was in Kiev that extensive religious and courtly buildings began to be constructed with the help of Greek architects.

By far the clearest expression of Byzantine influence was in the architecture of Old Russia.¹⁴ In the late 10th and 11th century

Byzantine stone and brick architecture was adopted. Its complex cross-shaped and domed churches with their perfected system of ceilings represented the most advanced building techniques of the time. Only in certain parts of the contemporary West with its Romanesque style of architecture was the slow and difficult transition from wooden structures to stone and brick vaulting taking place. By contrast, Kievan Rus very early received from Byzantium an already perfected and intricate system of vaulted and domed ceilings for buildings of a subtle and refined spatial configuration and of great height.¹⁵

The first stone church in Russia was that dedicated to the Assumption of the Virgin (the "Desiatinnaia church") in Kiev. According to the chronicle, it was built by Greek craftsmen between 989 and 996. Several decades later, the church of the Transfiguration of the Saviour was erected in Chernigov, again by Greek architects (1031-1036); specialists consider it the most "Byzantine" church in Old Russia. In many of its features it approaches the best models of the 11th-century Byzantine capital's architecture: the strict lines of its architectural forms, the elegant simplicity of its compositional solutions, the refinement of its external decoration, and the purely Byzantine technique of its masonry.¹⁶

The peak of south Russian 11th-century architecture was the Cathedral of St. Sophia in Kiev (1037-1054). Its purpose was to recreate on Russian territory the traditions of the Sophia Cathedral in Constantinople, the chief shrine of the Orthodox world. Just as the Cathedral in Constantinople symbolised the victory of Christianity throughout the civilised and inhabited world and the power of the Byzantine Emperors, so the Cathedral in Kiev confirmed the adherence of Old Russia to Orthodoxy and the strength of the princes. However, the artistic embodiment of this ideological conception was different in Constantinople and Kiev. The Cathedral of St. Sophia in Kiev, the beloved project of Prince Yaroslav the Wise, was an enormous church with five aisles and extensive chancels that also included the side aisles. It was built jointly by Greek and Russian craftsmen but did not have any direct analogues among the outstanding examples of Byzantine ecclesiastical architecture. While it retained the basic Byzantine cross-shaped form and domes, the Cathedral of St. Sophia marked the gradual departure of Old Russian architecture from Byzantine models. The stepped composition of its exterior dimensions, the abundance of domes, and the massive crossed pillars that made the interior more crowded all endowed the principal church of Kievan Rus with an unmistakable originality. The cathedral combined a monumental power and festive solemnity with the colourful elegance that harmonised so well with the hospitable natural conditions of south Russia.¹⁷

The architecture of Novgorod the Great departed even further from Byzantine architectural models. This can be particularly well

traced by comparing the cathedrals dedicated to St. Sophia in Constantinople, Kiev and Novgorod. For all its general similarity to the design and architectural layout of the Kiev cathedral, that in Novgorod (built in 1045-1050) offered quite new artistic solutions which were unknown to Byzantine or south Russian architecture. Local traditions were so forcefully expressed here that they substantially modified the style of the cathedral. However, we cannot exclude the possibility of Western Romanesque influence on the architects of Novgorod. The Kiev layout of a five-aisled, cross-shaped and domed church underwent such a significant alteration in Novgorod that it became practically unrecognisable. From the outside, the Cathedral of St. Sophia in Novgorod resembled an enormous cubic structure, unshakable and monolithic. The cathedral's mighty walls were constructed of rough stone pierced by few window embrasures and were crowned by six majestic domes. The many-stepped pyramidal silhouette of the cathedral in Kiev was replaced by the monumental enclosed dimensions of St. Sophia's in Novgorod. The festive showiness of the south Russian cathedral's external ornamentation gave way to the noble simplicity of its northern cousin's outer decor. The only decoration on the walls of the Novgorod cathedral were the powerful spade-shaped band and delicate semi-columns on the facets of the central apse, not to forget the arching bands on the drum vaults. The entire appearance of this church was stamped with a severe majesty, an inspired contemplativeness, and an epic calm; it was as if it was imbued with the free and pensive landscape of the Russian north.¹⁸

In the 11th-first half of the 12th centuries Byzantine traditions were quite firmly preserved in Russian architecture. After that date, however, there was an evident weakening of Byzantine influence heralded by the appearance of tower-shaped churches in Russia of a type unknown in Byzantine architecture. Old Russian architecture did not experience such sharp leaps in its development as the transitions in Western Europe from Romanesque to Gothic, and then from Gothic to the Renaissance. The national features of Russian architecture were established more slowly and smoothly and reached their culmination later in the architecture of Muscovite Russia. Recent research by Soviet specialists has shown that Old Russian architects had a developed knowledge of mathematics and technology. Each construction was built by following a strict mathematical system and making complex engineering calculations.¹⁹

Byzantine influence on Old Russian painting was more prolonged and stable than in architecture. And this is entirely understandable. One must remember that Byzantium not only acquainted Russian artists with various techniques (for making mosaics and frescoes and painting in tempera) but also gave them the iconographic canon, which the Orthodox church strictly protected as immutable. Workshops of artists, including Greek and Russian craftsmen, usually

worked from Byzantine models, from "originals". The latter were scrolls or bound notebooks of contour drawings on parchment brought from Byzantium. They were preserved in Russia over many years and were altered very slowly. To a certain degree, the dominance of the iconographic canon and the practice of working from models limited the native artistic talents of Old Russia's craftsmen.

Byzantine painting reached a flourishing peak in the 11th and 12th centuries when its solemn and elevated style and Byzantine aesthetics then took their final form.²⁰ Alongside the capital's superb works of art, such as the mosaics of the south aisle of St. Sophia in Constantinople and the Monastery of Daphni near Athens, provincial school of painting had by this time become strong and acquired their own artistic language: their achievements might be seen in the mosaics of Hosios Lucas in Phocis and at Nea Moni on the island of Chios. Byzantine influence was then entering Russia directly from Constantinople by various routes, and also from the western provinces of Byzantium via Salonica and Mount Athos.

There were two traditions of painted church decoration in the 11th- to 12th-century Russia. One was more severe and solemn and had its sources in Byzantine monumental painting. The other was freer and pictorial: it had taken shape on Russian soil. A classic monument embodying the first tradition was St. Sophia's Cathedral in Kiev. Here the Byzantine iconographic canon had been retained in full. The cathedral's mosaics and frescoes were created over a long period (1037-1067) by the joint efforts of Byzantine and Russian craftsmen. The vast building's decorative elements are astonishing in their variety and monumental scale.

Two strains in Byzantine art, so specialists believe, can be detected in the cathedral mosaics. The first derived from the Constantinople school of painting and was distinguished by its high level of execution and the refinement of its artistic forms. The second reflected the influence of a provincial and more archaic art, as embodied in the mosaics of the Hosios Lucas Monastery in Phocis.²¹ The Pantocrator soars in the cupola while the solitary figure of the Virgin Mary stands at the end of the apse in the pose of a supplicant. She was revered in Kiev as the city's defender and protector and was named the Virgin of the "Sacred Wall". Her image is full of dignity and majestic calm. The colours are bright with a predominance of intense blue, yellowy gold and white; the golden background meanwhile gives the depiction a solemnity and magnificence. The depiction of the holy prelates is considered the best of the mosaics in the apse. The prelates' figures are distributed in regular frontal poses and are distinguished by their monumental style; their faces are given individual features and reflect the traditions of Hellenistic portrait painting.

The cathedral is exceptionally rich in frescoes. These frescoes have now been thoroughly studied although even today there remain several controversial questions as to their identification. In the main nave of St. Sophia there is an extensive cycle devoted to the Evangelists which contains many multi-figure compositions. Unfortunately, several of the frescoes have suffered with time. They are close in style and iconography to those of Hosios Lucas in Phocis and Nea Moni in Chios. The frescoes of this cycle are distinguished by their monumental scale, solemn symmetry and the presence of large rather heavy figures who stand immobile, facing front on. All of this gives the composition an epic calm and majesty. The range of colours is attractively bright and there is an abundance of light tones: whites, greys, pinks and lilacs, greens and violets. As a rule, these scenes with many figures are set against a blue background. A distinctive feature of the frescoes of St. Sophia in Kiev is the great number of individual figures of saints, both male and female, who are often depicted with portrait-like traits. Their faces are severe without being ascetic, and inspired but not with fanatical exaltation. They are imprinted, as are the other frescoes, with an epic calm and concentrated introspection. Among comparable works of the 11th century, the cathedral frescoes have no equal for the number of individually portrayed saints.

Of particular interest to scholars, both historians and art specialists, are the cathedral frescoes which carry group portraits of Prince Yaroslav's family. Poor preservation and the restoration work make it difficult to identify them exactly and gain an overall conception of the composition. The latest discoveries, however, have enabled us to determine that there are 13 figures in this portrait, and not 11 as was thought earlier. In the centre of the west wall Christ is seated on the throne and flanked by Prince Yaroslav and his elder son on one side, and by Princess Irina and her elder daughter on the other. The prince is presenting Christ, his patron with, a model of the cathedral. On the south wall are the figures of his four daughters, and on the north wall four of the princely couple's sons who face towards the centre of the composition. The prince and princess were portrayed in rich princely garments, and wearing something like a royal crown on their heads. In Yaroslav's design, the entire scene was intended to show the might and independence of Kievan Rus, and the strength and wealth of its prince.

The figures of his four daughters are best preserved in the family portrait. The princesses are clothed in garments richly decorated with precious stones and process rightwards towards the centre of the composition: two carry candles and this gives the whole procession a solemn and ritual character. There is a hypothesis, though a disputed one it is true, that the daughters depicted here are none other than Elisaveta, Anna and Anastasiya—in other words, the future queens of Norway (later, of Denmark), France, and Hungary—with a younger teenage princess whose name we do not know.

The princesses are shown as young girls and, despite being portrayed in the conventional mediaeval manner, their faces are attractive and have some of the features of a portrait. The face of the third daughter is particularly pretty and feminine, radiating a quiet dignity and gentle charm. Unfortunately, only fragments of the princes' portraits on the north wall have been preserved.²²

The composition in the cathedral in Kiev is analogous to the scene depicted in mosaics in the south aisle of St. Sophia's in Constantinople. There in a famous scene the Emperor Constantine Monomakhos and the Empress Zoe bring gifts to Christ seated on the throne: a small bag of gold and a scroll of parchment listing the imperial contributions to the main church of the Byzantine capital.

The Kiev composition was evidently painted around 1045 when not one of Yaroslav's daughters had yet become a queen. The portrait completed the prince's life's work which he had undertaken to glorify the majesty of his realm. Yaroslav the Wise was buried in St. Sophia's in Kiev, in a marble sarcophagus. It is curious to note that this sarcophagus, in the words of the well-known Soviet historian and archaeologist Boris Rybakov, is now a unique type of "visitors' book" for the cathedral. Many hundreds of people, from 11th-century inhabitants of Kiev to 17th-century Poles, have left their names on its slabs. Rybakov refers to the Cathedral of St. Sophia as a museum of mediaeval Russian epigraphy, with many graffiti on the walls of the nave and the aisles, in the chancel and even in the sanctuary.

Among inscriptions of the most varied nature there is a very interesting record of the death of Yaroslav the Wise. Research by Soviet specialists has proved that the inscription talks of Yaroslav's death occurring on February 20, 6562 (i.e. 1054). This coincides exactly with the facts given in the *Ipatyevskaya Chronicle*.²³ It is particularly important for our understanding of the nature of the Kievan prince's authority that he is here referred to as "tsar" whereas in other sources he was called by the Oriental title of "khakan". All this testifies to the independence of Kievan Rus and its prince's efforts to transform his authority into that of a tsar. In any case, the contemporary who etched this inscription thought of him as a tsar. This yet again confirms that the hypothesis that Old Russia was a vassal state of Byzantium in the 11th century has no foundation.

In the 12th century the superb mosaics of the St. Michael Monastery in Kiev were created (1108). These have their counterparts in Byzantine mosaics of the classic style, particularly those in Nicaea and at the Monastery of Daphni near Athens. Everything about them points to their direct links with the Constantinople school of painting: the strict iconographic canon, their general composition, the high level of artistic execution, and the inscriptions in both Greek and Slavonic. Unfortunately, only the eucharistic scene with the

apostles and the saints on the sides of the apse, and certain fragments in the sanctuary survive from the mosaic ensemble. In many respects the communion scene here surpasses the comparable mosaic on the similar subject in the Kiev cathedral. Where the figures of the apostles in St. Sophia's are immobile and face forwards, those in the monastery are full of movement. They adopt free poses turning to one another, as if in conversation; their appearance is full of feeling and expression; and their garments fall in luxurious and asymmetrical folds.

The faces are expressive and bear sharply characteristic features, reflecting the inner mental state of each particular apostle. In its artistic embodiment, the head of the angel here is similar to those of the angels in the Church of the Assumption in Nicaea. The apostles' light and elongated figures strain upwards, and astonish us by the correctness of their proportions. The figures' movement is subordinated to a single decorative rhythm. The deep warm colouring of the mosaic is attractive and light tones predominate: white, pearly grey, emerald and violet combined with silver and gold.

The mosaics of the St. Michael Monastery are indubitably among the masterpieces of Russian-based Byzantine painting. They can only be compared to such fine works in the classical Byzantine style as the mosaics of the Church of the Assumption in Nicaea and the Monastery of Daphni near Athens. Byzantine influence was less pronounced in other provinces of Old Russia than it was in Kiev.

The vital sources of secular art never ceased to nourish the cultures of Byzantium, Old Russia and other European countries of the time. The similarity of the genres and themes in the painting, sculpture and applied arts of these countries is explained by the kindred tastes and aesthetic ideals of the feudal nobility in Byzantium and Old Russia.²⁴ In Byzantium secular culture was linked to the imperial cult and praise of the Byzantine Empire. Portraits of the imperial dynasty and the upper nobility, celebrations of their military triumphs and courtly entertainments, and praise of the feats of classical heroes were the favourite subjects of Byzantine secular art. These themes from Constantinople's secular paintings and applied art evoked a deep response among Russia's feudal lords and they enthusiastically used them to magnify princely authority. Secular trends in Byzantine art became particularly strong in the 12th century. The chivalrous life style of the court of the Comnenes aided a growth in interest towards secular genres of culture. We can observe analogous phenomena in Russia of the same period.

Regrettably, very few works of secular painting and sculpture have survived, either from Constantinople or from the urban centres of Old Russia itself. The destruction of Constantinople's imperial palaces prevents us from assessing the secular art of the Comnenian capital. Only the renowned mosaics from the palace of the Norman Kings in Palermo (1140) can give us some impression: the "Room of

King Roger II" and the "Tower of Pisa" come as a rare preserved example of courtly secular art inspired by Constantinople. The reports of Byzantine writers, miniatures from illuminated manuscripts, and artistic works of craft provide additional evidence about secular Byzantine culture.

Unique works of secular painting from before the Mongol-Tartar invasion have been preserved in Russia.²⁵ First place among them, by right, must be given to the wall paintings from the staircases of the St. Sophia Cathedral's two towers. They are astonishingly varied in their subject-matter which derives from Byzantine models and to some degree reflects the daily life and customs of the Kievan princely milieu. A series of frescoes quite obviously derive from the courtly art of Byzantium. Among them belong scenes of horse-races at the hippodrome with the emperor and his suite in attendance; the antics of the *skomorokhi* or wandering minstrel-clowns; a giant carrying a pole on which a boy acrobat displays his skills; skirmishes with wild beasts; the single-handed combat of an athlete with a man wearing a wolf mask; hunting scenes; and theatrical performances with actors and clowns. The genre pictures are rather distinctive. One shows an unsaddled horse being chased by riders, while a second depicts a camel being led. Two frescoes are interesting for understanding the local elements in these wall paintings: the triumphal entrance of a crowned rider with a halo around his head which specialists consider to be either a depiction of the Byzantine emperor or of the prince of Kiev; the second shows a young musician with a bowed musical instrument whose face bears south Russian features. The frescoes are executed in the courtly entertainment style or genre.

Secular motifs also found their way into the illuminated books of Old Russia. A superb example of secular art is the portrayal of Prince Svyatoslav and his family which decorates *Svyatoslav's Izbornik* (Svyatoslav's Miscellany) dated 1073. The portrayal of the prince himself is far from being an abstracted idealisation: it has distinctive, almost portrait-like features.²⁶

Secular motifs can be traced with a particular continuity in the examples of Byzantine applied art in hoards found on Russian territory. They include silver and bronze utensils, cloisonné on gold, and carved and sculpted stone and bone objects. Since long-distance transport was difficult and costly, trade in such luxury items was considered especially profitable. Foreign gold and silver, and "ornamented brocade and various vessels" came to Russia as ambassadorial gifts, as customs duty and war booty, and they were also brought by emigrants. These works by mediaeval craftsmen give vivid and authentic accounts of their time and its view of the world. They throw light on certain poorly-known aspects of Byzantine daily life and ideology and, in particular, on the secular culture of the imperial court and the feudal nobility. A set of 12th-century silver cups with rich decoration and thematic scenes introduces us to the

world of Byzantine epic poetry, behind which may be glimpsed the real historical background. They give an original commentary on the epic poem about Digenes Akritas. The way the human hero blends with the painted world, and that of the plants around him, in the vessels' decoration is characteristic for the genre of the lyric-heroic poem.²⁷

Secular art was less dependent on the canons of the official religion and thus distinctive trends in popular culture were more pronounced in these works. Among the ordinary people of the countries under Byzantine influence it was most often artistic elements from the empire's local schools that gained access since they preserved more democratic and down to earth features. The craftsmen of Old Russia are justly considered the wise and thrifty inheritors of the best traditions of Byzantine art. Not only did they preserve the loftiest aesthetic and moral values of the time, which had been created by Byzantium: they also multiplied these riches by introducing an optimism, softness and life-affirming vision of the world.

For a long time Old Russian culture developed in constant contact with the greatest centres of civilisation in the East and in the West. It was enriched by its acquaintance with the best achievements of Byzantium, Western Europe,²⁸ and the Muslim world.²⁹ Yet these varied and complex sources were also the foundation on which an indigenous Russian culture was established and grew strong. By the end of the 11th century, Russian culture had already attained the level of the leading countries of mediaeval Europe. In the 12th century it continued its forward development which had been temporarily interrupted by the Mongol-Tartar invasion. Russian culture in the pre-Mongol era was distinguished by a profound humanism and a tolerance of all other nations, whatever their language or religious creed. And, at the same time, it was imbued with a deep patriotism and a belief in the beauty of its own land and the strong spirit of its people.

NOTES

- ¹ M. N. Tikhomirov, *Russia's Historic Ties with the Slavic Countries and Byzantium*, Moscow, 1969, p. 31 (in Russian).
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- ³ D. Obolensky, "On the Question of the Russian Princess Olga's Journey to Constantinople in 957", *Issues in the Study of Cultural Heritage*, Moscow, 1985 (in Russian); M. A. Alpatov, op. cit., pp. 64-72.
- ⁴ B. A. Rybakov, *The Crafts of Old Russia*, Moscow and Leningrad, 1948; M. N. Tikhomirov, *Old Russian Towns*, Moscow, 1956 (both in Russian).
- ⁵ *Magistri Adami Bremensis Gesta Hammaburgensis Ecclesiae Pontificum*, Hannover-Leipzig, 1917.

- 6 B. A. Rybakov, *Kievan Rus and the Russian Principalities in the 12th to 13th Centuries*, Moscow, 1982, p. 90 and ff.; A. N. Sakharov, *The Diplomacy of Old Russia*, Moscow, 1980 (both in Russian).
- 7 M. A. Alpatov, op. cit., pp. 113-115. There are disagreements among scholars as to the time and place of Vladimir's baptism (L. Müller, "The Story of Vladimir Svyatoslavich's Baptism in *The Tale of Bygone Years*", *Issues in the Study of Cultural Heritage*).
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- 9 M. A. Alpatov, op. cit., p. 73.
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Theory and Practice of Comparative Linguistic Studies

Victoria YARTSEVA

Over the last three decades comparative linguistic studies have led to the emergence of a separate branch within general linguistics most commonly referred to as comparative linguistics but also sometimes designated as “confrontational linguistics”, “contrastive linguistics” and so on. The sources of comparative linguistics are to be found in the practical teaching of foreign languages, whose theoretical interpretation however went beyond the establishment of more extensive links with related linguistic disciplines. As a consequence the boundaries and methods of comparative linguistics can be defined only by its place in the general linguistics and its dependence on the findings of typology, psycholinguistics and sociolinguistics.

In my view, the degree of reliance on typology and psycholinguistics in a contrastive study will depend on its purpose and, consequently, differ from case to case. Many aspects of language system and the very nature of language as a hierarchical system of signs used for purposes of communication in a variety of situations predetermine a great diversity of contrastive studies. On the one hand, this is a boon to contrastive linguistics because it extends its area of application; on the other, it makes its boundaries blurred and uncertain and leads to all sorts of misunderstanding.

One of the first problems a linguist has to deal with is the number of languages and the kind of techniques to be used in a comparative analysis. It is commonly believed that, in contrast to typology which deals with many languages at the same time, a comparative study should be based on two languages. At least this has been the approach used in most investigations and dissertations devoted to the comparative analysis of two entire language systems or their parts.

A look at the table of contents of a collection brought out by Hungarian linguists¹ proves the point: Katalin Kiss, “English Participles and Their Hungarian Equivalents”; Éva Diósy-Stephanides, “A Contrastive Study of the English and the Hungarian Infinitive”; Béla Korponay, “Middle and Causative Constructions in English and Hungarian”, etc. Many papers use a wealth of factual material. For example, in “A Preliminary Study for a Contrastive Analysis of the English Gerund and Its Hungarian Equivalents, Éva Diósy-Stephanides asserts that only the Hungarian verbals with the suffixes *-ás/-és* or *t* which perform an adverbial function and are equivalent in their meaning to a clause can be considered to be the counterparts of the English gerund. However a Hungarian studying English finds it extremely difficult to master the English gerund, mainly because it combines features of the noun and the verb in a complex way and has a wider area of application than the Hungarian gerund. It is worth mentioning in this connection that Hungarian linguists are very active in contrastive studies.² Most authors in the above-mentioned collection of papers use as their analytical techniques a combination of structural analysis with a functional and semantic interpretation of language material, as well as some concepts of generative grammar.

It may well be that the predominance of contrastive studies of pairs of languages is due to the fact that, as many linguists believe, the historical roots of contrastive linguistics lie in the practical experiences of teaching foreign languages. Gerhard Nickel, the prominent West German specialist in the subject, observed that “contrastive linguistics as a systematic branch of linguistic science is of fairly recent date—though it is not really the idea as such which is new, but rather the systematisation”.³ Historians of linguistics commonly hold that a turning point in the progress of contrastive studies was the publication in 1957 of Robert Lado’s *Linguistics Across Cultures*⁴ which was largely prompted by Charles C. Fries’ ideas about the linguistic foundations of the teaching of English. Fries had observed, among other things: “The most effective materials are those that are based upon a scientific description of the language to be learned, carefully compared with a parallel description of the native language of the learner.”⁵

In his preface to Robert J. Di Pietro’s *Language Structures in Contrast* Dwight Bolinger wrote: “Contrastive linguistics was born of classroom experience. Every teacher of a foreign language knows, and every student of a foreign language soon finds out, that the native language of the learner interferes in specific and predictable ways at each new step in acquiring a second language. The teacher’s bag of tricks consists mainly of ways to overcome that interference.”⁶ Bolinger added however that the tasks of contrastive linguistics are not limited to the teaching of foreign languages. Contrastive studies provide insights into language processes and the laws governing

them. As a consequence, contrastive linguistics is a sort of interface between theory and practice.

The linkage between the development of contrastive studies and progress in the teaching of foreign languages has been reflected in certain commonly used terms. For example, Rudolf Filipovič, Director of a Serbo-Croatian-English Contrastive Project, commented on the subject: "A contrastive analysis is an attempt to predict and elucidate the reactions of learners in a given contact situation. The learner's knowledge of the source language (L_S) affects the learning of the target language (L_T). Where structures of L_S and L_T coincide formally and semantically the learning process will be easier, and where they differ the learning process will be inhibited."⁷

While we agree with the above views of foreign linguists, we would like to set the record straight as regards the chronological development of comparative studies. Speaking of the broader educational value of the teaching of foreign languages, L. Shcherba outlined some fundamental principles of contrastive linguistic studies and, more importantly, showed the need for a two-way comparison of languages contrasting the native to the foreign language and vice versa. Shcherba used this genuinely linguistic approach based on the content rather than the form of the two or more languages under comparison in his lexicographic works.⁸

Shcherba's ideas put forward in his articles and prefaces to dictionaries have lost none of their relevance to today's contrastive lexicography, whose practical applications are to be found mainly in the compilation of bilingual dictionaries. While the general thrust of the theory of comparative linguistics remains unchanged the analytical techniques used will inevitably vary, for different levels of phonetics, grammar and the vocabulary under study call for different specialised analytical techniques including experimental ones, whose importance for phonetics for example can hardly be overestimated. At the same time the functional-semantic approach to the study and comparison of two or more languages makes applications of comparative studies especially attractive. In this sense comparative linguistic studies have not only purely linguistic but also broader educational value.

The practice of compiling bilingual and multilingual dictionaries raises the following question: are multilingual comparative grammars feasible, and if they are, what should their aims be? As we have already pointed out, the details of comparative analytical techniques should be adapted to the linguistic levels under study. The extent of cross-linkages between these levels is difficult to predict outside specific analytical contexts.

In a previous publication⁹ we have already mentioned an article by Chauncey Chu,¹⁰ who wrote that verbs of mental perception and cognition, being inherently active, include certain negative or positive presuppositions. At the same time many verbs with a modal meaning

can contain either a presupposition or an implication, and sometimes both. To prove his point, Chu gives the following example: *John regretted that Sheila was hurt*. He goes on to argue that the sentence presupposes that Sheila experienced pain at some time preceding the temporal axis of the verb "to regret", but contains no implication. On the other hand, the utterance "John continued to work" presupposes that John had already been working before the onset of the time span of the verb "to continue" and also implies that John was working immediately after. This shade of meaning—continuing action that began before the moment of speech—can be conveyed in English with the help of the Present Perfect Continuous Tense (has been working).

Such differentiation of the meanings of verb forms is non-existent in Russian and must be rendered with the help of lexical and syntactic means, while the difference between "continued to work" and "continues to work" lies on a somewhat different plane, because the presupposition about a continuing activity that began some time before depends on the verb's lexical meaning, not on its tense form. Similarly, what Chu refers to as "the implication of accomplishment" in the meaning of such English verbs as "to manage, to finish, to complete, to succeed" and the like (e.g., *John managed to solve this problem*) can find a grammatical expression with the help of Present Perfect forms. Thus, even in such typologically related languages as Russian and English the correlations between their lexical and morphological levels may be distorted in spite of the fact that the two languages have a certain number of homogeneous lexemes, though the paradigmatic forms of differentiating the grammatical meaning being different.

The relationship between typological studies and comparative linguistics is very special and contradictory. The aim of the typological description of the languages of the world is to classify them in terms of their similarities and distinctions. Hence the importance in a given language not only of the existence of a device or relation but also the place this linguistic fact occupies in the general scheme of the distribution of devices and relations typical of the languages under study. Systems analysis rules out the danger of accidental coincidences of individual elements of the compared languages because it concentrates the researcher's attention on the distribution of the relevant features of language structure. In special research the superimposition of the two language systems and the registering of their similarities and differences may prove sufficient. However a really complete typological classification of languages calls for a combination of formal and functional analysis.

In a systems analysis it is of particular importance to establish "the point of origin" or, to put it differently, the base for comparison from which one should proceed in identifying and describing units of the compared languages. In this respect typologi-

cal and contrastive linguistics have some things in common, because it is very important for the latter, too, to define the point of departure if the comparison is carried out in a linguistic and not purely pedagogical framework, where the "source language-target language" scheme (or the other way round) would be quite sufficient. A central concept in typological linguistics is that of "language type" which enables the identification and classification of the languages of the world. It might be added that although a morphological device can serve as a marker of a language type it does not convey its essence.

The same morphological device can be used to convey different grammatical meanings. By the same token, the same content can be conveyed by a variety of means. It should be recalled that systems approach to language study has convinced typologists that comparison of individual forms in two languages is little productive because all it reveals is that certain forms coincide while others differ. This has led most linguists to emphasise categories which have fundamental importance for the language as a system. Although the modes of conveying grammatical meanings have a direct bearing on linguistic analysis, in deciding whether two or more languages are typologically similar, one has to be guided by deeper forms of their categorisation. In other words, a linguist should take into account not only features of form but primarily the compared languages' parts of speech (or similar lexicogrammatical categories), connections between them, modes of conveying subject-object relations, spatial and temporal characteristics of action, etc.

The problem of the relation between form and content arises in all linguistic research regardless of whether it deals with just one language or sets out to describe the universals and specifics of all the languages in the world. Since no language is a homogeneous whole, if only because it always contains both emerging and disappearing elements, it is inevitable that every language system is unique. Consequently, comparative analysis of two or more languages should emphasise primarily their unique characteristics. This does not mean however that we underrate the importance of linguistic universals: in our view they are more relevant to typological than comparative linguistics.

If we assume that certain universals are interdependent, it would be convenient in assigning a language to a definite type to have a set of "key" universals which would automatically presuppose the existence of other related ones. The procedure most commonly used by linguists to identify universals consists in seeing how a concept—possession, time, spatial relations, the category of number—formalised in one language, is expressed by the grammatical or lexico-grammatical systems of some other languages. The usefulness of this research is beyond question. The display itself of concrete examples from scores and even hundreds of languages in accordance

with certain principles of selection and classification has great scientific value.

However there are two pitfalls in this approach to linguistic universals. First, in setting out to find something given a priori the linguist will inevitably tend to shut his eyes on some other important features of the functioning of the language under study. The result of his efforts is frequently an enumeration of formal means and devices used by the language to convey the concept chosen as the target of the search. This approach may thus lead to the substitution of a "skeleton" category whose very abstractedness makes it indeed applicable to any language for genuinely insightful universals, rich in content and connected to the specific typological characteristics of the languages under study with a variety of links.

The second danger is the isolation of a lexical or grammatical phenomenon and its assessment without due regard for its links to the system of adjacent categorial meanings. When a linguist is looking for all the possible means of expressing the future tense in a given language, on the assumption that this universal category is bound to exist in it, he tends to overlook the many diverse links between this and other categories of the language. Although isolation of a phenomenon for the sake of convenience is a common research technique, the description of the future tense as a language category should take account of the fact that while in one language it may occur in combination with the categories of spatial characterisation and aspect, in others it co-occurs with a set of modal characteristics of action or the category of mood.

In our view, a language type can be defined as a form of organising the conceptual content of a language. In assigning a language to a type with its distinctive features it would be better to use linguistic phenomena confined to just one level. However, since a language system represents a single whole, features of one level should correlate with the structures of other levels. For example, treatment of a quality and the object it belongs as a single category, equivalent to non-classification of adjectives as an independent lexico-grammatical category will inevitably affect the syntactic structure of attributive and predicative phrases. Treatment of an action confined to the subject or, conversely, an action directed on an object as separate morphological categories is as relevant to the paradigmatic axis of a sentence as it is to the morphological paradigms of words that can denote the subject and the object. Sticking to just one level in the classification of language types is a guarantee that their schematic representation is going to be internally consistent. Such largely idealised schemes, built on the material of several languages, will subsequently be "tried on for size" in respect of individual languages.

Our description of a language type as a form of organising its conceptual content is based on the understanding that different

forms of splitting a notion or, conversely, syncretising it are of fundamental importance for the identification of typological features of languages. In this respect typological investigations are similar to contrastive linguistics which also seeks to find out which macro- and microsystems have identical semantic parameters in the compared languages. This brings us to the discussion of methods and analytical techniques that can be recommended for contrasting single-level phenomena in two languages.

Although binary oppositions are most commonly used to identify distinctive features, sometimes graduated scales of differences are also used, the result of which is a more fractionated classification scale. For example, Frank Parker believes that each distinctive feature must meet a number of requirements: "1) each feature must be non-overlapping and continuous. That is, a distinctive feature defines every point on an independent or semi-independent parameter; 2) it must define one and only one continuum; 3) if one definition can be shown to more narrowly limit the set of permissible distinctive features while still meeting the criteria of descriptive adequacy, it should be more highly valued".¹¹ This break-down into one-dimensional features is certainly useful for the analysis of concrete material despite the fact that the total number of such features may increase. In comparative studies this useful technique of binary oppositions has to be combined with other methods.

For all the importance of structural comparative analysis the notional categories expressed by language structures also provide information about the ways in which a given language reflects the speaker's perception of the outside world. Justified criticism of idealistic theories elaborated by certain foreign linguists who contend that language draws "a picture of the world" should not prevent us from an in-depth analysis of semantic series which, for all their broad similarities in many languages, differ in their inner particular subsystems or elements. That is why the "semantic field" concept, commonly used in lexical and grammatical comparative studies, seems quite appropriate.

It must be pointed out that the application of provisions of generative grammar, particularly those about deep and surface structures, to comparative studies has not justified itself. Comparative analysis of genetically related languages deserves special mention. We have already had occasion to write that typological analysis and comparative analysis per se is applicable both to unrelated and related languages. However, students of philology would benefit immensely from the study of groups of related languages including not only such common ones as Russian, English, French and German which feature most frequently on school and university curricula, but also such minor ones as Slovene, Friesian and Sardinian. Phenomena weakly expressed in a "major" language can receive a convincing explanation through comparison with a "minor" related language.

That is why we disagree with those linguists who hold that the study of "minor" languages is relevant only to the history of language.¹²

At present most comparative studies are synchronous, and an ever greater number are devoted to the synchronous comparison of modern languages. Synchronous comparison of different historical periods of related languages remains the domain of comparative-historical linguistics. In our view, there are no obstacles to the application of comparative analytical techniques to diachronous studies if due attention is paid to preserving the boundary between it and diachronous typology. It is even more important to extend comparative linguistics to comparative-stylistic studies, comparative analysis of terms which gain general currency in step with the scientific and technological revolution, and contrastive translation studies. This diversification will doubtless add to the practical value of comparative linguistics and increase the potentials of each and every language in the world.

NOTES

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The Adoption of the US Constitution: Myths and Reality

Vladimir SOGRIN

In the United States, which in 1987 marked the bicentenary of the Federal Constitution, there are a large number of publications, notably historical investigations, devoted to the country's fundamental law. More often than not, historians focus their attention on the Constitution's origin. Most works are of an apologetic nature, though critical studies also exist.

We consider it appropriate, first and foremost, to dwell on the critical work by Charles A. Beard entitled *An Economic Interpretation of the Constitution of the United States*, since virtually all the apologetic American historiography on this matter was written as a polemic against his ideas.

In 1913, Beard was the first non-Marxist historian to reject the formal, legal interpretation of the US Constitution which had dominated 19th-century writings. In contrast to historians before him, who had extolled the Constitution as representing the free will of the entire nation, embodying a "social consensus", Beard concentrated on economic motives of the creators of the fundamental law and described it as the embodiment of legal guarantees for the ownership interests of the American upper strata. Thoroughly analysing the economic interests of the 55 participants in the 1787 Philadelphia Convention which elaborated the US Constitution, Beard concluded that they represented the will of just four groups: finance capital, the state's creditors, manufactory owners and trading and merchant quarters.¹ It was these same people who provided the blueprint for a strong Federal Government principally designed to defend the interests of money capital, or what was known as "movable property".

Beard's ideas were developed by the school of Progressive historians. It is of no small interest nowadays to recall the assessments reached by the best known of its representatives. A. Schlesinger Sr. proved that the Constitutional Convention of 1787 had cancelled out the democratic achievements of the American Revolution and replaced the colonial masters overthrown in the 1775-1783 War of Independence with the domination of a trading and financial aristocracy.² H. U. Faulkner wrote that the wise Founding Fathers had hardly cared about so-called human rights, but they had not, of course, lost sight of the right to private property. The most important additions to the power of the Federal Government were its prerogatives to collect taxes, regulate trade, defend industry and mint coins.³ F. A. Shannon, another Progressive historian, declared that there was nothing democratic about the US Constitution. He claimed that it sanctified slave ownership, regulated inter-state commerce and protectionism in the interests of the trading and manufactory-owning bourgeoisie and established a political and legal system which reliably defended large-scale ownership.⁴

In more recent times, the critical tradition in studying the origin of the US Constitution was continued by such historians as M. Jensen, G. S. Wood, S. Lynd, and J. T. Main.⁵ Nevertheless, the majority of non-Marxist historians offer apologetic interpretations of the US Constitution, regarding it as an expression of the people's will and the embodiment of the most advanced democratic principles. Following the Second World War, there was a massive attempt on the part of American historiographers to subvert the conclusions drawn by Charles A. Beard and his followers.⁶

Using a wealth of documentary evidence, the representatives of the modern apologist trend tried to prove that at the time of its adoption the Constitution enjoyed the support not only of the bourgeoisie and plantation owners, but also of a section of the farmers and especially the lower urban strata composed of artisans, traders and workmen. From this, they concluded that the Constitution represented the interests of the whole people. They were actually confusing two different issues. Whilst the class nature of the Constitution expressed the interests of bourgeois circles and plantation owners, the social basis of the movement for its adoption did indeed include part of the masses due to a series of concrete historical reasons.

The main one of these was that the US Constitution established the centralisation of the American Federal state, and that this centralisation, being geared first and foremost to the interests of the propertied upper strata, did indeed reflect general national interests at that time and enjoyed very widespread support. The centralisation objectively facilitated the consolidation of the North American states, provided the basis for them to retain and advance their economic independence and their political prestige on an international scene

dominated by the European monarchies. State centralisation was understood and advocated in this sense by the American Democrat leaders Thomas Jefferson, Thomas Paine, Benjamin Franklin and Benjamin Rush. The consolidation of central government was fought for by the propertied upper strata and the lower strata, such as workers and artisans. There is a host of documentary evidence of artisans and workers openly coming out in defence of American industry against foreign competition with regard to the battle against inflation and in support of strong central government. The idea of centralising state power also enjoyed support among farmers trading their wares on the national market.

The upper strata made skillful use of the interest the broad masses of Americans had in the centralisation of state power when the US Constitution was adopted, although the people were not at all involved in its elaboration. The elaboration of the 1787 Federal Constitution resulted from concrete historical laws and reasons, and the organisation of a strong central government was accomplished by the moderate conservative Founding Fathers of the United States, and not by the Democrats. Political leaders of the American bourgeoisie and plantation owners crammed the Constitution with clauses which met their class interests and which neutralised most of the democratic innovations of the American Revolution.

Another argument favoured by contemporary critics of Beard is that he presented an oversimplified picture of the social composition and motives of the 1787 Convention. According to Beard, its participants, being owners of money capital and creditors of the state, were concerned to provide guarantees for their ownership rights and thus produced an economic document in the shape of the Constitution.

This argument seems convincing at first sight. The Constitution was not, of course, an economic document or a kind of agreement between the directors of a joint stock company. Among its authors there were many politicians who were neither creditors of the government nor even large proprietors. But does this mean that the participants in the 1787 Convention were guided by non-class interests and produced a non-class document? It does not, of course. There is no direct link between the socio-economic situation of a politician and his class outlook. The creators of bourgeois ideology were not capitalists who exploited workers directly, but intellectuals and politicians who, in part, did not have two pennies to rub together. This did not, however, prevent them from expressing the interests of the bourgeoisie in a manner of which the immediate exploiters were incapable. Marx stressed that what makes some or other people ideologues of the petty bourgeoisie is not their social position, but "the fact that in their minds they do not get beyond the limits which the latter do not get beyond in life, that they are consequently driven, theoretically, to the same problems and

solutions to which material interest and social position drive the latter practically".⁷ The creators of the US Constitution, regardless of whether they were proprietors or not, were guided by the bourgeois world outlook, and this fact found reflection in the fundamental law of the United States.

An archetype modern-day apology for the American Constitution was provided by the historian T. Eidelberg, who rejected Beard's interpretation and opposed it with one he himself described as dialectical. Calling for a balanced analysis of the contradictory motives which guided the US Founding Fathers, Eidelberg admits that the authors of the Federal Constitution did indeed distinguish between the interests of a propertied elite and the poor and propertyless majority, and suggests that the Constitution reflected the social disagreements which existed in America at the time. He does not conceal the fact that some ideas held by the authors of the Constitution were an overt expression of the interests of the upper strata. Eidelberg also claims to prove that the Founding Fathers were opposed to suppressing the aspirations of the lower strata and hoped that their interests could be brought into harmony with those of the upper strata with the help of the mechanism provided by a pluralist society, where the different social strata of American society being offered a real chance to hammer out agreements on controversial issues. According to Eidelberg, the authors of the Constitution were not advocates of democracy in tune with the will of the majority, but they did elaborate a higher form of blueprint for a pluralist democracy giving the right to equal political representation for a wide gamut of social interests.⁸ Eidelberg's concept has the mark of the theory, much favoured by Western political scientists, of the pluralist nature of capitalist society.

We must also take a critical view of attempt by non-Marxist historians to ascribe an undying democratic character to the US Constitution on the strength that it embodied the revolutionary ideals of the Enlightenment. Not seeking to deny that the authors of the Federal Constitution were dedicated to the sanctity of private property R. Hofstadter set out to prove that these ideas of the Founding Fathers coincided with a proposition of the advanced philosophy of the Enlightenment. According to Hofstadter, this second aspect guiding the thinking of the Founding Fathers made the US Constitution an event in the intellectual history of Western civilisation.⁹ The liberal historian H. S. Commager alleged that the Founding Fathers had succeeded in bringing to life something which was even beyond the capabilities of the leading and boldest brains in Europe.¹⁰

There is no objection to the thesis that the principles of the ideology which gave birth to the Enlightenment, and formed the world outlook of the most advanced sections of the bourgeoisie in the 18th century, were reflected in the US Constitution. At the same time, a comparison of the Constitution, and the philosophy of the

United States' Founding Fathers, with different currents in the ideology of the Enlightenment shows that the authors of the fundamental law of the USA resolutely rejected the radical doctrines of this ideology and accepted only its more moderate principles. Moreover, some of the Constitution's propositions were at odds with the sacred principles of the Enlightenment. It did nothing to abolish Negro slavery, which was in contradiction to the Enlighteners' first precept on the equality of all people before the law. It should also be pointed out that the inclusion of some principles of the Enlightenment in the US Constitution did not make it non-class document at all, if only because the Enlightenment itself was not an ideology of non-class character. The historical practice of all bourgeois societies emerging with idealistic dreams on the part of bourgeois Enlighteners about universal prosperity showed the illusory nature of hopes that reason would reign triumphant on the ruins of world feudalism. "We know today," Engels wrote, "that this kingdom of reason was nothing more than the idealised kingdom of the bourgeoisie."¹¹ This truth was confirmed for the first time by the practices of American early bourgeois society.

Our criticism of the apologist interpretations of the origin of the US Constitution does not imply any recognition of Beard's concept as their scientific antithesis. From the Marxist-Leninist viewpoint, Beard's concept is full of serious oversimplifications and, to no small extent, anti-historical. Beard mechanically assigned the blame for the ills of bourgeois society which appeared in its imperialist era to the Founding Fathers of the USA and was unable to grasp the fact that the American Constitution, despite its class narrowness, did have a certain progressive significance at the time it was adopted. Beard was also mistaken in considering that the Constitution accorded with the class interests of money capital, against which he set immovable property in the form of land capital. In actual fact, the US Constitution represented a class compromise between the two dominant groups at the time, the bourgeoisie in the North-East and the plantation and slave owners in the South, which forged a state of unity in the face of the democratic aspirations of the masses. And finally, let it be noted that Beard, being guided by an essentially positivist method in his economic interpretation of history, failed to take into account the outlook and political philosophy of the Founding Fathers, who had adopted the principles of the moderate European Enlighteners, notably John Locke and Montesquieu. This led him to interpret the Constitution as an economic document.

The 1787 Constitutional Convention, whose activities are examined below, assembled in Philadelphia, the first capital of the United States.¹²

An analysis of the Convention's documents should be supplemented by a study of the political campaigning and practical actions of the bloc of bourgeoisie and plantation owners which

preceded it, and also their behaviour at the ratifying conventions held in the individual states during 1787 and 1788. In their speeches at the ratifying conventions and in propaganda pamphlets addressed to the nation, the Federalists (as the supporters of the Constitution started to call themselves) sometimes declared the opposite of what the participants in the Philadelphia Convention had said at the secret meetings. A comparative analysis of the Federalists' ideology leads us to conclude that it existed on three different levels. The first level is represented by the Federalists' individual convictions, which are revealed most clearly in their private correspondence with like-minded people and confidants. The second level is their collective platform, in which their often widely differing individual convictions were brought under the umbrella of a common denominator. The 1787 Constitution was an expression of the Federalists' collective will, and the philosophical expressions it develops are accepted as being embodied in the 85 articles published jointly by Alexander Hamilton, James Madison and John Jay in 1787-1788. Particular importance attaches in this context to the attainment of ideological unity between Alexander Hamilton, the intellectual leader of the North-Eastern bourgeoisie and James Madison, the political head of the Southern plantation owners.

The third, and final, level of Federalist ideology was the rhetoric calculated to win the sympathies of the mass of the people. Examples of this are the propaganda produced by the Federalists in the form of pamphlets, and their speeches at the ratifying conventions in the individual states. The conclusions drawn from an analysis of the principles, aspirations, long-term interests and immediate goals of the authors and supporters of the American Constitution will depend on which of its levels researchers focus their attention. It should be pointed out that, on the whole, US historiographers avoid any division of the Federalist ideology into different levels. Most authors identify the rhetoric employed by the creators of the Constitution with their ideology.

Among the participants in the Philadelphia Convention were politicians who played an outstanding and decisive role in elaborating the fundamental law of the United States. The Convention's Chairman, George Washington, who had been Commander-in-Chief of the armed forces of the North American states during the War of Independence, had virtually no influence on the elaboration of the Constitution's guiding philosophy and text. As an ideologue, he was clearly inferior to James Madison, Alexander Hamilton, James Wilson, Gouverneur Morris, Edmund Randolph and John Dickinson, who had the lion's share in working out the fundamental law. The ideas of the Convention were directly inspired by James Madison, who came to be called the philosopher of the American Constitution, and Alexander Hamilton. The leaders of the moderate wing of the American Revolution were acknowledged as the heads of the

Convention. There were no prominent Democrats among them. The famous Enlightener and Democrat, Benjamin Franklin, did, it is true, take part in the Convention, but owing to his age (he was in his 82nd year) and poor health, he was unable to play any active role in the proceedings.

What were the dreams of the American Founding Fathers and what principles did they embody in the Constitution?

First of all, they resolutely condemned the Articles of the Confederation, the unstable agreement reached by 13 states during the War of Independence, and called for their cancellation. This document had been approved by the Continental Congress of 1777 and proclaimed the entry of 13 North American states into a firm league of friendship. In the most important Article (No. 2), it declared that each state would retain its sovereignty, freedom and independence in pursuit of the rights which were not specially delegated to the United States Congress.¹³ Since the document made no mention of the supremacy of the Confederation, the states functioned as independent entities with their own governments. All the rights of the Continental Congress, notably the exclusive ones, were accompanied by stipulations laying down the sovereignty of states. The execution of the exclusive rights granted to the Congress thus demanded the agreement of not less than nine states.¹⁴ The adoption of the Articles of the Confederation reflected a certain degree of immaturity of national self-awareness on the part of the North American states proclaiming their independence.

The participants in the Philadelphia Convention of 1787 were convinced that the powers of the Continental Congress did not include the most important without which it could not lay claim to the role of some kind of effective body. The Congress, they stated, had been deprived of the right to collect and introduce both direct and indirect taxes, which had turned it into an authority with no source of income, meaning that it would always have to request funds from the states' legislative assemblies and thus remain ever in their debt. It had also been deprived of the right to regulate trade between states, which led to countless internal "economic wars". The Congress was given the right to arbitrate in all manner of disputes between states, but did not have the means to enforce its decisions. It had to rely in all cases on the goodwill of the governments of the individual states.

The delegates to the Philadelphia Convention were particularly disconcerted at the fact that of three possible forms of power—legislative, executive and judicial—the Articles of the Confederation provided for the establishment only of a legislative body, the Continental Congress. As for the executive body, it functioned as a branch of the legislative. The Congress could set up all manner of committees to monitor the implementation of its decisions. Executive power was extremely fragmentary. The Congress declined to appoint

either an executive authority or some kind of executive council to take a leading role in this conjunction. The organisation of the Continental Congress was also exposed to severe criticism. It consisted of one chamber whose members were changed every year by the state legislatures and could be recalled at any time. Each state had only one vote at meetings of the Congress, no matter how many deputies it had delegated. The state governments frequently forgot entirely about the existence of the Congress. One of its meetings was attended by delegates from just three states. In 1784, the Congress only just managed to raise a quorum to ratify an agreement with Britain recognising the independence of North America.

The draft US Constitution approved by the Philadelphia Convention accorded wide powers to the central government and, what is extremely important, proclaimed that Federal law took precedence over the laws of states. Among the prerogatives granted to the national government of the United States, particular importance attached to its right to raise and collect taxes, both direct and indirect, and to regulate trade and commercial relations between the individual states. The Federal Government was invested with the "power of the sword and the purse", which had been a long-cherished dream of Madison, Hamilton and their followers. The Constitution, laws and agreements of the USA were declared to be the country's supreme law, even if they contradicted the constitutions and laws of the individual states.

The delegates to the Philadelphia Convention exceeded their powers in cancelling the Articles of the Confederation and working out the text of the United States Constitution. The Continental Congress had empowered them only to supplement and amend the Articles of the Confederation. However, the members of the Convention demonstrated from the very outset a determination to cancel them and elaborate a fully fledged constitution setting up a strong central government.

The cancellation of the Articles of the Confederation, the establishment of a Federal Government invested with considerable powers and the centralisation of government power in the United States were not the only aims of those taking part in the Philadelphia Convention. Another important objective they had in mind was to resolutely revise what they considered to be the erroneous and disastrous legal and political principles embodied in the constitutions of the 13 states and to prevent these "ills" from appearing in the fundamental law of the United States. Whilst the first aim was more or less consonant with the position taken by Americans from many walks of life, the second was gravely at odds with popular democratic aspirations and represented a clear expression of the class interests of the bloc of bourgeoisie and plantation owners.

The sovereignty of the individual states was not to the liking of the participants in the Philadelphia Convention, also because it meant

that the constitutions of the individual states continued to influence the political process in North America. The Federalists were convinced that the democratic drawbacks of these constitutions could only be overcome by the imposition of a good honest constitution for the whole of America, i.e. one which would reliably defend the interests of the upper strata.

Which were the elements of the states' political make-up that did not satisfy the participants in the Philadelphia Convention?

The constitutions of the states had been adopted in the initial stage (1776-1777) of the American Revolution and reflected the revolutionary upsurge of the masses and the concessions forced on the bourgeois circles and plantation owners. The remains of monarchism had been completely wiped out in the American states, the republic and the elective nature of all organs of power were proclaimed everywhere. Despite fierce battles with the moderates, in 1776 success had been achieved by Democrats in the majority of states in making all those bearing government power subject to re-election at annual intervals. The franchise had been widened in many states.

The states' constitutions provided for a serious revision from democratic positions of the basic bourgeois political principles of "division of powers" and "checks and balances". In contrast to the moderates, the left wing of the patriotic camp deeply mistrusted the executive power, endeavoured to weaken it as much as possible and to make it subject to legislative assemblies. The Democrats were successful in this attempt. In all states governors were deprived of the right to veto decisions of, and all other means to restrict, the legislative assemblies, which their predecessors had held in colonial times. By agency of more democratic, lower chambers, the legislative assemblies were given very wide scope to limit the executive branch. They decided the governor's salary, had the power to dismiss him, call him to account before a court and, in the majority of states, possessed the right to set up the entire executive power apparatus. Finally, the principle of united and indivisible executive power (this had enjoyed the support of many moderate American and European bourgeois ideologues, notably John Locke and Montesquieu) had been cancelled in all states. The power of the governor was limited not only by the legislative assembly, but also by the executive council, which in Pennsylvania, for instance, enjoyed much greater power than the head of the executive authority himself.¹⁵

A major change in the political make-up of the American states was occasioned by a sharp extension in many states of the level of representation accorded to the Western, frontier counties. This signified a growth in the voting power of representatives of the petty bourgeoisie, such as farmers and shopkeepers, and a concomitant decline in the influence of voters from the upper and middle bourgeois strata in the East. Without this reform, the emergence of

the revolutionary democratic party of Constitutionalists in Pennsylvania would have been unthinkable. It is this party which succeeded in retaining power for almost the entire duration of the anti-colonial war and made numerous democratic demands a matter of reality. Without the extension of representation levels for the Western counties, one could hardly have expected the formation (in New York) of the parliamentary faction headed by the commoner Clinton, which ran the political life of the state throughout the period of the Revolution.

Immediately following the War of Independence, the leaders of the upper bourgeois strata and plantation owners started to expose to fierce criticism the democratic excesses during the years of the Revolution. They had to contend with numerous instances of harm to the class interests of proprietors due to the extraordinary influence exerted on political life by rank-and-file patriots.¹⁶

The indignation of the upper strata at the democratic principles of the revolutionary period reached its zenith in connection with the revolt in Massachusetts led by Daniel Shays in 1786-1787. The hesitations of the Massachusetts Assembly, particularly its lower chamber, which was in no hurry to use force against the insurgents, and the absence of any powers on the part of the Continental Congress to intervene in the serious conflict, convinced the upper strata once and for all that the political system which had emerged in the United States was incapable of maintaining "internal security".

The leaders of the bourgeois and plantation-owning upper strata were unanimous in their conviction that the national structure of the American states which had emerged in the revolutionary period had brought with it the transformation of popular sovereignty into anarchy and even a system of democratic despotism geared, as James Madison attempted to prove at the Philadelphia Convention, to subjugating the interests of the propertied upper strata to the propertyless majority.¹⁷ Edmund Randolph, a delegate from Virginia, proclaimed that the greatest threat to the country was to be found in the democratic articles contained in the constitutions of the individual states. Roger Sherman from Connecticut was even more categorical in his castigation of democracy, stating that the people should have as little as possible to do with the affairs of government. Elbridge Gerry from Massachusetts suggested that the difficulties the country was facing originated from a surfeit of democracy. Using Massachusetts as an example, he attempted to show that the dangerous excesses resulting from this had their greatest effect on the lower chambers of the legislative assemblies, turning them into the servant of the rabble.¹⁸

Madison and Hamilton, whose ideas ran like a thread through the entire Philadelphia Convention, provided the theoretical substantiation for the mission of the American Constitution. Any society (what they actually meant was a bourgeois society), they demonstrated, is

split into two factions or classes, a rich minority and a majority with little or no property at all. Hamilton stated that inequality in the ownership of property was at the root of the great and fundamental division of society into different groups.¹⁹ Madison declared that the inequality in the property distribution was the most general and indestructible source of the division of society into different groups.²⁰ The sacred freedom of competition, Hamilton told those attending the Convention, would make the contradiction between the poor and the rich all the greater. It was an obvious truism, he continued, that in the ownership of property there could be nothing like equality, and inequality in the ownership of property already existed. The further development of industry and trade would increasingly widen this gap.²¹

What are the uncontrollable results of this process? To Madison, they were quite evident. The majority would inevitably set itself the aim of closing the gap, unleashing the levelling spirit, which had already appeared in the United States, to its fullest extent. And the solution? This was also self-evident. In creating a political system to last for all times, it was essential to accord the minority reliable means of defending their interests and exerting control over the majority.²²

But how was one to keep in check the democratic excesses which had taken firm root under pressure from popular demands at the time of the revolution? The delegates' views on this matter differed. Some simply demanded that certain democratic stipulations be abolished, radically cutting the level of representation accorded the Western states in the US Congress, reinstating the electoral law of the prerevolutionary period, etc. Others looked for more subtle methods of limiting the people's democratic achievements. Heading the latter group was none other than the "philosopher of the American Constitution", James Madison.

Madison, with support from Alexander Hamilton, John Rutledge, James Wilson and Oliver Ellsworth, believed that if the question of electoral law, unanimously regarded as a fundamental article of the Republican System, did not accord with the viewpoint prevailing in the states, the latter would simply refuse to accept the draft of the Federal Constitution.

The decision of the 1787 Constitutional Convention to extend voting rights in national elections to all those invested with these rights during the War of Independence was a certain concession to the principles which inspired the American Revolution. The importance of this step should not, however, be overstated. Suffrage extended only to white male taxpayers, who at that time made up less than 3 per cent of the American population. Deprived of the right to vote were women, propertyless white men, Negroes and Indians, the indigenous population of North America.

The acceptance by the Philadelphia Convention of the electoral law endorsed by the state constitutions served as a cloak for more

refined attacks on the people's rights. The first of these was the assignment to the US Senate of a special function in defending the interests of the propertied minority. The authors of the Federal Constitution believed that government power on the whole was created to defend genuine human rights, but the Senate was assigned the task of specifically defending the right to private property, representing the "wealth of the nation". At the same time, the Senate was to restrict the democratic excesses of the House of Representatives, to be a bastion of stability and order.

The concept of a Senate specially responsible for defending the interests of the propertied upper strata was at odds with the doctrine of true equality proclaimed in the 1776 Declaration of Independence. It most notably conflicted with the latter's stipulation that state power is established to defend the right to life, freedom, the aspiration to happiness, and not the right to property. The 1787 Convention recognised the supreme object of the Federal state to be the defence of ownership interests.²³ Immediately following the promulgation of the Constitution, A. Hanson, one of its advocates, proclaimed that in all states, and not only in despotic ones, the rich should derive benefits from the ownership of property, which in many respects represented mankind's greatest asset and the reason for its existence.²⁴

When it came to discussing the US Senate at the Philadelphia Convention, its participants split into two groups. One of them was worried about the exclusively class function of the Senate; and the other; composed of representatives of the small states, was concerned about turning the Senate into an instrument capable of counteracting the establishment of their domination by the larger states in the Federal Union. A compromise endorsed by the Convention gave the Senate a configuration that accommodated the aspirations of both groups. It provided a reliable defence for ownership interests and also embodied the principle of equal representation for all states. Each of them, regardless of its population, received two seats in the Senate.

The authors of the Federal Constitution were agreed that for the Senate to provide socio-political stability, its members must retain their powers for a considerable duration and be of limited number. The six-year term for US Senators introduced by the Federal Constitution was considerably longer than the electoral term of most higher chambers in the individual states. By allocating two seats in the Senate to each state, the Philadelphia Convention limited the number of senators to 26 (there were 13 states in the Union at that time). The Senate was given wider powers than the House of Representatives. Only it had the power to give advice and consent to the President on matters of Federal appointments and to conclusion of international agreements. Finally, the right to elect senators was

allocated not to rank-and-file voters, but to the legislative assemblies of the individual states.

The authors of the Federal Constitution also revised from moderate positions the model of the lower chamber which had asserted itself in the states. The electoral term of the House of Representatives was twice that of the legislative assemblies at state level. Following the British example, they established a level of representation approximately equivalent to that in the House of Commons. At the time the Federal Constitution was adopted, the House of Representatives of the US Congress was to have 65 members, whilst the number of members sitting in the legislative assembly of the state of Massachusetts was around 400.

It was the activities of this latter chamber, which had been hesitant to act at the time of the revolt led by Daniel Shays, that were to become the main target of criticism on the part of the Federalists. *The Federalist* condemned broad representation of the voters in the lower chambers, stating that, whatever talents they might have among their members, such large assemblies could never ensure that passions were subordinated to the power of reason. Even if every Athenian had been a Socrates, the Athens assembly would have remained a mob.²⁵

The authors of the Federal Constitution accorded a leading role in defending the interests of the upper strata to a strong and independent executive authority. Speaking at the Philadelphia Convention, Madison perceived the most dangerous trend in the development of the United States in the absorption of all power by what he called a legislative moloch. In issues 71 and 73 of *The Federalist*, Hamilton declared that the usurpation of all power by legislative bodies was becoming a law of republican societies, and it was precisely in republics that legislative assemblies presented the greatest threat to freedom.²⁶ In the view of its authors, the object of the Federal Constitution was to reorganise the division of powers, giving greater state prerogatives to the executive.

A special place in their system of views was held by the concept of single and indivisible executive power, which they borrowed from the French philosopher Montesquieu.

Like Montesquieu, the authors of the American Constitution saw the main benefit of the maximum concentration and centralisation of executive power in the fact that it allowed decisions to be quickly put into practice. The maintenance of peace in a country as large as the United States, they stated, as well as the government of society as such and its defence from external enemies, could only be achieved if decisions were taken quickly and forcefully implemented by a single strong authority in the face of the President. They considered that the division of executive power between two, three or more persons would have fatal consequences for the Federal state. Some of the participants in the Philadelphia Convention shared Montesquieu's

view that single and indivisible executive power should be vested in a monarchy and a republic could not survive at all on such a vast territorial expanse. Among the proponents of monarchism were Alexander Hamilton, John Dickinson, Gouverneur Morris, J. Brum and J. McClure.²⁷

This idea admittedly failed to arouse majority support, with the delegates favouring the investment of executive power in the US President, who was to be re-elected every four years. When it came to defining the powers of the President, the formula of indivisible executive power was somewhat curtailed, following a decision to provide the Senate with the right to give "advice and consent" to the President in the appointment of senior officials and the conclusion of international agreements. The power of the President was very great nevertheless. To many Americans, he appeared to be an elected monarch, since there was a widely held view at that time that a monarchy had not so much to do with the institution of inherited rule as the concentration of executive power in the hands of a single person. Besides, it was quite clear that much greater power had been vested in the President of the United States than the British king at that time.

The participants in the Convention saw no need to include in the Federal Constitution a Bill of Rights, which was a constituent part of the state constitutions and proclaimed the freedom of speech, the press, assembly, conscience and various others. Following the publication of the draft of the Federal Constitution, its authors were accused of being anti-democratic. They tried to justify their rejection of a Bill of Rights by saying that such a bill existed in all state constitutions and its reproduction in the US Federal Constitution was therefore superfluous. In response to this, the critics of the draft Federal Constitution found a resonant answer. If, like the Articles of the Confederation, they stated, it united not the population but the states, preserving their sovereignty, the position of its authors would be understandable, but the fact that the Federal Constitution had been declared the supreme law meant that it absolutely had to incorporate a Bill of Rights.

The violation of human rights principles and the equality of all people before the law by the authors of the Federal Constitution was manifest in their recognition of Negro slavery. The sanctioning of slavery by the Constitution resulted from a compromise between the North-Eastern bourgeoisie and the Southern plantation owners, designed to ensure a firm union of the North American states. Gouverneur Morris, one of the recognised leaders of the North-Eastern bourgeoisie, declared that, faced with a choice between the maintenance of unity with the South and faithfulness to human rights, he would prefer an alliance with the plantation owners.²⁸ The North-Eastern bourgeoisie, without putting up any substantial fight, sacrificed the idea of the equality of white and Black Americans for

the sake of affirming the inviolability of private property, which the Negro slaves indeed were in their eyes.

The US Constitution did not only sanction the institution of slavery, but accorded the Southern states extended political representation in Congress, taking into account the fact that three-fifths of their population was composed of Negroes doing forced labour.

On September 17, 1787, the Philadelphia Founding Fathers presented the document they had worked out to the American public for them to pass judgement. In this instance, the word "public" was not all that it seems to be, since less than 3 per cent of the population were involved in ratifying the Constitution. The voters, in turn, passed on the right to approve or reject the draft Constitution to special ratifying conventions held in the states. But even these conventions, which were anything but democratic, exposed the Federal Constitution to fierce criticism.

Thomas Jefferson and other Democrats were perturbed that the Constitution did not limit the number of times a person could be re-elected. They considered that this could turn Presidential power into monarchistic. Many anti-Federalists stated that the scheme proposed for the organisation of the Senate was a blueprint for the establishment of an aristocratic mode of government. The greatest objections, however, were aroused by the absence of a Bill of Rights in the fundamental law of the United States. Four states agreed to ratify the draft Constitution only if it was supplemented by a Bill of Rights, and most others came out in support of this measure. It was impossible to ignore the will of the states on this issue.²⁹

Following the approval of the US Constitution by the ratifying conventions, the year 1788 saw the election of the first President (George Washington being elected to the said post) and the national Congress. During the first session of Congress in 1789, it was proposed to include the Bill of Rights in the Constitution in the form of 10 amendments. The proposal was initiated by none other than James Madison.

Against the background of the feudal absolutism of the 18th century, there can be no doubt that the first bourgeois, republican Constitution of that era was indeed progressive. When compared with the legal state entity that emerged from the American Revolution, it must, however, be said that this Constitution curtailed the democratic achievements recorded during the War of Independence.

NOTES

¹ Ch. A. Beard, *An Economic Interpretation of the Constitution of the United States*, New York, 1913, p. 324.

² A. M. Schlesinger, *New Viewpoints in American History*, New York, 1922, pp. 81-83, 184-199.

³ H. U. Faulkner, *Economic History of the United States*, New York, 1928, pp. 57-58.

⁴ F. A. Shannon, *Economic History of the People of the United States*, New York, 1934, pp. 132-136.

⁵ J. T. Main, *The Antifederalists: Critics of the Constitution, 1781-1788*, Chapel Hill, 1961; idem, *The Sovereign States, 1775-1783*, New York, 1973; idem, *Political Parties before the Constitution*, Chapel Hill, 1973; S. Lynd, *Class Conflict, Slavery and the United States Constitution*, Indianapolis, 1967; M. Jensen, *The Founding of a Nation: a History of the American Revolution*, New York, 1968; idem, *The American Revolution Within America*, New York, 1974; G. S. Wood, *The Creation of the American Republic, 1776-1787*, Williamsburg, 1969; idem, *The Confederation and Constitution*, Boston, 1973.

⁶ R. E. Brown, *Charles Beard and the Constitution: a Critical Analysis of "An Economic Interpretation of the Constitution"*, Princeton, 1956; E. McDonald, *We the People: the Economic Origins of the Constitution*, Chicago, 1958; C. Rossiter, *The Grand Convention*, New York, 1965; T. Eidelberg, *The Philosophy of the American Constitution: a Reinterpretation of the Intentions of the Founding Fathers*, New York, 1968; R. Kirk, *The Roots of American Order*, La Salle (Ill.), 1974; M. Burns, *The American Experiment. The Vine Yard of Liberty*, New York, 1982; R. Ketcham, *Presidents above Party: the First American Presidency, 1789-1829*, Chapel Hill, 1984.

⁷ K. Marx and F. Engels, *Selected Works*, Vol. 1, Moscow, 1969, p. 424.

⁸ T. Eidelberg, op. cit., pp. 3, 25, 256, 260.

⁹ R. Hofstadter, *The American Political Tradition and Men Who Made It*, New York, 1948, pp. 3-17.

¹⁰ H. S. Commager, *The Empire of Reason: How Europe Imagined and America Realized the Enlightenment*, New York, 1977.

¹¹ F. Engels, *Anti-Dühring*, Moscow, 1969, p. 26.

¹² *The Records of the Federal Convention of 1787*, Ed. by Farrand, Vols. 1-4, New Haven-London, 1966 (1st Print: 1911).

¹³ *The Documentary History of Ratification of the Constitution*, Vol. 1—*Constitutional Documents and Records, 1776-1787*, Ed. by M. Jensen, Madison, 1976, p. 86.

¹⁴ *Ibid.*, pp. 89-91.

¹⁵ G. S. Wood, *The Creation of American Republic*; M. Jensen, *The American Revolution Within America*; J. T. Main, *The Sovereign States*.

¹⁶ *The American Revolution: Explorations in the History of American Radicalism*, Ed. by A. Young, De Kalb, 1976, p. 30; M. Jensen, *The American Revolution Within America*, pp. 82-84.

¹⁷ *The Records of the Federal Convention of 1787*, Vol. 1, pp. 135, 136, 420-422.

¹⁸ *Ibid.*, pp. 48-51.

¹⁹ *The Papers of Alexander Hamilton*, Ed. by H. C. Syrett, Vols. 1-25, New York-London, 1961-1977, Vol. 4, p. 218.

²⁰ *The Federalist*, Ed. by E. M. Earle, Washington, 1937, p. 43.

²¹ *The Papers of Alexander Hamilton*, Vol. 4, pp. 218-219.

²² *The Records of the Federal Convention*, Vol. 1, pp. 422-423.

²³ *The Records of the Federal Convention*, Vol. 1, pp. 533, 534, 542; *The Papers of Alexander Hamilton*, Vol. 4, pp. 504-512.

²⁴ *Pamphlets on the Constitution of the United States*, Ed. by P. L. Ford, New York, 1968 (1st Print: 1888), p. 254.

²⁵ *The Papers of Alexander Hamilton*, Vol. 4, p. 516.

²⁶ *The Records of the Federal Convention*, Vol. 2, p. 35; *The Papers of Alexander Hamilton*, Vol. 4, pp. 609, 619.

²⁷ *The Records of the Federal Convention*, Vol. 1, pp. 86, 87; Vol. 2, pp. 33, 52, 55, 114.

²⁸ *The Records of the Federal Convention*, Vol. 1, p. 585; Vol. 2, pp. 106, 374.

²⁹ J. T. Main, *The Antifederalists...*, pp. 136-166.

The Revolutionary-Democratic Enlightenment as a Phenomenon of Russian Culture

Vladimir KANTOR

The opponents of the revolutionary democrats in 19th-century Russia accused them of bookishness and nihilism, the nihilism being declared to be a consequence of the bookishness borrowed from Western Europe. "Nihilism is neither more nor less than a form of our aping Europe," wrote Nikolai Danilevsky. "We parrot foreign words and thoughts, just as our grandfathers parroted the views of the encyclopaedists and partly the doctrines of mystics, and as our fathers echoed the theories of German transcendental idealism. If these theories, which gained some currency in Russian society in former times, cannot be regarded as phenomena of Russian life, why do we ascribe this attribute to nihilism, which is of just as obviously foreign origin?"¹ Even the enthusiasm of the democratically minded young people for the natural sciences (which expressed Russia's inner need for scientific progress and produced, towards the close of the century, a number of great natural scientists) was declared to be imitative bookishness: "We study the natural sciences from pamphlets by Feuerbach and Büchner.... Under the guise of the natural sciences," sarcastically wrote Mikhail Katkov, leader of the anti-democratic reaction, "we are still studying German philosophy or a bastard offspring of it that looks just as much like philosophy as like natural science."²

Lenin also wrote of the Europeanism of the revolutionary democrats,³ but he stressed that it was a Europeanism of a special kind, one that signified a search for revolutionary theory.

It must be borne in mind that, apart from being revolutionaries, the revolutionary democrats were also enlighteners. In Engels' words,

they "prepared men's minds for the coming revolution",⁴ at the same time solving enlightenment tasks in the proper sense of the word; anyway, they outlined the principles on which it must be based. In this sense, they inherited the unsolved problems of the previous ages.

Indeed, Nikolai Chernyshevsky, the major revolutionary democrat of the 19th century, wrote that only through the study of European books and through ascending to the level of European science could one do away with backwardness and proceed to original creativity.⁵ But the roots of the problem of the enlightenment or "bookishness", as it was called in those times, go back deep into Russian history, towards its very beginnings, the very first translated books and chronicles. The fact is that the position of Russian thinkers was conditioned not only by the demands of the country's social, political, and economic development of those times—it was naturally rooted in the very type of attitude towards life, it was explained by the specific development of Russian culture.

The task of the present article is to show the roots of the revolutionary-democratic enlightenment in the history of Russian culture. In our excursus into the history of Russian "bookishness", we proceed from the assumption that this problem seemed highly important to revolutionary democrats, and we therefore consider it in the context of their own ideas and quests.

* * *

The process of Russia's involvement in civilisation, closely linked, in the words of Chernyshevsky, with "progress in the life of nations" (*Selected Philosophical Essays*, Moscow, 1953, p. 258) was never simple, it went through periods of upsurge and decline. But this movement was nowhere a simple one. In describing the beginnings of Russian history, Sergei Solovyov, the well-known pre-revolutionary historian, wrote this: "The stepmother of history compelled one of the most ancient European tribes to move from west to east and to populate those lands where nature is man's stepmother. At the beginning of the new European Christian history, two tribes gained dominant positions, thenceforward to hold them forever—the Germanic and the Slavonic, two fraternal tribes of the same Indo-European origin; they divided up Europe between them, and this initial division, this initial movement—of Germans from the north-east to the south-west, to the areas of the Roman Empire, where a solid foundation of European civilisation had already been laid, and of Slavs, contrariwise, from the south-west to the north-east, to the pristine spaces so unfairly treated by nature—this movement in opposite directions contains the difference between the entire subsequent history of the two tribes."⁶ Let us comment on this statement in the light of our problem.

The Germanic barbarians who brought down the Roman Empire and flooded its territory in the 4th-6th centuries, slowly absorbed classical culture in its Christianised variant. (We must not forget that by the end of the 4th century the Roman Empire had adopted Christianity as an official religion.) As Soviet researchers have shown (see works by Mikhail Gasparov, M. Grabar-Passek, A. Gurevich and others), this assimilation of Roman-Christian culture took up practically the whole of the Middle Ages. It should be mentioned here that in the times of Kievan Rus, the Slavs, owing to their propinquity to Byzantium, were in a relatively favourable position for absorbing the classical heritage. Rome had been destroyed, but Byzantium flourished. The absence of cultural history of its own would only tell much later. At the time, though, it was no accident that in the 10th century Kievan Rus turned to Orthodox Byzantium as a source of a state religion, and not to the Catholic West, seeing Constantinople (Tsargrad, or King City) as the highest level of civilisation. It would have made no sense for Rus to seek civilisation in Western Europe, where the tribes that overran it still retained survivals of cannibalism in the 9th century.⁷ The conflict between the "scholarly" culture of the Middle Ages, the "religion of the Book", and of popular culture, was then at its height.⁸ After the conquest of Italy at the end of the 8th century by Charles the Great, who brought back from that country books and scholars that were no longer needed there, the empire of the Franks lived through a brief period of the so-called Carolingian Renaissance (9th century). But the true syncretism of bookish and popular cultures, their creative dialogue, which ultimately gave rise to the national literatures of Western Europe, did not take place at that time. Education and elementary civilisation were preserved only at monasteries. But "divided in a divided Europe, deprived of the influence of more cultured circles, and compelled to adapt itself to the needs of a continuous influx of semiliterate or completely illiterate neophytes, monastic culture was threatened by gradual barbarisation and complete dissolution in popular culture. There were real signs of that danger: while the second half of the 9th century produced abundant and extremely varied literature, the first half of the 10th century is striking in its absolute barrenness".⁹ Kievan Rus was attracted to centres of direct links between Christianity and classical civilisation. Only Byzantium could be the source of instruction. But how was one to become a disciple? The tribes that had made their way to Europe had a better time. "The deficiencies of our nationality proceeded not from the spirit and blood of the nation, but from unfavourable historical development," wrote Vissarion Belinsky, well-known 19th-century literary critic. "The barbarian Teutonic tribes which had swept like a flood on Europe were fortunate in that they encountered the classical genius of Greece and Rome, those noble soils from which had sprung the broad-leafed majestic tree of Europeanism."¹⁰ These tribes were

surrounded by monuments of classical culture—by architecture, wall-paintings, sculptures; even the roads made in ancient Rome were used as late as the 19th century. Here, too, were manuscripts of books, libraries, whole mounds of books at monasteries; books did not have to be brought from distant lands, all the monks had to do was not to destroy them. Again, all this was their own, appropriated by right of conquest. In Russia, it was all different. Campaigns against Constantinople and even victories over it, just as later victories over Napoleon and the taking of Paris, introduced only the army, only a very small part of the people, to civilisation in an intimate, visual and tangible way. The rest of the people were taught "from the book". In Europe, the bookish culture which we discussed above was not the only civilising influence on the masses, on the bulk of the people, while in Russia books played an incomparably greater role than in the West.

Books and book learning came to Russia with conversion to Christianity,¹¹ and they came as a completely new, formerly unknown cultural phenomenon. The assimilation of book learning by Russia was a fact of "transplanting Byzantine culture to the Slavic soil. Literary monuments," writes Academician Likhachev, "are transplanted to the new soil and here continue an independent life under new conditions and sometimes in new forms.... This phenomenon is extremely important for the formation of new cultures...".¹² The book functions as a tutor, it furthers "assimilation of the more progressive forms of civic communal life" (N. Gudziy). However, education through books alone, through transplanted forms of culture, is fairly difficult, for the people heading towards civilisation do not see with their own eyes any forms of "well-ordered life" which, in Chaadayev's view, introduces "order in man's spiritual life",¹³ and is a necessary condition for concern with spiritual problems, for a possibility of the higher pursuits at leisure. *The Tale of Bygone Years* has preserved evidence of initial rejection by the people of bookish culture, of bookish education. "He [Grand Duke Vladimir.—V. K.] sent messengers to the better class of people to take away their children and instruct them in book learning. The mothers of those children mourned them for dead, for they were not yet firm in their faith."¹⁴ Interestingly, the attempt to achieve enlightenment through books,¹⁵ to mould and bridle uncontrolled life, to put it in a moral framework, to set down moral norms and interdictions, was perceived as punishment, as violation of living life, as death.

This brings us back to the 19th-century controversy in which the Slavophiles reproached the Westerners and revolutionary democrats for attempting to impose "bookishness" and "rationality" on the people, to suppress the living Christian worldview of the people through Western books¹⁶; the Slavophiles apparently lost view of the fact that for Russia, Christianity was also a phenomenon of "bookish

culture" in conflict with the spontaneous forms of the so-called "living life". Christianity had come from Byzantium, a splinter of the Roman world, i.e. of the West and not of the East, or of Asia. But there is a most important thing that must be borne in mind. "Foreign influences," points out Academician Likhachev, "prove to be effective only to the extent in which they accord with the country's inner needs,"¹⁷ with the need for acceleration of its social, economic and cultural progress; otherwise it will simply be unable to assimilate the lessons of a different civilisation. It was no accident that, for the first Russian scholars, it was the book that personified the "living life", a source of *moving and developing* life. "The bookish worldview," wrote Vassily Klyuchevsky, the 19th-century Russian historian who made a deep study of this process, "was for Russia a novel and foreign ideal, very remote from native reality but intended to transform it and to link it up with the previously alien educated world where higher and better ideas prevailed. By its very novelty and high level, this worldview stimulated native thought, compelling its first Russian carriers to think and reshape local feelings at a time when it was incapable of reshaping the local relations. Through this contemplation and education, the new worldview was inculcated in native life."¹⁸

It should be pointed out that Kievan Rus moved very fast into the front rank of the most educated and enlightened states of the early Middle Ages. Direct contacts were also established with the countries of Western Europe, where the age of barbarity came at that time to an end and feudalism took root—feudalism which was, in Chernyshevsky's words, "a mitigated form of the previous unchecked anarchy of brigandage and abuse of power" (Chernyshevsky, VII, p. 660). But, although it was the same old "brigandage adopted as a system, internecine strife regulated by rules" (ibidem), it still represented an obvious "progress" (ibidem), and the West willingly established contacts with Russia directly connected with highly civilised and forbidding Byzantium. "The Rurik dynasty transferred," wrote Marx, "soon after the foundation of the Russian Empire, their capital from Novgorod to Kiev, in order to be nearer to Byzantium. In the 11th century Kiev imitated in all things Constantinople, and was called the *second Constantinople*..."¹⁹ Yaroslav the Wise's daughter married the French king; in the age of the Monomakha and Mstislavs, there were schools in Russia, for the study of the Greek and Latin languages, and Metropolitan Illarion of Kiev (11th century) boldly states in his famous *Discourse on Law and Grace*: "We are not writing for ignoramus but for men who have partaken abundantly of the sweetness of books."²⁰

In Kievan Rus, the principalities or "semistates"²¹ warring with each other were, as a rule, grouped round the central city and united by a common language and culture (the Scandinavians called Old Rus *Gardariki*, or "the country of cities"). The population was fairly

mobile—not only did the prince move from city to city with his bodyguards but each guardsman also had the "right of departure"; as historians pointed out on numerous occasions, the tribal way of life was constantly eroded; foreigners were willingly incorporated in the structure of the nationality that was then taking shape, while their distinctive features were obliterated. These foreigners were Greeks (mostly scholars and monks); Turkic-speaking steppe dwellers, who became part of the nationality through marriage; Varangians, who served as princes' bodyguards; Lithuanians; and merchants from Surozh; Hanseatic merchants became well established at Novgorod. "The way from the Varangians to the Greeks," notes Solovyov, "the western stretch of Russia from the Baltic to the Black Sea, was the principal trade route and the principal historical scene in our ancient history; rich trading cities and strong urban communes of independent tendencies were concentrated here."²² We must also bear in mind that in that complex union of Old Russian cities there were even different forms of government, including the republican one in Novgorod. Active trade, exchange of material values, men and ideas—all this undoubtedly created premises for intellectual efflorescence. In the 12th and 13th centuries, scholarship and literacy, as Academician Tikhomirov pointed out, went beyond the confines of princes' and boyars' courts, episcopal residences and monasteries, becoming, to a certain extent, a property of relatively broad circles of the population. Book learning spread in some sections of the urban population, and also among the craftsmen of the princes and boyars.²³

In this situation, bookish culture was more readily absorbed, a real need was felt for it, and the scholar became a significant figure in culture. "When the art of reading and writing became widespread in our people," wrote Klyuchevsky, "and books appeared along with it, and together with books came book wisdom... then the Russian mind drank thirstily from those books... Since those times, a reasonable and understanding man in Russia has always been a 'man of bookish learning', i.e. one with a scientific or literary education, and the most profound trait in the character of that learned man became humility and wisdom, both personal and national. That was the way in which the first type of the Russian intellectual reliably known from written sources was born."²⁴

* * *

Unfortunately, this development, this structure of a civilisation that was only beginning to take shape and was not yet hardened, was swept away and almost completely destroyed by the Tartar invasion. Chernyshevsky compared the Tartar-Mongolian invasion of Russia with the barbarian invasion of ancient Rome, pointing out the community of the causes of the two aggressions. "What destroyed the

ancient world?" he asked. "We say outright that the only cause was the turbulence among the nomad tribes from the Rhine to the Amur. It was neither more nor less than the destruction of a country by a flood" (Chernyshevsky, VII, 657).

When we speak today of blind natural forces of which man is a plaything, when we say that an ignoramus can gain access to weapons of mass destruction, we set down a historical paradox: the fate of mankind depends on whether it will fall in the hands of a maniac, i.e. an individual in whom the blind forces of human nature are far from being under control—they are, in fact, completely unchecked. There are, however, clearer situations. "The collapse of the Roman Empire was the same kind of geological catastrophe," wrote Chernyshevsky, "as the destruction of Herculaneum and Pompei.... These instances of destruction of objects or causes by external pernicious forces... occur... on innumerable occasions in history; never before, however, has this kind of destruction occurred in history on such a scale as the destruction of the entire ancient civilised world. Don't talk, then, of the reasonableness or beneficial effects of these catastrophes.... They are the result of blind play of natural forces in the elements, animals or men who have not yet left behind their bestial state" (Ibidem).

After the fall of Kievan Rus, when Russia was displaced from the advantageous trade routes to the north-east, into virgin forests, it was noticeably split off from the rest of Europe.

Moscow became the centre that united Rus in its opposition to the Tartar-Mongolian yoke. The fight for the freedom and independence of the country required an enormous effort, including the mobilisation of the whole of its spiritual potential. Suffice to recall the names of cultural figures from the end of the 14th and the early 15th centuries, like Andrei Rublyov, Sergius of Radonezh, Theophanes the Greek, Epiphaniy the Most Wise. Moscow tried to continue, with some success, the cultural traditions of Kievan Rus, despite the extreme difficulties and obstacles in the path of culture: the Tartar-Mongolian oppression, endless wars, fires, remoteness from the world centres of culture, etc. "During nearly four centuries of its existence as the capital of the Grand Dukedom and 'the king city'," wrote Academician Tikhomirov, "Moscow was the principal centre through which new technical skills came to Russia, and varied cultural influences from western, southern and eastern countries penetrated Russia."²⁵ At the same time it was with Russia before Peter the Great that the revolutionary democrats connected the facts of sluggishness, stagnation, and intellectual inertia. The development of the people's vast spiritual potential, they thought, was fettered by unfavourable socio-political conditions. They believed that one of the factors was the negative influence of Byzantium, which went at that time into decline and separated Russia, through the form of Christianity which Russia had borrowed from Byzantium, from

Western Europe that was rapidly developing in the Renaissance; and the second factor was that in the struggle against the Tartar-Mongolian yoke Muscovy assimilated, willy-nilly, some features of the despotic organisation of the Mongolian conquerors.²⁶ Chernyshevsky's view was that these traits were still alive in the 19th century: "Our main concept and the most persistent legend is the idea of arbitrariness which we introduce into all things. Legal forms and personal effort seem impotent and even ridiculous to us; we expect and want to do everything by the force of a whim, by uncontrolled resolution; we never rely on conscious collaboration or spontaneous readiness and ability of others, we do not want to conduct our affairs in this way; for each of us, the first condition of success, even in just and kind intentions, is that others must blindly and implicitly obey us. In each of us there is a little Napoleon or, better say, a Batu Khan" (Chernyshevsky, VII, 616).

The Russian state took shape amid tense struggle on various fronts. "We can hardly understand now," wrote Klyuchevsky, "still less can we feel what great sacrifices its formation demanded of the people, how it oppressed the existence of private citizens."²⁷ Autocratic power was primarily concerned with the state's external affairs; it disregarded internal affairs. "The oppressed people's inner life did not develop," noted Pushkin with bitterness. "The Tartars were in no way like the Moors. Conquering Russia, they did not bring with them either algebra or Aristotle. The throwing off of the yoke, the strife between the Grand Dukes and the principalities, between autocratic power and the freedoms of the cities, between autocracy and the boyars, between the conquest and the people's traditional ways, were not conducive to the free development of enlightenment."²⁸

We know that the development of literature was never fully interrupted, but former greatness gave way, as Pushkin put it, to "pale sparks of Byzantine education."²⁹ Education ceased to be accessible to the broad masses of the population. Afanasy Nikitin, a merchant of Tver, completed about 1475 his notes on his voyage to India; in these notes he wrote with some bitterness of the loss of his books during the voyage,³⁰ but Maxim the Greek, a monk from Athos especially invited in the 16th century to translate sacred texts, who had lived for a while in Florence with the nephew of the famous humanist Pico della Mirandola, found himself in a fairly difficult situation in Russia.³¹ Learning had become a great rarity: "During the times of Ivans, there were not enough schools for teaching elementary Russian literacy."³² The study of foreign languages went out of use even in the higher strata of Russian society. This was pointed out by Belinsky, who cited notes left by the clerk Grigory Kotoshikhin from the times of Tsar Alexis Mikhailovich: "There is no study of languages other than Russian in the Russian state—no Latin, Greek, German or any other" (Belinsky, V, 108). Ivan

Fyodorov, Russia's first printer, was also persecuted in the middle of the 16th century. The Russian democratically minded publicistic writers recalled and discussed that fact in the 19th century in their controversy with the Orthodox defenders of old ways who asserted the originality, permanence and continuity of enlightenment in Russia.

The theme of Russia before Peter the Great was a constant one in the socio-literary polemics in the 1840s-1870s. Slavophile thinkers saw Muscovy as a kind of ideal of social harmony, a country of Christian enlightenment exempt from the influence of foreign book learning. On the contrary, revolutionary democrats pointed out the obvious contradictions between the people and the upper classes (it was no accident that the 17th century was called the age of rebellion), and the fact that they had arisen long before Peter's epoch—as Slavophiles alleged ("History parted us from it [the people.— V. K.] at a period much earlier than Peter's,"³³ insisted Dmitry Pisarev, a prominent Russian thinker of the 19th century). The revolutionary democrats stressed that *Peter's reforms were engendered by the inner need of the country* that was eager for enlightenment; and that absence of book learning of enlightenment, of contacts with Europe led to stagnation and not to society's vitality: "Russian life before Peter ... was not unlike a large sleepy pond covered with slime; from top to bottom, everything drowed in this stagnant pool in which the state was taking shape and bogged down. Faceless generations came in succession like leaves on a tree, never coming to; they lived bound tight by heavy periodic rituals. The quietude and the negative simplicity of this life were not enviable. In nature, everything undeveloped is quiet and restful" (Herzen, XIII, 274).

* * *

The need for the country's historical development required reforms, it required enlightenment—a more dynamic enlightenment directly connected with the advanced countries of the world. "Only extreme ignorance," wrote the revolutionary democrat Nikolai Dobrolyubov, "can regard Peter's reforms as an accidental consequence of that man's arbitrary will. The thinking man inevitably sees them as a natural consequence of Russia's previous history.... The people found it easy to accept the new direction, which had that advantage before the old that it contained the seeds of life and movement rather than stagnation and death."³⁴

Preoccupied with his reforms, Peter paid little attention to literature and art. "Under Peter," writes Efros, "art had neither an independent existence nor did it occupy a prominent place. It was a secondary detail of the state structure. It was a variety of craft and an appendage of science."³⁵ As Russian historians of culture have shown, the main drive of state enlightenment was directed towards

the transference to Russia of new objects, relations, principles of life, and city types, rather than of new words and concepts. For Peter the builder, the power of things was more important than the power of words.³⁶ The construction of St. Petersburg according to the model of Holland, which was then the most advanced European country, created a solid material form in which the civilised Russian had to be created. Peter opposed a city restoring the links between Eastern and Western Europe to the one that had moved from West to East—Constantinople. It was no accident that the comparison of St. Petersburg and Moscow became an important theme in the art and publicistic writings of the 1830s and 1840s—in Pushkin, Gogol, the Slavophiles, Herzen, Belinsky.

* * *

For at least 100 years after Peter the Great "the government," in the words of Herzen, "continued to march at the head of civilisation" (Herzen, VII, 188). Catherine the Great corresponded with French encyclopaedists, turning an attentive ear to their instructions, advice, and flattery; she saw herself as a "philosopher on the throne", and was favourably disposed towards Fonvisin and Derzhavin. Denis Diderot seriously hoped that she would implement the Enlighteners' programme of spiritual civilisation of the people, as a result of which the outward signs of European culture (architecture, furniture, clothes, etc.) would be supported by internal transformations.

However, civilisation presupposed the need for certain freedoms which the autocracy was not going to grant. Contemplating the internal limitations of the idea of enlightened monarchism, Chernyshevsky wrote in his article on Lessing: "An individual's honest and indefatigable activity can, to some extent, give a good direction to the worst of mechanisms; but as soon as the firm hand ceases to guide that mechanism, it stops to function or functions poorly. Only that good is solid which does not depend on accidentally appearing personalities but is based on independent establishments and the nation's independent activity" (Chernyshevsky, IV, 37-38). It was precisely this independent activity of the nation that the autocracy feared. The persecution of Novikov and Radishchev signified the nascent conflict between the autocratic state and the enlightenment. As Herzen wrote, the educated Russian gentry that saw itself as the heir of Peter's reforms believed that "freedom could be engrafted with the same ease as civilisation, forgetting that civilisation did not go beneath the surface and was the property of an insignificant minority" (Herzen, VII, 196). How were freedom and enlightenment to be carried into the popular masses? How were the people to be enlightened? Even as they rose in rebellion, the peasants did not see their real goals, they could not work out an independent position; all their actions were in the nature of a mutiny which Pushkin called

"senseless and ruthless"; and it was precisely the senselessness and ruthlessness of their rebellion that doomed it to failure. It was by no means an accident that the state substituted external ties for internal enlightenment, fearing, with good reason, that the enlightened people would require freedom that would sweep away the autocratic mode of government. It was clear that state enlightenment had lived out its usefulness. At the beginning of the 19th century, wrote Herzen, "power and thought, Imperial decrees and the humane word, autocracy and civilisation could no longer walk side by side" (Ibid., 192).

Now, how was Russia to be enlightened, reformed and civilised? Beginning with Radishchev, the whole of Russian literature was concerned with that question. The initiative in the enlightenment and humanisation of the country passed into the hands of the progressive part of educated society; the autocratic state became an obstacle. However, liberal Westerners and Slavophiles were in fact trying to combine or adapt the needs of enlightenment to the demands of autocracy which stood for absolute enslavement of the individual, absolute indifference to the individual's needs and wants.

Revolutionary democrats endeavoured to overcome this slavish fear of independence, of one's own voice. "At home," wrote Herzen, "you have no soil on which a free man can stand. The liberty of the individual is the greatest thing of all, it is *on this and on this alone* that the true will of the people can develop" (A. Herzen, *From the Other Shore and the Russian People and Socialism*, London, 1957, pp. 11-12). In other words, it is only possible to introduce the people to civilisation through the introduction of each individual to independent activity. Let us recall the great formula of Marxism: "The free development of each is the condition for the free development of all."³⁷ It is, of course, a lengthy and far from simple process. Herzen and Chernyshevsky believed that its sources lay in European culture; they reproached liberal Westerners for having missed the most important thing about Europe—her *revolutionary tendencies*, hatred for oppression and assertion of man's independence. "Even in the worst periods of European history," insisted Herzen, "we encounter some respect for the individual, some recognition of independence.... This respect not merely for material but also for moral force, this unquestioning recognition of the individual—is one of the great human principles in European life" (Herzen, *op. cit.*, p. 12). Thus, according to the revolutionary democrats, the principal drawback of the Westerners' position was that they did not want to assert that principle of the independence of the individual (won by the revolutionary thinkers of the West) but the bourgeois historically and socially restricted forms of Western life which was by no means entirely free from elements of savagery and barbarity. "There is a good deal of education in Western Europe," wrote Chernyshevsky. "That is so; but aren't masses of people in Germany, England and

France still immersed in considerable ignorance? Rest assured—they believe in magicians and witches, and current among them are countless superstitious stories of absolutely pagan character" (Chernyshevsky, VII, 665).

* * *

The era in which revolutionary democrats appeared on the scene was awaiting not simply an enlightener but an enlightener who would also be an active reformer, one who would formulate a new system of values. With a few exceptions (like Pushkin, Chaadayev, Gogol, or Lermontov), most educated people did not rise above the level of Tentetnikov or Khlobuyev described in Gogol's *Dead Souls*. Here is Khlobuyev's self-analysis, echoing the bitterness of Gogol himself: "We are educated, we have attended lectures at a university, and yet what are we good for? Now, what did I learn? I did not learn to lead an orderly life.... We only came to the University to applaud the professors, to give them prizes, instead of receiving them ourselves. What we got out of education was not the best things about it but the worst—its externals, not education itself. No, Pavel Ivanovich, we are not good at living.... Sometimes I can't help thinking that the Russian is a hopeless case. He wants to do everything but he does nothing. You keep thinking that from tomorrow you'll start a new life, you'll go on a diet, but nothing of the sort happens: on the evening of that very day you gorge yourself so much that all you can do is to blink and you can hardly utter a word. You sit there glaring like an owl at everyone, you do. And everyone is like that."³⁸ It was clear that these questions—How was one to live? What was one to do? How was the way of life and life itself to be reformed?—were the questions of the continued existence of the country which came to rack and ruin under the oppressive regime of autocracy and serfdom, as Gogol showed.

Gogol expressed, probably more strikingly than anybody else, this waiting for a leader who would rouse the country, inspire it to strive for real education (which is finer than any university), and give an impetus to the spontaneous activity of the people: "But where is the man who could utter that all-powerful word 'Forward' and address it to the Russian soul in its native tongue, who, knowing all the strength and quality and depth of our nature, could by the mere waving of a magic wand direct us towards a higher life? With what tears and what love would he be repaid by the grateful Russian? But century after century goes by, half a million sluggards and idlers and lie-a-beds [Gogol refers here to the educated stratum.—V. K.] are plunged into deep sleep, and rarely is the man born in Russia who is able to utter that all-powerful word" (Nicolai Gogol, *op. cit.*, pp. 277-278). It is these words of Gogol that Dobrolyubov chose for the epigraph for his famous article "What Is Oblomovshchina?", in

which he showed that analysis of *oblomovshchina* confirmed Gogol's diagnosis of Russia's state, and that this concept "is the key to the riddle of many of the phenomena of Russian life, and it lends Goncharov's novel far greater social significance than all our exposure novels possess".³⁹ Dobrolyubov showed that the stage of the liberation movement at which the gentry played the main role was over, and stated the need for searching for "the ideal Russian public leader".⁴⁰

Many were expected to play that role: the government, industrial entrepreneurs, University professors, writers. But the government merely tightened the screws; industry could not develop under the conditions of serfdom; besides, the third estate was, strictly speaking, practically nonexistent in Russia at that time (the need for such an estate was indicated already by Diderot in his letters to Catherine the Great, while characters like Kostanzhoglo and Murazov were Gogol's equivalent of the third estate—men of vigorous industrial, economic action). As for professors and writers, they were sharply divided into two trends—the Slavophiles and the Westerners. Although the Slavophiles were against serfdom, they mistrusted the idea of activity and transformation, pointing to the "sad experiences" of Europe. Liberal minded Westerners advocating education and reforms placed their hopes on the government and on slow borrowing of the forms of Western life, on slow and gradual enlightenment of the minority. However, as early as the 1840s, true democrats became prominent among the Westerners, who thought in terms of complete restructuring of social life and the fate of the people: Belinsky, Herzen, Ogaryov. The revolutionary-democratic trend, whose greatest ideological proponent was Chernyshevsky, took shape as a trend that endeavoured to meet the demand of Russian culture so strikingly formulated by Gogol.

Revolutionary democrats formulated a unique and highly daring conception of reforming the socio-cultural foundations of Russia in order to lead the country lagging behind the advanced nations of Europe into the circle of civilised nations. The need for reforms, undoubtedly sensed by all contemporaries, was great, and it was felt that the European stage of civilisation would not, of course, be attained overnight; the revolutionary democrats believed that it would take more than one generation to implement the reforms ("That time will come, but not tomorrow or the day after," wrote Chernyshevsky (VII, 617)). They hoped to set a definite course of development for Russian culture, so that their age might prove to be a turning point in Russia's destiny. They failed, but their spiritual experiences, their spiritual effort became an attainment of Russian thought and will forever be part of Russian history.

These tasks stimulated both the incredible energy of the revolutionary democrats' activity and the utopian quality of many of

their views, their passionate desire to bring closer the hour of Russia's future civilisation, to see at least a hint of it, however insignificant. Fyodor Dostoyevsky recalled the words of Belinsky about the first railway: "I often come here to take a look at the progress (of the station of Nicholas railway, then still under construction). Simply standing there watching people work brings relief to my heart: at last we shall have at least one railway. You can't imagine how that thought warms my heart at times."⁴¹ Summing this up, Dostoyevsky said of the great critic: "Of all the people of Russia, he was in the greatest hurry."⁴² But the same "haste" was characteristic of other revolutionary democrats, it was in a sense their typologically generic trait. Let us cite Chernyshevsky's statement about Dobrolyubov: "And could he take care of himself? He felt that his work powerfully accelerated the course of our development, and he kept urging time on..." (Chernyshevsky, VII, 851). This haste or, to be more precise, this vigour, was connected with a remarkably acute feeling for the times in which they lived—the times of crisis and great change, a kind of cultural upheaval, for it was in those decades that the great Russian art finally took shape—whose force and scope were equal to any of the greatest upsurges in the history of the human spirit. So they could not help urging time on, they certainly were aware of their own role in this upheaval, the more so that it involved not only questions of art. Abolition of serfdom was at that time in preparation, and the struggle for the forms of that abolition was in full swing. The people awakened to conscious life. But the awakening was not an easy one. "Will you awaken full of strength?" appealed Nekrasov, famous democratic poet, to the people. Who was going to awaken it? Who was going to give an impulse to the movement of culture? "...And we are all seeking, thirsting, waiting (waiting for someone to tell us what is to be done)...," wrote Dobrolyubov, describing that situation. "It seems to us that everybody around us is either tormented by the same perplexity that torments us, or has crushed his own feelings in his heart and confines himself to pursuing only his petty, selfish, animal interests. And so life passes, day after day, until it dies in a man's heart, and day after day a man waits and hopes that the next day will be better, that his doubts will be solved tomorrow, that somebody will tell us how to do good."⁴³ The burden of that responsibility, of that all-powerful word "Forward", was assumed by the revolutionary democrats. Their work of enlightenment was in the name of the people and it was addressed to the people. In their activity, one sees clearly a personal feeling of responsibility for the country's fate. Let us recall the lines from Chernyshevsky's letter to his wife written already in the Peter and Paul Fortress: "I will tell you one thing: our lives belong to history.... Since Aristotle's times no one has done what I intend to do, and I shall be men's kind teacher for centuries, like Aristotle" (Chernyshevsky, XIV, 456).

What is the historical and socio-cultural meaning of the revolutionary democrats' conception of enlightenment?

Lenin pointed out the following features that were characteristic of the revolutionary-democratic movement. The first trait characteristic of the "heirs" of Narodism was, according to Lenin, "a violent hostility to serfdom and *all its* economic, social and legal products".⁴⁴ That meant defence of right under which the individual was protected by laws and could lay a claim to independence, for serfdom contradicted above all the interests of the spontaneously active individual. Certain Renaissance-like traits are often pointed out in the work of Alexander Pushkin in Soviet literature; now, if the Renaissance stands for the emergence of a free and spontaneously active individual, then Renaissance features can be discerned in the entire 19th-century classical Russian literature, in which the problem of the individual was posed as acutely as never before or after. The revolutionary democrats played a really important role in the solution of that problem.

Lenin writes: "The second characteristic feature common to all the Russian enlighteners was ardent advocacy of education, self-government, liberty, European forms of life and all-round Europeanisation of Russia generally."⁴⁵ Europeanisation ceases to be a state, military or administrative need and becomes a social, cultural, political and economic one, an activity developing from within and not from above.

Lenin continues: "And the third characteristic feature of the 'enlightener' was his defence of the interests of the masses, chiefly of the peasants (who, in the days of the enlighteners, were not yet fully emancipated or only in the process of being emancipated), the sincere belief that abolition of serfdom and its survivals would be followed by universal well-being, and a sincere desire to help bring this about."⁴⁶ It was in the attitude to the problem of the people that the entire depth and sober-mindedness of the positions of revolutionary democrats were most clearly manifested. Slavophiles like Samarin believed, for instance, that the "natural school" slandered the peasant, the people, when it described peasant life in its true colours. The critical drive of Russian literature was defended by the revolutionary democrats; unlike the Slavophiles (and some Westerners, too), they did not at all believe that serfdom, which had lasted for many centuries, had not affected the Russian peasant at all. If that were so, there would be nothing to fight against, and legal abolition of bondage would suffice. The idealisation of the peasant in his then state, so characteristic of the Slavophiles, the "*Pochvenniki*" [a Slavophile trend preaching closer contacts with the common people—*Ed.*] and the Bakuninites, comes from the fact, Chernyshevsky believed, that the position of the people "appeared

hopeless" to them, and they did not dare to judge them by the criteria applicable to educated society. This feeling of hopelessness and unwillingness to do anything to rouse the people's spontaneous activity was "the source of the insurmountable tendency towards embellishing the people's mores and notions" (Chernyshevsky, VII, 857). The demand for presenting the peasant as an individual in his own right (instead of describing peasant life as the highest stage in the development of mankind), so brilliantly implemented later by Russian literature (by Chekhov, Bunin, Leo Tolstoy in his later works), was first formulated by Chernyshevsky. "Let us forget," he wrote, "which of us is a man of the world, which merchant, burgher or peasant—let us regard everyone as just people, and let us judge everyone according to human psychology, without permitting ourselves to conceal the truth out of respect for the title of peasant" (Chernyshevsky, VII, 862). In the final analysis, it was a question of revolutionary overcoming of the survivals of serfdom and the revolutionary democrats looked for support among those men from the people in whom the "initiative of the people's activity" (*Ibid.*, 863) lay fallow for the time being. Chernyshevsky and his comrades-in-arms, being enlighteners, attempted to implant in the people an ideal that is essential for any stratum of society—the ideal of a free, spontaneously active individual. As Lenin wrote, they defended the interests of the popular masses on the basis of that criterion.

NOTES

- 1 N. Ya. Danilevsky, *Russia and Europe*, St. Petersburg, 1889, pp. 314, 315-316 (in Russian).
- 2 M. Katkov, "On Our Nihilism: Concerning Turgenev's Novel", *Russkii vestnik*, 1862, July, p. 407
- 3 V. I. Lenin, *Collected Works*, Moscow, Vol. 2, pp. 505-506.
- 4 F. Engels, *Anti-Dühring*, Moscow, 1969, p. 25.
- 5 N. G. Chernyshevsky, *Complete Works* in 15 Vols, Vol. 3, Moscow, 1947, p. 359 (further on, references to this edition are given in the text) (in Russian).
- 6 S. M. Solovyov, *The History of Russia since Ancient Times*, Book 7, Vol. 13, Moscow, 1962, p. 9 (in Russian).
- 7 G.W.F. Hegel's *Werke. Vollständige Ausgabe durch einen Verein von Freunden des Vereinigten*, Vol. 9, Berlin, 1837, p. 382.
- 8 A. Ya. Gurevich, *Problems of Mediaeval Popular Culture*, Moscow, 1981, pp. 154-159, 344 (in Russian).
- 9 M. L. Gasparov, "The Carolingian Renaissance (8th-9th Centuries)", *Memorials of Mediaeval Latin Literature of the 4th-9th Centuries*, Moscow, 1970, p. 242 (in Russian).
- 10 V. G. Belinsky, *Complete Works*, Vol. 5, Moscow, 1954, p. 128 (in Russian) (subsequent references to this edition are given in the text of the article). See also V. G. Belinsky, *Selected Philosophical Works*, Moscow, 1956, p. 126.
- 11 N. K. Gudziy, *History of Ancient Russian Literature*, Moscow, 1956, p. 21 (in Russian).
- 12 D. S. Likhachev, *The Development of Russian Literature in the 10th-17th Centuries*, Leningrad, 1973, p. 22 (in Russian).

- 13 P. Ya. Chaadayev's *Works and Letters*, Vol. 2, Moscow, 1914, p. 110 (in Russian).
- 14 *Izbornik*, Moscow, 1969, p. 75.
- 15 Let us note that this tendency, generally characteristic of the Middle Ages, was more pronounced in Byzantium, which influenced Rus; in Byzantium, the view was widely current of the world as a school, of history as a process of education, and of man as a pupil (see S. S. Averintsev, *The Poetics of Early Byzantine Literature*, Moscow, 1977, pp. 161-171 (in Russian)).
- 16 I. V. Kireyevsky, *Criticism and Aesthetics*, Moscow, 1979, p. 292 (in Russian).
- 17 D. S. Likhachev, op. cit., p. 19.
- 18 V. O. Klyuchevsky, *Unpublished Works*, Moscow, 1983, pp. 304-305 (in Russian).
- 19 K. Marx and F. Engels, *Collected Works*, Vol. 12, p. 230.
- 20 Illarion, "The Discourse on Law and Grace", *Culture as an Aesthetic Problem*, Moscow, 1985, pp. 105-106 (in Russian).
- 21 A. N. Robinson, *The Literature of Ancient Rus in the Literary Process of the Middle Ages*, Moscow, 1980, p. 160 (in Russian).
- 22 S. M. Solovyov, *Selected Works, Notes*, Moscow, 1983, p. 223 (in Russian).
- 23 M. N. Tikhomirov, *Russian Culture in the 10th-18th Centuries*, Moscow, 1968, p. 99 (in Russian).
- 24 V. O. Klyuchevsky, op. cit., pp. 300-301.
- 25 M. N. Tikhomirov, op. cit., p. 275.
- 26 A. I. Herzen, *Collected Works in 30 Vols.*, Vol. 7, Moscow, 1956, p. 162 (all subsequent references to this publication are given in the text).
- 27 V. O. Klyuchevsky, *Works*, Vol. 2, Moscow, 1957, p. 396 (in Russian).
- 28 A. S. Pushkin, *Complete Works in 10 Vols*, Vol. VII, Moscow-Leningrad, 1951, p. 307 (in Russian).
- 29 *Ibid.*, p. 306.
- 30 *Afanasy Nikitin's Voyage Beyond Three Seas*, Leningrad, 1986, p. 50 (in Russian).
- 31 M. N. Gromov, *Maxim the Greek*, Moscow, 1983, p. 24 (in Russian).
- 32 V. O. Klyuchevsky, *Unpublished Works*, p. 302.
- 33 D. I. Pisarev, *Works in 4 Vols*, Vol. 1, Moscow, 1955, p. 61 (in Russian).
- 34 N. A. Dobrolyubov, *Collected Works in 9 Vols.*, Vol. 3, Moscow-Leningrad, 1962, p. 306 (in Russian).
- 35 A. Efros, *Two Centuries of Russian Art*, Moscow, 1969, pp. 29-30 (in Russian).
- 36 A. M. Panchenko, *Russian Culture on the Eve of Peter's Reforms*, Leningrad, 1984, p. 188 (in Russian).
- 37 K. Marx and F. Engels, *Selected Works*, Vol. 1, Moscow, 1969, p. 127.
- 38 Nicolai Gogol, *Dead Souls*, Baltimore, 1961, p. 339 (with an interpolation by the present translator). (Further references to this edition are in the text.)
- 39 N. A. Dobrolyubov, *Selected Philosophical Essays*, Moscow, 1956, p. 182.
- 40 *Ibid.*, p. 214.
- 41 F. M. Dostoyevsky, *Complete Works*, Vol. 21, Leningrad, 1980, p. 12 (in Russian).
- 42 *Ibidem*.
- 43 N. A. Dobrolyubov, op. cit., p. 419.
- 44 V. I. Lenin, *Collected Works*, Vol. 2, p. 504.
- 45 *Ibidem*.
- 46 *Ibidem*.

Miklouho-Maclay: A Great Russian Scholar and Humanist

Daniil TUMARKIN

Among the many outstanding figures in the intellectual world of the 19th century, Nikolai Miklouho-Maclay justly has his place.

He was, at one and the same time, a courageous traveller, an erudite scholar, and a humanist of progressive views. He was an active public figure, and fought for the rights of oppressed peoples. Taken individually, such qualities are not especially rare: it was their combination in one person that defines Miklouho-Maclay's exceptional character.

Nikolai Miklouho-Maclay* was born in 1846, the son of a railway engineer. His father, a strict but just man, died in 1857 before being awarded his pension and all the cares of raising their five children were borne by his mother. For that time, she was a woman of advanced views. As a girl she had been close to the group around Alexander Herzen, the outstanding Russian writer and revolutionary; as another son later recalled, she brought up her children in a humane and just atmosphere to respect people of all nationalities. This upbringing together with the straitened material circumstances under which they lived, and the struggle against need, all opened the future scholar's eyes to the world around him. At the age of eighteen he would write: "I always feel a great sympathy for poor people and those facing difficult political and social conditions. I have more sympathy for the poor and the deprived than for the wealthy and those enjoying all their rights."¹

* 'Miklukho-Maklay' would be a more exact transliteration. However, when he was living abroad he usually signed his name as Miklouho-Maclay (or, more rarely, as Mikloucho-Maclay) and we have followed this practice here.

As the young Nikolai was growing up, Russia experienced a period of dramatic change. Serfdom was abolished but on terms that favoured the landowners. In the years leading up to this reform and after its public announcement in 1861 there were peasant uprisings, student disturbances and increased activity by revolutionary democrats, who called for the overthrow of tsarism and the transfer of land to the peasants. Nikolai Miklouho-Maclay was also affected by this powerful democratic upsurge. While at the gymnasium he read and discussed the forbidden works of Herzen with his fellow pupils; for taking part in a student demonstration at the age of fifteen he was arrested and spent three days in prison. In 1863 he entered St. Petersburg University but he studied there for less than a year. He was expelled for his participation in student gatherings and forced to finish his education abroad.²

As a student Miklouho-Maclay made a deep study of zoology and comparative anatomy. However, he also took an interest in physical anthropology and ethnography, and in philosophy and political economy as well. As can be seen from his letters and his summaries of the books he had read, he was then attracted to the ideas of the French Utopian Socialists. Yet his intellectual master remained Chernyshevsky. This great Russian thinker, scholar, writer and journalist was recognised as the leader of the revolutionary-democratic movement in Russia in the late 1850s and early 1860s. Miklouho-Maclay had become acquainted with Chernyshevsky's philosophical and economic writings and with his articles on Russian problems before he went abroad. On leaving Russia he took with him *What Is to Be Done?*, the novel in which Chernyshevsky depicted the future socialist order in allegorical form and portrayed the "new people" who were struggling for a radical change in Russian society. In those years this novel was his constant companion.

At Jena University Nikolai Miklouho-Maclay attended lectures by Ernst Haeckel, one of the greatest of 19th-century biologists and a distinguished follower of Darwin. Haeckel noticed the young Russian's interest in biology and the depth and originality of his thinking. He made him his assistant and between 1866 and 1869 Miklouho-Maclay visited Madeira, the Canary Islands, Morocco and the Red Sea, chiefly to study marine fauna. Yet while travelling around the shores of the Red Sea, Miklouho-Maclay already displayed those traits which would characterise his later life: a penchant for difficult and dangerous enterprises, and a deep interest in the cultures of other peoples and the way they lived.

In 1869 Miklouho-Maclay returned to St. Petersburg and began to work at the Academy of Sciences' Zoological Museum. He soon presented the Council of the Russian Geographical Society with his plan for an expedition to the Pacific Ocean that would begin with its northern waters and last for many years. This was chiefly conceived as a zoological investigation; Miklouho-Maclay only suggested study-

ing physical anthropological and ethnographical questions in the time left over from the expedition's main studies. The Council accepted Miklouho-Maclay's plan in principle and promised to help him carry it out. In preparing for the expedition, however, the scholar's ideas underwent fundamental change.

His discussions and correspondence with leading scientists and the scientific literature convinced Miklouho-Maclay that it would make better sense to begin his intended long years of study with the enormous island of New Guinea, which was then practically *terra incognita* for Europeans. He came to realise that, in both academic and social terms, the most pressing need was for a study of the inhabitants of the island, for the fantastic rumours then current about the Papuans³ were being exploited by racists.

In the 1850s and 1860s the study of human races and the interpretation of racial differences had become a highly controversial field of more than academic interest. Many noted English and American anthropologists (James Hunt, Burton, Morton, Nott, Gliddon and others) tried to prove that human races were unequal, and that the difference in their cultural levels was due to their innate biologically-determined qualities; the white races, they argued, were destined by nature to rule and the dark races, to be ruled. These theories were used by the slave-owners and their supporters to defend their position, and subsequently were quoted in justification of colonial expansion.⁴

However, it was not only the racist-anthropologists who believed in a qualitative inequality between human races and thought those with dark skin to be comparatively closer to the apes. There were also certain European scientists who mistakenly supposed that such ideas would help to establish Darwinism and the materialist world outlook as a whole. Such conceptions, they thought, refuted the biblical teaching that god had made man and provided additional arguments in favour of man's descent from the apes. These followers of Darwin allotted the Papuans, Bushmen and other culturally-backward peoples the role of "intermediary link" between Europeans and their animal forbears. This was a view shared by the young Miklouho-Maclay's teacher, Haeckel. Yet to Miklouho-Maclay the danger of such conceptions, whatever their authors' intentions, was quite obvious. Himself a convinced Darwinist, he nevertheless differed with his teacher and like-minded scientists on the issue of race. He decided to conduct a rigorous investigation, using the inhabitants of New Guinea as his example, to show with indisputable facts what the dark-skinned races were really like.⁵

Miklouho-Maclay made thorough preparations for the expedition. He had discussions with the leading Russian specialists in various fields and then travelled to the West to seek the advice and suggestions of German and English scientific and scholarly authorities. In London he met the famous biologists, Thomas Huxley

and Alfred Wallace, and according to their memoirs made a great impression on them; they were struck by his courage and the humanitarian principles guiding his plans.⁶

In Russia he battled with some difficulty in the Geographical Society to preserve the changes that he had introduced into the programme of his expedition. Then it took him almost a year by sea to reach his destination. In September 1871, however, the Russian ship *Vityaz* reached the northeast coast of New Guinea and Miklouho-Maclay disembarked where no European had ever set foot before.

Here he spent 15 months and if we include two later visits (in 1876-77 and 1883) his total stay amounted to three years. The Maclay Coast, as it became called, was a stretch of shore over 150 miles long reaching from Cape Croisilles to Cape King William. We chiefly know about his life and activities at this time from the diaries he kept. They are not only a valuable source for studying the local population but also, to a certain extent, a self-portrait of Miklouho-Maclay. From their pages we build up an impression of an extraordinarily modest and fearless man who was an educator, a humanist and a progressive scholar.

A few days after he landed, Miklouho-Maclay set out, unarmed, for the nearest village. Its inhabitants gave him a hostile reception—several arrows passed close to his head. To show his peaceful intentions Miklouho-Maclay unrolled a sleeping mat on the ground and lay down to sleep surrounded by armed strangers. This extraordinary and, at first sight, improbable incident was typical of the man. He managed to overcome the Papuans' suspicion by his bravery, patience, justice and love for his fellow human beings and won their trust and affection.

Tolstoy subsequently wrote to him: "You were the first to demonstrate beyond doubt by your experience that man is the same everywhere, i.e. a good and sociable being, and that we can and should only employ goodness and truth in our dealings with him, not guns and hard liquor. You proved this, moreover, by a feat of true bravery."⁷

Miklouho-Maclay gained the confidence of the villagers of Bongu, Gorendu and Gumbu and became friendly with them. He learned to make himself understood in their language and established good relations with the inhabitants of many of the Maclay Coast villages. On this basis, he could then undertake wide ethnographical and physical anthropological investigations. "It was my rare fortune," he wrote, "to observe a population that was completely isolated from contacts with other peoples; moreover, they were living at a stage of cultural development when all tools and weapons are made out of stone, wood and bone."⁸ Miklouho-Maclay made the fullest use of this unique opportunity. He gave a thorough and detailed description of the economy and material culture of the Papuans, and of their daily life, customs and practices. He paid great attention to

their specific art. To this day, his writings have remained an important source on the ethnography of New Guinea, and in many respects are an unsurpassed model of ethnographic fieldwork.

Miklouho-Maclay gave a rather less detailed account of the Papuans' social system and religious beliefs. It was not just the particular complexity of these matters that deterred him: the scholar was an unusually cautious and conscientious researcher. He always attempted to keep to precise and established facts and refrain, as he himself put it, from supplementing his personal observations with various speculations and hypotheses. Yet one can also find many interesting observations on these matters in his diaries and articles.

He established that each village on the Maclay Coast constituted a community; they were organised according to the principle of collectivism, and did not contain either property-holders or the propertyless. "There were no chiefs in these communities," he wrote, "and no rich or poor, and so there was no envy, stealing or violence."⁹

From Miklouho-Maclay's notes we can see that the local inhabitants had neither hereditary nor elective leaders. However, certain "big men" were haphazardly distinguished from the community's members due to their battle skills, their successes as hunters or cultivators, or their knowledge of magic ritual. Important decisions were usually made collectively by all the adult men of the village.

Taken as a whole, Miklouho-Maclay's observations give a vivid presentation of the traditional way of life among the inhabitants of the coast that bears his name. We see real human beings with their distinctive characters and peculiarities acting within the bounds of a specific culture with its own norms and customs. However, these data enable us to make much wider generalisations for in essence they reflect the most important aspects of human life at one of the early stages in its development. Miklouho-Maclay preserved for ethnography factually unique material, and did so without prejudice or conjecture: he thereby assured himself a place in the history of the study of preclass society.

Miklouho-Maclay had first set out for New Guinea to make a physical anthropological study of the Papuans. His findings were of great importance. Since his task was to make a comparative study of racial types in the Pacific region he of course did not let the distinguishing features of its inhabitants pass unremarked. At the same time, however, he never forgot that racism used the physical differences between human races as the basis for its erroneous theories; indeed, it not only exaggerated the differences in one or another indicator but invented non-existent distinctions. This explains the particular thoroughness and yet objectivity which Miklouho-Maclay as a genuine scholar devoted to this subject, when studying the characteristics that many scientific authorities of the time regarded as being the distinguishing features of the Papuan race.

Although they had never seen the indigenous inhabitants of New Guinea or, at the most, only observed them from the deck of a ship, these so-called authorities asserted that the Papuan race exhibited a number of "ape-like" features. For example, in the textbooks and scientific literature on physical anthropology one could read that the hair on the head of a Papuan grew in "clumps or tufts", that his skin was noticeably rougher than a white man's, and so on. Miklouho-Maclay found these assertions to be quite without foundation.

"I have seen no sign whatever of a cluster or tuft-like distribution of hair," he stated in an article written following his first stay on the Maclay Coast. "The hair on a Papuan's head grows exactly like that of a European...."¹⁰ "I can in no respect agree with those authors who attribute a particular roughness of skin to the Papuans," he emphasised in the same article. "Their skin is smooth and differs in no way from that of Europeans; and this applies as much to the men, as to the women and children."¹¹ Step by step, Miklouho-Maclay established that the island's inhabitants did not fundamentally differ in their physical make-up from Europeans. And each time he confirmed this he experienced, as he wrote, "a pleasant feeling in my heart".¹² But perhaps yet more important was the great similarity the scholar discovered between Europeans and Papuans is all that concerned their psychological qualities. In his diaries and articles Miklouho-Maclay described Papuan faces as good, gentle and intelligent, and he was gladdened by their industry, honesty, quick grasp and cleverness; they adopted new ideas and practices with ease, he emphasised. He became convinced and in his works convincingly demonstrated, that the Papuans were just like white people, but lived at a lower level of historical development. These observations were then of great importance, and remain so to this day. "Backward" nations were incapable of progress, it had been argued, due to certain of their innate features and their psychic disposition: using the Papuans as his example, Miklouho-Maclay showed that such racist assertions were without any basis in fact. The Russian researcher, throughout his discussions, led his readers to the conclusion that the Papuans, like other dark-skinned peoples, were capable of catching up the civilised inhabitants of Europe and America.

He clearly appreciated the inhuman essence of such racist theories. In an article written during his second stay on the Maclay Coast he firmly denounced assertions that the dark-skinned races should disappear and make way for the white variety since they were a lower and weaker species. "Once we have admitted this proposition," he wrote, "and advocate the destruction of the dark-skinned races using guns and disease it is logical to go further and suggest an intraspecies selection from within the white race of all those individuals who do not meet the accepted ideal for representatives of the one and only chosen white race: they should also be destroyed. It is logical not to stop there. All hospitals, mental asylums and

orphanage should be recognised as not only unnecessary but even harmful, and any new-born baby who does not reach the accepted height and weight should be eliminated, and so on. If, on the contrary, we rely on dispassionate observation we shall reach the conclusion that the various parts of the globe with their different conditions cannot be settled by one variety of the *species homo*.... The existence of different races is therefore quite in accordance with the laws of nature, and we must recognise the human rights of the representatives of these races."¹³

These noble words written on that distant New Guinean coast are a great credit to Miklouho-Maclay. The Russian scholar had prophetically glimpsed the enormous threat posed by racist theories: fifty years later they would find their most extreme expression in the bestial policies of the Third Reich.

In the 1870s and 1880s Miklouho-Maclay also made two visits to the southeast coast of New Guinea and one to the southwest; he stayed on many of the islands of the Polynesian, Melanesian and Micronesian archipelagoes; and twice, in extremely difficult circumstances, he crossed the Malacca peninsula. These travels were also very fruitful. We may recall his precise and graphic description of the Admiralty islanders, his interesting account of social relations on the islands of Palau and Yap, and the valuable physical anthropological observations he made in the jungles of Malacca.

Everywhere, whether in New Guinea or the other Pacific Islands, Miklouho-Maclay gathered ethnographic collections. Today they are preserved in Leningrad, at the Academy of Sciences' Museum of Physical Anthropology and Ethnography. Altogether they amount to more than 600 items and are of unsurpassed importance for these sciences, because they allow the traditional material cultures of the Pacific Islands peoples to be studied in detail. Moreover, many objects from these collections are superb specimens of prehistoric art.

The drawings Miklouho-Maclay made during his travels are also of great ethnographic and artistic value. He was a gifted artist and achieved great expressiveness with modest means. The drawings are distinguished by their exact proportions and thorough detail. His portraits clearly reflected both anthropological types and human personality. Thus the more than 800 drawings executed by Miklouho-Maclay may be considered a valuable source for ethnography and physical anthropology.

The tropical climate did not suit Miklouho-Maclay and he suffered frequently from malaria. The last years of his life were spent in Australia, mainly in Sydney, on the recommendations of his doctors. Here he played an active part in the local Linnaean Society and worked at the first marine biological station in the Southern Hemisphere: the station had been built according to his plan on the outskirts of Sydney. In 1884 he married Margaret, the daughter of the former prime minister of New South Wales, Sir John Robertson.

On his travels through Oceania, Miklouho-Maclay came face to face with a terrible reality: European and American sailors and traders were kidnapping the islanders into slavery, getting them intoxicated, and robbing and killing them. The humanist scholar was shaken by these evil activities. "The extermination of the dark-skinned races is nothing less than the application of brute force," he wrote in 1877. "...Any honest person must rise in protest against this abuse."¹⁴

For many years, Miklouho-Maclay passionately protested against the perpetration of these evil activities and demanded that the human rights of the Pacific islanders be respected. He sent letters and telegrams to European statesmen, gave public lectures, and wrote articles for newspapers and periodicals. Thus in April 1881 an open letter from Miklouho-Maclay to John Wilson, commanding officer of British naval forces in the south-west Pacific, appeared in the Melbourne newspaper the *Argus*. The scholar wrote that "the exportation of slaves (for it is only right to give the transaction its proper name) to New Caledonia, Fiji, Samoa, Queensland and other countries by kidnapping and carrying away the natives, under cover of false statements and lying promises, still goes on to a very large extent, I am prepared to aver and support by facts. The conduct of many whites towards the aboriginals of the South Sea Islands is in no way justifiable, and of the truth of this, I have many instances at my command.... The least that the blacks have a right to expect from the civilised races is, neither pity nor sympathy, but justice, and this I feel confident can be given them.... It would be desirable if an international understanding upon this subject could be speedily brought about."¹⁵

Several months later, Miklouho-Maclay presented the British authorities with a detailed and thoroughly documented "Notes *in re* Kidnapping and Slavery in the Western Pacific" that developed the theme of his letter. Here he concentrated his attacks on the slave trade and the entire system of forced labour then flourishing in Australia and Oceania. Depending for the most part on his own observations, and citing specific cases, Miklouho-Maclay showed the real nature of the "free labour trade". He described the methods whereby the islanders, including children and teenagers, were seized and their cruel exploitation on board European and American ships where they were often killed. He detailed the forms taken by the trade in "live goods" and the negative influences it had on the traditional societies of Melanesia and Micronesia. In one section of his "Notes" he told how South Sea islanders lived and worked on the sugar plantations of Queensland (in north-east Australia).¹⁶

In his attempts to preserve the independence of the Maclay Coast's inhabitants, he worked out a scheme for setting up a "Papuan Union", an independent state on the north-east coast of New Guinea. The first outlines of this plan had appeared as early as 1876.

However, he drew up a detailed version of the "Maclay Coast Scheme" in November 1881. In it he proposed to raise the level of the local inhabitants' civilisation and enable them to reach a "higher and more general stage of purely native self-government" by relying on local institutions and customs: this would bring the isolated villages of the Maclay Coast together in a single Union. To resolve questions of general importance, he proposed the institution of a Great Council made up of the most influential adult males, the "big men" of the main villages; matters of a "local character" would remain the province of the traditional village councils. "My own position vis-à-vis the Great Council would be that of an adviser and deliberator," explained Miklouho-Maclay, "as well as their representative in connection with foreigners, or people not belonging to the Union of Maclay Coast Papuans...." Among the very first tasks envisaged in the scheme were the opening of schools, the construction of wharves, roads and bridges, and the overall development of the local economy.¹⁷

When assessing Miklouho-Maclay's project one is above all struck by the broad humanity of the Maclay Coast Scheme. It vividly reflects its author's anti-racist views and his conviction that all peoples, irrespective of their race and position on the scale of social development, were capable of developing their culture and progressing. Many contemporary anthropologists (not to speak of the traders and colonial officials) considered the Papuans to be "subhuman" and an intermediary stage between Europeans and their animal forbears; at best, they were looked on as a lower race. The Russian scholar, on the contrary, had no doubts on the basis of his scientific convictions and personal acquaintance with the Maclay Coast villagers that it was possible to raise their level of civilisation.

Miklouho-Maclay's scheme had two other notable features that were unusual for that time. Although one of the most immediate measures was to be the opening of schools, nowhere was it suggested that the New Guineans should be converted to Christianity or that missionaries be invited to the Maclay Coast. There were good reasons for this.

As far back as 1871, when the *Vityaz* was still approaching the New Guinea coast, Miklouho-Maclay witnessed a bloody clash on Rotuma Island caused by the rivalry between British and French missionaries. On his later travels in Melanesia and Micronesia he became convinced that the advocates of Christianity frequently served as the vanguard of foreign intrusion. Certain missionaries, he wrote in 1878, while masquerading as the champions and friends of the natives, were acting as traders. Yet still more important, in his view, was that all the activities of the missionaries, whatever their personal intentions, in practice cleared the way for the "invasion of the traders and their accoutrements: the introduction and use of firearms and hard liquor, the spread of disease and prostitution, the carrying off

of the natives (by force or deceit) into slavery, and so on".¹⁸ These "blessings of civilisation", he commented with irony in another article, were hardly compensated for by the ability to "read, write and sing psalms".¹⁹ It is not surprising then that Miklouho-Maclay in no way wished to aid the appearance of missionaries on the Maclay Coast.

The suggestion in his scheme to open schools in the villages of New Guinea was far-sighted. The colonial powers who soon divided all of the island between them considered the idea superfluous. H. Murray, the governor of Papua from 1907 to 1940, repeatedly declared that the best education for its native inhabitants was to work in the mines and plantations owned by the white settlers. It was in fact only after the Second World War that the Australian authorities were forced to create a network of rural elementary schools in Papua New Guinea, i.e. to do what Miklouho-Maclay had suggested as long ago as 1881.²⁰

The Russian scholar had given thorough consideration to many aspects of the "Maclay Coast Scheme". As a whole, unfortunately, the scheme had an unrealistic and utopian character. In part, this was due to the low level of socio-economic development among the local inhabitants which greatly hampered any such radical changes. And then there was the inevitable resistance of the colonial powers which just at that moment were preparing to divide up the still unoccupied Pacific Islands territories, including the eastern part of New Guinea.

As Miklouho-Maclay himself wrote with bitterness, the thought occurred to him several times that his appeals to spare the islanders in the name of justice and humanity "were like asking sharks not to be so voracious".²¹ He proved unable to save his friends. In 1884 south-east New Guinea was annexed by Great Britain and the north-east part, including the Maclay Coast, by Germany. He then began to struggle against the seizure of the Maclay Coast and, trying to manipulate the rivalry between Britain and Germany, unsuccessfully sought the support of the tsarist government. In January 1885 he wrote to the Russian Foreign Minister: "What I would like for the Maclay Coast is independence under a general European (international) protectorate."²² However, the ministries in Berlin, London and St. Petersburg did not take Miklouho-Maclay's appeals seriously.

In his efforts to deter the intrusion of German colonisers on the north-east coast of New Guinea, he drew up yet another utopian project. In April 1886 he arrived in Russia where he put forward a plan to establish a Free Russian Settlement in the Maclay Coast area. This idea met with wide public support. About 2,000 people responded to his call for volunteers. Miklouho-Maclay had thought to set up a free settlement that would correspond to his social ideals. Reading his proposal involuntarily calls to mind the scholar's student years when he revered the work of Chernyshevsky and the French Utopian Socialists. His scheme in fact envisaged setting up a

cooperative commune of free settlers who would work the land collectively, distribute material benefits in accordance with the amount and the quality of work each performed, and administer themselves democratically. "The colony will form a commune," he wrote, "and will be administered by an elder, a council and a general gathering or meeting of all the settlers."²³ Didn't Vera Pavlovna, the heroine of Chernyshevsky's novel *What Is to Be Done?*, dream of such working communes? It is also notable that V. I. Modestov, the well-known Russian historian and publicist, drew a parallel between the proposed settlement and Fourier's utopian plans for reorganising society when he described the scheme in a newspaper article.²⁴

The Vice-President of the Russian Geographical Society, P. Semyonov, knew Miklouho-Maclay very well; later he would recall that Miklouho-Maclay intended "to establish the kind of relations between the Russian colonists and the natives that would unite their differing interests; in place of the selfish exploitation of the natives, such relations would have assured them against the threat of total extermination".²⁵ Thus we can regard the plan to set up a free Russian settlement as a modification and elaboration of the Maclay Coast Scheme, which had been equally utopian for that time. The scholar's tragedy was that he hoped to implement his noble plan in a world dominated by capitalism and colonial expansion and was counting, moreover, on the cooperation of the Russian Tsar.

In October 1886 the special committee appointed by Alexander III to examine Miklouho-Maclay's proposals rejected his plan for a free Russian settlement. The committee members had two reasons for their decision. First, they wanted to avoid a conflict with Germany in a region which was so far away from the Russian Empire's shores. But second, and especially, because of "the form of administration, which the organiser proposed to give his colony" and the dubious reliability of the settlers. The committee decision was supported by the Tsar's ministers. On December 9, 1886, Alexander III drew up a resolution: "This matter is considered finally closed. Miklouho-Maclay's proposal is to be rejected."²⁶ The failure of his attempts to save the indigenous inhabitants of the north-east New Guinean coast from intruders deeply upset the scholar.

By this time, Miklouho-Maclay had published more than 100 articles in scientific and scholarly journals in Russia, Germany, Britain, France, Australia, the Dutch East Indies (now the Republic of Indonesia) and Singapore. Their subject-matter covered different issues in physical anthropology and ethnography, and also zoology, comparative anatomy and certain other disciplines. The time had come to sum up his findings in a general work, and first of all, to work through his expedition diaries and prepare them for publication.

Whilst he was still in some doubts as to how to organise and write his major work on the research he had conducted in New Guinea he

received a letter from Leo Tolstoy. "In the name of all that is sacred," advised the writer, "set out in the greatest detail, and with your characteristically scrupulous regard for the truth, all of your human relations with the people there. I do not know what contribution your collections and discoveries will have for the discipline you serve; however, your experience of living with savage men will constitute an epoch in the discipline that I serve—that of studying how people should live together. If you write this account it will be of great and good service to mankind."²⁷

Taking the great writer's advice, Miklouho-Maclay decided not to omit many episodes in his diaries which were being prepared for press, apparently of a personal nature, which told of his relations with the islanders

Years of travel, sickness and misfortune had seriously undermined Miklouho-Maclay's health. He dictated the texts of his diaries, being no longer able to write himself. In summer 1887, already severely ill, he moved with his family from Sydney to St. Petersburg. Probably he realised that his end was near, and was doing all in his power to speed up the preparation of his manuscripts for publication. However, his strength ebbed away. On April 14, 1888, he died in a Petersburg hospital, not yet having reached the age of forty-two. His widow and children returned to Australia where his descendants live to this day.

* * *

In the last years of his life, Miklouho-Maclay was quite a well-known figure both in Russia and abroad, in Western Europe and in Australia. For example, the British Prime Minister William Gladstone expressed a high opinion of Miklouho-Maclay's personality and activities in a letter written in 1882.²⁸ Soon after his death, however, Miklouho-Maclay was almost completely forgotten. A group of Russian scholars, who were like-minded or his friends, made determined efforts to ensure that his manuscripts were published.

It was only after the October Revolution had freed the peoples of the Russian Empire and proclaimed peace, equality and friendship among the world's nations that Miklouho-Maclay's public and scholarly achievements were given due assessment and recognition.

In 1923 the diaries of his major voyages to New Guinea were published for the first time, one of the most outstanding works of its kind. Other publications followed. After tremendous preparatory work, a five-volume collection of his works was published in 1950-1954 by the Academy of Sciences' Institute of Ethnography. These contained also photographs of his drawings and collections, articles about his life and activities, and full commentaries.

Not even this major work was exhaustive, however. Over the last three decades many more drawings and writings by Miklouho-Maclay

have been located, both in the USSR and elsewhere, and also other materials concerning his life and activities. At present a new and more complete edition of his works is being prepared that will include these discoveries.

The memory of this outstanding scholar and champion of the rights of oppressed peoples is revered in the Soviet Union. There is a street named after him in Moscow and the Academy's Institute of Ethnography bears his name. Furthermore, the USSR Academy of Sciences regularly awards the Miklouho-Maclay Prize for outstanding scientific and scholarly works about the lands and peoples of the Pacific Ocean. The scholar has become one of the favourite heroes of millions of Soviet schoolchildren.

Miklouho-Maclay himself stressed that he was speaking "on behalf of many dozens of thousands of humans whose only crime is that they have a dark skin, are weaker and unable (at present) to defend their rights themselves".²⁹ The times have now changed and what, one hundred years ago, was a utopian dream has today been made a reality.

In 1975 Papua New Guinea gained its independence. The new state includes the eastern part of New Guinea, the Bismarck Archipelago and several other islands. The achievement of independence provided important preconditions for the country's progress.

In 1971 and again in 1977 the author visited the Maclay Coast on board the Soviet research vessel *Dmitri Mendeleev*. He found that the inhabitants of Bongu and a number of other villages have preserved a glowing memory of the Russian scholar, who has become a legendary figure in certain local traditions. The islanders clearly recall that it was *tamo russ* Maclay who brought them the first iron axes and knives, many cultivated plants they did not know, and gave them a bull and a heifer. They point out the place where his hut stood. These historical facts are not only imprinted in the collective memory but also in the Bongu language. Certain Russian words, with some phonetic modification, have been preserved: *shapor* (*topor*, axe); *gugrus* (*kukuruz*a, maize); *abrus* (*arbut*, water-melon); *bika* (*byk*, bull) and others.³⁰

In 1975 Miklouho-Maclay's diaries telling of his three visits to the Maclay Coast were published in Madang, a town which has since grown up there.³¹ An Australian C. Sentinella translated the diaries into English but as a sign of respect to Miklouho-Maclay all the printing was carried out by indigenous typographers.³²

In Port Moresby, the capital of Papua New Guinea, meetings and conversations with students and lecturers at the local university and with many government representatives and public figures showed us that Miklouho-Maclay's noble activities were well known there; he was justly remembered as the first to voice the demand for the country's independence. Radio Papua New Guinea regularly broadcasts programmes about *tamo russ* Maclay and a postage stamp has been issued

in his honour. Not long ago, a street was named after him in Madang.

Neither is he forgotten in Australia, especially in Sydney where his descendants are living. In 1979, with their active participation, a Miklouho-Maclay Society was set up there. Its aims are to spread information about the great ethnographer and humanist's life and work, enable his research to be continued, and to develop cultural ties between the peoples of Australia, USSR, and Papua New Guinea.

It is now 100 years since Miklouho-Maclay died. Much has changed in the world during that time. However, the public and scholarly feats of the Russian scholar are still of service to mankind in its efforts towards progress, cooperation and friendship between all peoples.

NOTES

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- 2 B. N. Komissarov, "N. N. Miklouho-Maclay's Early Years: Towards a History of the First Petersburg Period of His Life", *Sovetskaya etnografia*, 1983, No. 1, pp. 128-139.
- 3 Like the majority of contemporary investigators, Miklouho-Maclay referred to all the indigenous inhabitants of New Guinea as Papuans. This ethnicon is used in the same sense throughout our article.
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- 7 L. N. Tolstoy, *Complete Works*, Vol. 63, Moscow-Leningrad, 1934, pp. 378-379 (in Russian).
- 8 N. N. Miklouho-Maclay, *Collected Works*, Vol. 3, Part 1, Moscow-Leningrad, 1951, p. 24.
- 9 *Ibid.*, p. 467.
- 10 *Ibid.*, p. 28.
- 11 *Ibid.*, p. 26.
- 12 *Ibid.*, Vol. 1, Moscow-Leningrad, 1950, p. 159.
- 13 *Ibid.*, Vol. 2, Moscow-Leningrad, 1950, pp. 423-424.
- 14 *Ibid.*, p. 424.
- 15 *Argus*, April 8, 1881.
- 16 N. N. Miklouho-Maclay, "Notes in re Kidnapping and Slavery in the Western Pacific", *Great Britain. Parliament. Command Papers. Correspondence Respecting the Natives of the Western Pacific (C-3641)*, London, 1883, pp. 82-84.
- 17 The "Maclay Coast Scheme" is to be found among Miklouho-Maclay's papers kept at the State Library of New South Wales in Sydney. An article describing how the document was composed and analysing its contents was published by the present author, with a Russian translation of the Scheme, in *Races and Peoples*, Issue 7,

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- 23 *Ibid.*, p. 298. Also see N. A. Butinov, *N. N. Miklouho-Maclay: A Biographical Essay*, in Miklouho-Maclay's *Collected Works*, Vol. 4, p. 553; B. A. Valskaya, "N. N. Miklouho-Maclay's Plan for Establishing a Free Russian Settlement on the Pacific Ocean Islands", *Australia and Oceania: Past and Present*, Moscow, 1970, pp. 43-44 (in Russian).
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Modern Militarism: Global Dimensions

Sergei BLAGOVOLIN,
Alexander BUZUYEV

Early in the 20th century Lenin observed that militarism was an international phenomenon and that the cosmopolitan caste of arms producers shared a common class interest in whipping up a war psychosis. Present-day realities cogently confirm Lenin's conclusion that "interlinked on a world-wide scale, capital is thriving on armaments and wars".¹

The seventies and eighties have seen a new qualitative leap in imperialism's military preparations—as evidenced in their growing globalisation. A large group of countries is being drawn into a single system of military and military-economic activity, their resources and military power being used for the purpose of solving concrete tasks on a world and a regional level.

* * *

The globalisation of imperialist activity in the afore-mentioned spheres reflects above all the political interests of the most reactionary section of the Western ruling quarters, primarily of the USA, who stake on the solution of international problems from positions of strength and on the change in their favour of the existing military-strategic parity. This is the prime mover, the mainspring of the current process geared to the achievement of economic, political and military aims.

Priority among them is given to the formation of the so-called aggregate military power (AMP), which represents a whole system of *de jure* and *de facto* existing blocs and alliances that complement one another and interact on the basis of a global distribution of functions in the military-political sphere.

The kernel of AMP is, of course, NATO. However, other blocs and alliances are playing an ever bigger role. This is due to the gradual displacement of priorities in the USA's political and economic interests connected to a growing extent with the Pacific and the Indian Oceans. As distinct from NATO, other blocs and alliances do not have a strictly formalised organisational structures providing for joint medium-range and long-range planning in the sphere of military and military-economic preparations. But each bloc is actually dominated by the USA, which dictates the scale and nature of the interaction of the participating countries. Nevertheless there are sharp disputes and differences between the states which the USA seeks to integrate into AMP in the same regions (e.g. in the Middle East). Here we see the striving of the US politico-military leadership to minimise these disputes and differences, provided it succeeds in imposing on them the so-called strategic community on the issue crucial for the USA—participation in the realisation of its global politico-military plans. There is no denying that in quite a number of cases this "informal system" of relations (without the relevant organisational structures) produces tangible results, including in the matter of bringing various elements of AMP up to the qualitative level necessary for joint actions.

From this standpoint of equal importance is the formation of AMP proper and the strengthening and expansion of an adequate military-economic structure, which enables AMP to function and which has already turned into capitalism's world military economy, into a specific sector of the world capitalist economy.

A far-flung system of organisational, scientific, technological and in certain cases of directly productive, technological ties has evolved linking the military economies of different countries that are being drawn into AMP with the US playing the dominant role. The deepening international division of labour in military production has given rise to a specific market where practically all and every type of weapon and equipment (e.g. AWACS) are sold.

A concomitant of the world military economy of capitalism is the trafficking in arms, the creation and modernisation of the war industry, the transfer of military technologies and the training of military personnel. All this plays a major role in terms of levelling out the elements of AMP.

As noted in the CPSU Programme, "the imperialist powers strive to coordinate their economic, political and ideological strategy, to create a common front of struggle against socialism, against all revolutionary, liberation movements".² A special role in these joint actions is played by the military sphere. The latter becomes a factor uniting these forces to weaken the centrifugal tendencies in those cases where inter-imperialist contradictions on many crucial issues become more pronounced.

Furthermore, the US military circles see a reliable method of preserving their military-political leadership in the capitalist world in the future in the formation of a global military structure. The US action to form AMP is actually the old imperialist tendency, transformed in keeping with the times, towards building up big empires. In Lenin's words, this tendency "is fully achievable, and in practice is often achieved, in the form of an imperialist alliance of sovereign and independent—politically independent—states".³

The USA started its cooperation with other countries in the development and production of armaments at the end of the fifties and the beginning of the sixties. Now there has already formed a system of mutual transfer of technologies, standardisation of systems of arms and—on a larger scale—of basic units and aggregates. Moreover, the electronic space systems of communication, control and reconnaissance of many Western countries have been integrated into the relevant US systems and now have put to use their technical means, such as Navstar and AWACS. The US firms also take part in the production of formally "non-American" armaments and hardware, for example, of a new European EFA fighter. In recent years the US military-industrial complex has stepped up its activity in this direction, particularly evident in its striving to get other countries to participate in the realisation of the Strategic Defense Initiative and to coordinate military research by making full use of the potentialities of the capitalist international division of labour. The accession of Great Britain, West Germany, Italy and Japan to the Programme of Star Wars also gives the USA big chances of preserving and strengthening its leading positions in the sphere of civil R&D and of obtaining additional substantial advantages over its partners-rivals. As noted by some specialists, the real purpose of SDI is to concentrate the entire advanced Western technology in the USA and its control of it.⁴

Acting without giving second thought to their partners is a characteristic feature of the policy of US ruling quarters in the military and military-economic spheres. According to the plans of these ruling quarters, the US partners must remain in a position that would preclude any possibility of a choice. It is assumed that the military-strategic subcentres of imperialism as represented by America's allies and partners must function within the framework of a single conception of global security and common strategic tasks, imposed by the USA and based on the idea of joint counteraction to the alleged Soviet threat. The USA very often ignores the interests of a whole number of countries in the sphere of regional security.

However, many of them (to say nothing of West-European countries and Japan) have specific security interests different from those of the USA. This circumstance, though it does not call in question the need for them to maintain close relations with the USA as an important element of the present correlation of forces in the

international arena, nevertheless creates preconditions for their disassociation from US power politics aimed at changing this correlation.

Hence, the probable intensification of the centrifugal tendencies within the framework of AMP largely due to the growing possibilities of some of the states meeting their security needs individually or collectively, which fact, in its turn, needs to be regulated on the basis of bilateral or multilateral agreements with a view to preventing new impulses to the arms race.

Furthermore, it is becoming ever more clear that the solution of international problems through force is fraught with the growing danger of being drawn into a disastrous conflict. The very idea of AMP may, therefore, become unacceptable to many countries associated with the USA.

In fact, due account by these countries of historical experience and the current world situation shows that without laying any special stress on building up the military component in the economic and political structure of society even major capitalist states, such as Japan, can strengthen their positions both on a regional and a world scale. On the other hand, the USA finds itself in a position when its unbridled militarisation is costing it the exacerbation of its social and economic ailments. Growing awareness of these realities evidently accounts for the growing tendency in the socio-political life of many capitalist countries to find a new, non-militarist solution to international problems.

Naturally, the US ruling quarters and military-industrial complex strain every effort to hinder this course of developments by making use of the globalisation of military and military-economic activity. The question legitimately arises whether these mounting processes influence the ability of different states to solve problems of their military activity in terms of their own interests and conceptions. Indeed, the national military and military-economic preparations, launched by the military-industrial complexes (or their elements) of those states which are drawn into AMP and the world capitalist military economy, far exceed the limits of national control. A kind of "external contour" of management is created, which is largely controlled by the USA and used for generating militarist processes in other countries. The leading role in this is played by the transnationalisation of the military-industrial complexes, that is, the location of military production in various forms beyond the national territory.

* * *

The external investment expansion of military-industrial firms that was started only in the last two decades is the result, in our opinion, of two interlinking processes: the intensification of produc-

tion by national military-industrial corporations in other countries and the ever more active involvement of transnational civilian monopolies in military business. The military-industrial transnational corporations—a specific variety of monopoly capital—have arisen at the borderline of these processes. These corporations orient themselves both on the national and international capitalist markets of armaments, have a large network of foreign branches and subsidiary companies, and take an active part in the capitalist international division of labour in military production. These include the overwhelming majority of the leading suppliers of the Pentagon and military departments of the major West-European states.

What impels the arms producers to invest their capital abroad? The reasons are many. One of them is the penetration into other countries with the object of extending markets, avoiding certain government restrictions that exist in their own countries, restricting competitors on their own territory. Another reason is their bid for self-sufficiency in the strategic types of raw materials needed for the production of modern systems of weapons and hardware. At the same time the export of capital is, for every particular military-industrial company, an instrument of the general policy of maximising sales and profits.

However, the basic reason for the export of military-industrial capital is rooted much deeper—in the exacerbation of the inherent contradictions of the operation of the law, the tendency of the average rate of profit to drop. These contradictions find expression in the presence of the constant “surplus” of capital. In our opinion, the same reason ultimately causes the heightened interest on the part of major transnational monopolies of the civilian branches in military production, which fact is a new form (although temporary and partial) of the resolution of the contradictions related to the super-accumulation of capital.

The growing involvement of the transnational corporations of the civilian branches in military business is conditioned above all by the relative worsening of the conditions for the appropriation of monopoly profit in the non-military sector of the capitalist world economy.

Profit derived from the manufacture of arms has a kind of immunity from the changing phases of cyclical development. It is guaranteed practically in all cases of world tension. The aggravation of the international situation at the end of the seventies and the beginning of the eighties therefore created particularly propitious conditions for the growth of military production at the TNC enterprises throughout the capitalist world.

Changes in the structure of property play a big role in this process. The ever wider expansion of joint ventures (with the share of TNC participation ranging from 10 to 50 per cent) is a major principle of the long-term strategy of the foreign expansion of

transnational monopoly capital. As a rule, this capital forbids the transfer of real control into the hands of foreign partners.

The military-industrial TNCs also give much attention to attaching foreign enterprises to their global pattern of technical cooperation in production. In practice not infrequently this imparts an enclave character to military production moved abroad. The latter functions in the interests of the military departments of imperialist countries and to their orders and largely depends on the scale and content of their military programmes. The orientation on the “partial” narrow specialisation of such enclaves pursues the purpose, in addition to others, of preventing access to their own military secrets. In this way leadership in the military-economic sphere of the capitalist world is reliably secured for the major imperialist states.

In recent years the military-industrial TNCs have also begun to make the most of the potentialities of regional integration. That is why, in addition to the growing tendency to create “enclave” military production abroad, they stimulate the operation of the opposite tendency (wherever they find this to their advantage), namely, the creation of large-scale military production, “incorporated” in the economic structures of other countries and oriented on the sale of the final military product both on the national and regional markets.

US monopolies have invested in military production abroad more than anybody else—not less than 4-5 billion dollars, according to modest estimates. The geographical distribution of these investments is truly global. The experience of the transatlantic ally is being more actively adopted by the leading military-industrial monopolies in Western Europe. In recent years, their participation in foreign military business has considerably increased and they are showing an ever greater interest in the US market.

If the civilian branches are dominated by the export of capital in the form of direct investments, the military sector is dominated by the export of capital in the form of portfolio investments, which formally do not provide for complete control, or through the organisation of joint ventures. For example, the Pratt and Whitney Aircraft Co, a branch of the US monopoly United Technologies, has bought the shares of the French military-industrial monopoly SNECMA, while the US concern Northrop has bought the shares of the Spanish aero-rocket corporation CASA.

Orientation on portfolio and not direct investments in foreign military enterprises producing the complete military hardware is dictated in the first place by political factors—the restrictions introduced by the governments of recipient states. Not infrequently portfolio investments enable the military enterprises to attain the same purposes as direct investments. Ownership of only several per cent of shares, if this is accompanied by the transfer of licences and managerial contracts to a foreign firm and by the conclusion of agreements on cooperation and specialisation of

production, is enough for ensuring effective control over the firm's activity. In such cases the portfolio investments ultimately grow into direct investments.

The conclusion of inter-firm military-production cooperation agreements, often assuming the form of consortiums, is a specific form of transnationalisation of the military-industrial complex, which is to a growing extent determining the main trends of the capitalist international division of labour in the military sphere. Military goods, licences and capital move from country to country within the framework of these consortiums.

In connection with the production of sophisticated arms the military-industrial quarters in various countries seek to unite the financial and scientific resources for their joint development and production in shorter periods and with the least risk, and at the same time extend the geographical framework of sales. The sharp aggravation of competition on the world capitalist arms market is not the least of the factors contributing to the increasing number of such agreements in recent years. At the same time participation in cooperation programmes is a most effective method of obtaining military orders in another country.

By providing for joint work in science and technology, production and trade the international military cooperation programmes may involve several hundred or even a thousand firms. A new system of weapons or an independent type of military hardware is chiefly an object of cooperation. However, in some cases they reach agreements on joint work only in particular sectors or in restricted spheres of the production of new systems of weapons. This kind of cooperation assumes the most diverse organisational forms: from special contracts concluded with firms of other countries or one's own foreign branches for the supply of individual components of final products to joint work along the entire complex of industrial tasks and to the creation of joint ventures.

The US military-industrial monopolies hold the first place in the number of cooperation agreements concluded in the capitalist world. Only companies that figure in the top ten companies, participate mainly with the monopolies of the NATO countries and Japan in the realisation of dozens of large military cooperation projects both in capitalist and developing countries.

For example, the project of the F-16 aircraft is a large-scale multinational military cooperation programme. While making millions from participation in this programme, the US military-industrial firms have placed under their control the aircraft and rocket industries of Belgium, Denmark, Norway and the Netherlands. The big international cooperation projects include the development and production of new types of rocketry, such as AMRAAM and ASRAAM, the EFA fighter, and an orbital manned space station. No doubt, the SDI is the largest programme in the development and

production of arms, which sets itself the task of establishing closer cooperation already at the stage of basic research and experimentation. The military-economic transnationalisation encompasses the monetary and financial sphere as well. The banks that possess large blocks of shares of the military-industrial TNCs or dispose of them on the basis of trust commissions provide substantial financial support for their expansion abroad by using the network of their representations, missions, branches and affiliates throughout the world. At the same time they guarantee for themselves direct profit-sharing in the countries where the military-industrial monopolies operate.

The bourgeois state has also joined the process of transnationalisation of the military-economic activity on a wide scale. Thus, on the Pentagon's initiative, the structure of NATO institutions has included a special industrial group whose task is to establish direct contacts between corporations engaged in arms production. Actually this group performs the function of an international state-monopoly cartel body and actively participates in the implementation of the NATO long-range programme of building up armaments (intended for the period almost up to the mid-90s). This programme, covering nearly one hundred projects, provides for the production of new types and systems of weapons, including missiles, aircraft, warships and tanks. Already now the NATO countries are promoting such forms of military cooperation as the formation of international consortiums, the conclusion of agreements on the joint production of arms and on the division and coordination of production programmes, the licensing of the production of armaments and materiel.

By using different forms of the transnationalisation of military production the US military-industrial complex is able to influence the military economies of practically all NATO members. A case in point is Canada whose war industry is under foreign control at least by 50 per cent. Seven out of ten leading US military-industrial corporations have their own branches and subsidiaries in that country. The latter are to be found among the leading Canadian producers and exporters of military production. Besides, the national military-industrial firms largely work on contracts from the US Defense Department. They account for over 70 per cent of the country's military export. This kind of Canada's military-economic dependence on its southern neighbour leaves its imprint on the entire system of their mutual relations. Despite their numerous disagreements on many major questions in military politics, Canada follows in the footsteps of the USA almost in all cases. For example, the Canadian government has issued an authorisation for testing US cruise missiles over its territory. As a kind of compensation for this the Canadian branch of the Litton Industries was given an order to deliver for these missiles the elements of the guidance system, one of the main rocket units.

The involvement of many developing countries in imperialist military-economic activity is an important aspect of its globalisation. As the CPSU Programme notes, imperialism "is trying to drag them into a militarist orbit and to use them as springboards for its aggressive global strategy".⁵

To this end the USA and the NATO West-European countries sell ever larger quantities of weapons and other materiel to developing countries. For example, arms sales during the last decade netted 200 billion dollars (according to contracts).⁶ As a rule, they are the latest armaments, which they supply to their own armed forces. This means that on their territories the developing countries set up arsenals which greatly exceed the needs of their defence and imperil not only their immediate neighbours but can also be used by imperialist states for their aggressive purposes. In our view, massive purchases of weapons cannot be explained by external factors alone, for they are conditioned by certain prerequisites in the policies of the developing countries.

The acquisition of armaments is accompanied by the appearance of a large number of instructors from the USA and other NATO countries who take a direct part in the usage of the purchased military technology. Assisted by Western firms, the developing countries build expensive objects of the infrastructure (bases, communication systems, etc.) with the intention of bringing them in full conformity with the requirements of their combat use by the NATO armed forces. In other words, the developing countries are being incorporated into the global politico-military structure of imperialism, which, in its turn, is bound to increase their military-economic activity, to develop their own "internal militarism". The military spending of the main partners of the USA outside NATO (from among the developing countries) amounts to between 80 and 90 billion dollars. Their armed forces number over 3 million men and officers, and their arsenals are quite comparable with the respective summary indicator for the NATO West-European countries. Over the last 10 to 15 years the military-industrial concerns of the USA and other capitalist countries have set up military enterprises connected with them technologically and organisationally in many developing countries (Egypt, Pakistan, Singapore, Thailand, etc.). Some of them are gradually becoming powerful regional centres of force possessing a developed war industry and military personnel trained with Western aid. This is a major factor of developing the imperialist AMP, of expanding its material base far and wide. No wonder that those developing countries which are oriented on the West and have an impressive military-economic potential of their own are technologically completely dependent on their Western partners.

In this connection we cannot but note that a considerable part of the qualitative leap in armaments being made by the USA and the simultaneous expansion of its global military presence are, strictly speaking, paid for not only by its NATO partners and other developed capitalist countries but also by many developing countries, for which this pointless waste of resources is particularly ruinous.

The US military-industrial complex is a leading element of the system of relations with the aid of which the US ruling circles try in different ways but purposefully to harness both the developed capitalist and developing countries to their adventurist neo-globalist foreign policy.

The globalisation of the military and military-economic activity of imperialism reflects the deep contradictions which manifest themselves ever more clearly among the Western ruling elite in the choice of the paths and forms of the further development of relations with socialist countries. The expansion of the military-industrial complex has led to the formation of the world military economy of capitalism as a specific sector of the capitalist world economy. Its main function is to prepare for war materially, to escalate the arms race and to achieve the political aims of preserving not so much the capitalist system as destroying the socialist one. If the capitalist world economy is eventually bound to interact in many ways with the socialist world economy, which is insistently demanded by history, its military sector by its very nature cannot interact with the opposite social system and does not intend to do so. Thus, it hinders the development of the objective processes vitally needed by the whole of humanity, particularly multilateral cooperation among nations in the solution of pressing global problems (ecological, food, etc.).

Bearing in mind that the military economy is above all represented by complex and rapidly developing high-tech industries, we can easily imagine the barriers they have raised in the way of the normal functioning of the world economy. Recent years have shown how limitations imposed on the pretext of so-called security interests seriously hinder international economic cooperation. In the present situation when many realistically-minded politicians in the West urge their governments to renounce the hopeless policy of chasing for military superiority and to search for more constructive forms of international relations, this additional function of the military economy is also of no small importance to the most aggressive and reactionary circles in the imperialist countries. It not only prevents a change in the psychological and political climate, but strengthens the positions of those groups of monopoly capital which are the mainstay of the ruling political groups in the West.

The military-industrial complex most adversely affects the solution of global problems. The interconnection of disarmament and development is evident to all. Curbing and, all the more so, stopping the arms race would profoundly influence the nature and scope of

the assistance rendered by developed states to developing ones. Yet the huge sums spent by the developing countries on military needs (according to our estimates, in 1986 their military spending amounted to 120-130 billion dollars) could find a different application in the drive against hunger, disease and illiteracy.

The military-industrial complexes clearly gain from the existence of seats of tensions in the world—in the Middle East, in Africa, and Central America. The preservation of these flashpoints of tension implies not only the squandering of huge resources but also the impossibility of finding a joint solution to the acute problems common for the states in the same region. Against the background of acute global problems the squandering of resources on the senseless arms race strikes a blow not only at the hopes and needs of millions of people today but also at the morrow of humanity.

* * *

The globalisation of the military-economic activity in the capitalist world is fraught with great danger for the future of all nations, for humanity as a whole, especially now—in the face of the nuclear threat. This process, however, is not irreversible. That is why it is imperative that the progressive and peace-loving forces fully realise, before it is too late, the need to halt this process, and take practical measures that could reverse it and turn it towards disarmament.

Attempts to justify the globalisation of military-economic activity by references to the need for strengthening the national security of certain states by means of building up their military potential are anything but convincing. In the context of the nuclear-missile age a truly safe security must rely not on the arms race but on the means of defence within reasonable sufficiency, on the collectively built politico-legal mechanisms of regulating international relations.

The demilitarisation of the system of international economic relations is also called upon to play an important role. The main conditions here are the growing mutual trust among the countries and their confidence that the existing economic mutual ties between states and their associations will not be disrupted by military means.

NOTES

¹ V. I. Lenin, *Collected Works*, Moscow, Vol. 21, p. 227.

² *The Programme of the Communist Party of the Soviet Union. A New Edition*, Moscow, 1986, p. 17.

³ V. I. Lenin, *Collected Works*, Vol. 23, p. 50.

⁴ *The Mainichi Daily News*, September 20, 1986.

⁵ *The Programme of the Communist Party of the Soviet Union*, p. 21.

⁶ Calculated from *U.S. News and World Report*, May 28, 1984, p. 59; *ADIU Report*, March-April, 1986, pp. 1-2.



DEVELOPING COUNTRIES: NEW RESEARCH

Man in the System of Oriental Religious Reformist Movements

Marietta STEPANYANTS

We know that "with every great historical upheaval of social conditions the outlook and ideas of men, and consequently their religious ideas, are revolutionised".¹ This law of social development fully came into play in the spiritual evolution of the Afro-Asian peoples in the last hundred years.

Hinduism, Buddhism and Islam have age-long history; in the past, they also underwent various changes. Yet in the epoch before the involvement of the Afro-Asian countries in the system of world communication basic changes were not on the whole radical enough to change the traditional structures, so that there was no radical transformation of world outlook in the spiritual sphere. Only the breakdown of the traditional order of life, the emergence and development of capitalist relations eventually necessitated a total revision of dogmas, which had to be brought in agreement with new principles and attitudes; thus a need for a reformation arose.

In scholarly literature, the concept of reformation is used in both a narrower and a broader sense. In the first case the reference is to the Reformation (with capital R) as an anti-Catholic movement in 16th-century Europe, which led to a split in the Christian Church. In the second, it covers a more extended process started by the heresies and continued until the 17th century—a process aimed at the "embourgeoisement" of the Christian doctrine. It was an extremely complex process, especially in the 16th century; it was no accident that the latter has been called "the age of reformation (or of reformations, in the plural), not just of the Reformation...".² Although many changes in the Oriental religions in the 19th and 20th centuries are identical to the Christian Reformation, we believe that it will be more suitable to apply this term to these religions in the broader sense.

On the epistemological plane, Hegel believed that the Christian Reformation was caused by the separation of the objective and the subjective. The view of the sacred as something external in regard of the believer necessitated the introduction of a connective link, a mediator.³ The Church, which assumed the role of the mediator, taught that one could achieve freedom from divine punishment through external actions: going to Mass, assuming vows, going on pilgrimages, etc. Moreover, it was permitted to impose these external actions on others by buying some of the excessive good deeds ascribed to saints and thus achieving salvation.

The Reformation set out to eliminate that contradiction, to liberate man from the mediation of the church, from the pressure of the clergy. Luther rejected the concept of grace as a blasphemous haggling with God, and opposed to it the idea of salvation through faith, thereby superseding "external religiosity by making religiosity the inner substance of man..."⁴ Calvin went even further, asserting that some men were destined to salvation, others—to be eternally damned in full accordance with divine judgement. Christ offered his life for the sake of the elect. Evidence of a person being "chosen" is his conduct. It followed that every Christian could regard himself as endowed with divine grace and declare his acts to be the work of a "God's broom". In this interpretation, the idea of predestination became a religious basis of individual activity.

The Christian Reformation could not destroy the gap between the objective and the subjective, for it did not touch its source—alienation in real being, an alienation rooted in the division of labour and in private property. But, having failed to eliminate religious alienation, it objectively helped to adapt the Christian confession to new social relations. In the words of Engels, its essence was that this "first, as yet biassed and blundering attempt at reaction against the Middle Ages, brought about a major social change, the transformation of serfs into 'free' workers".⁵

In the Oriental religions, the reformation process also involves an attempt to eliminate the contradiction of the separation of the objective and the subjective, to bring the believer closer to God in order to "liberate" man, to develop his individual initiative corresponding to the spirit of bourgeois relations.

Each religion substitutes internal religiosity for the external one in its own fashion, taking into account the specificity of the dogmata and the ecclesiastical organisation. To take a particular instance, in Hinduism the general tendency towards the democratisation of the cult and simplification of the ritual manifested itself in the rejection of the ritual of gifts (flowers, fruit, etc.), sacrifices to the gods, uttering of the mantras, pilgrimages to holy places, etc.

Thus Devendranath Tagore (1817-1905), a follower of Ram-mohun Roy, introduced a pledge that bound the members of the Reformation movement he headed, the Brahma Samaj, not to

participate in idol worship, and to worship God only through deeds pleasing unto Him. Kesobchondra Sen (1838-1884), leader of a more radical society, the Bharatvarshiya Brahma Samaj, democratised Hinduism by resorting to forms of popular worship typical of Bhakti, a mediaeval opposition movement, in particular of the sect of the followers of Caitanya (1485-1534). Kesobchondra Sen transferred the rituals into the streets, mounting processions with folk music, singing, etc.

Anagarika Dharmapala (b. 1864), a Lankan enlightener and founder of the reformist Maha Bodhi Society, contrary to the canonic rite rules in Buddhist temples far from laymen's homes, called for worshipping Buddha at the home altar *Budu ge*.

The Japanese sect *Tensho kotai jingu ko*, (founded in 1945) one of the so-called new religions, is openly anti-institutional in character. Owing to the specificity of Japan's historical development (one of these specific features being religious syncretism, the coexistence and confrontation over centuries of Shintoism and Buddhism, both of which are regarded as equally traditional confessions), a distinctive form of reformation here is the emergence of "new religions", which often combine elements of Buddhism and Shintoism (not without some Christian influence).

Tensho kotai ko is not a mass organisation (it has some 300 to 400 thousand members), yet it is marked by democratic spirit. Its members are mostly rural dwellers. The peasant woman Kitamura Sayo, the founder of *Tensho*, was against temples and the clergy. "Look at the past," said this 20th-century prophetess. "All professional religionists have become more and more corrupt. They have built idols, temples and beautiful cathedrals, collected money and property from people, and studied religious books without spiritually awakening themselves. They preach that people must go to Heaven, but how could people follow religionists who have nothing to offer but idealism and imagination."⁶

The sect members offer only two prayers (written by Kitamura), and they have replaced the Shintoist-Buddhist ritual by mass dancing in crowded places (*Tensho* is sometimes called *odori shukyo*, or the "dancing religion") during which the performers sometimes attain a state of ecstasy which in their view rids them of evil spirits and turns them into angels whom God uses to establish his kingdom on earth.

The cultic practice of Islam is basically simpler than those of Hinduism and Buddhism. However, here too the reformation manifested itself in a rejection of excessive ritual. Even the need to offer daily prayers—one of the basic injunctions of Islam—has been questioned. Thus, according to Said Ahmad Khan, man must not place his hopes on the supernatural, on the fulfilment of requests and wishes expressed in prayers, for prayer brings consolation, nothing more. The laws of nature and morality cannot be changed by anyone, not even by God, and it is therefore meaningless to ask

for anything; everything must take its course according to eternal laws and not according to the Creator's will.

There is a tendency to reject the other two obligatory requirements of Islam—the fast in the month of Ramadan and the pilgrimage to Mecca (*hajj*). In Tunisia, for instance, the official campaign against fasting and pilgrimages was headed by President Habib Bourguiba himself. In February 1960, he announced a fatwa on the abolition of fasting: if religious practice comes into conflict with the solution of vitally important problems, it must be changed.

A sign of the democratisation of religion is translation of the Koran into national languages and recognition of the right of prayer reading in these languages, something quite impermissible from the standpoint of orthodox Islam, which insists that the Word of God was passed to man in the sacred Arabic language, not one of human making.

The general tendency of cult simplification conceals the desire, characteristic of the reformation process, to get rid of the mediating role of the clergy. Although there is no ecclesiastical centralisation in Buddhism, Hinduism and Islam, there is a hierarchical system in all of them (especially in Buddhism), and a mechanism of the subordination of believers through the "practice of mediation" between God and the laity. Hence the specificity of the forms of protest against the domination of the clergy.

Since the power of brahmins in Hinduism is sanctioned by the caste system, reformers stressed the injustice of privileges by birthright and fought against the castes (the struggle was, of course, not only anti-brahman but covered a much wider range of social problems). The brahmins' monopoly right to a knowledge of sacred texts and their role as mediators was rejected. Not content with purely verbal polemics against orthodox Hinduists, reformers consolidated their positions by holding services for all castes (as was done by Devendranath Tagore), by handing over the brahmins' sacred cord to the untouchables (Arya Samaj), and so on. Anti-institutionalism was most consistently implemented in the activity of Swami Vivekananda (1863-1902), who said: "If you want to be religious, enter not the gate of any organised religion. They do a hundred times more evil than good, because they stop the growth of each one's individual development."⁷ Swami Vivekananda stated that anyone ready for moral perfection was religiously perfect "without reading a single religious book, without going into a single church or temple."⁸

In Islam, there is no category of persons belonging to the priestly estate by birth or official ordination. Here, the functions of the clergy are performed by the mullas, the muaddhins, the gadis, etc., but above all by the ulamas—theologians versed in law who have the right to interpret divine texts and law. It is not surprising that the Moslem reformation has put forward, as one of the principal slogans, the "opening of the doors of *ijtihad*", i.e. a rejection of the duty to

follow a *taqlid* (the principles of the four legal schools, or *mazhabs*) and giving each believer the right of independent judgement (*ijtihad*). The simplification of rituals, and the democratisation of the cult, which pursue the goal of eliminating ecclesiasticism and, in the final analysis, the liberation of the individual (which in bourgeois society is limited to the freedom of private initiative and enterprise) are combined with and reinforced by a theoretically substantiated interpretation of the relationship between God and man on the ontological, epistemological and ethical planes. The main point of that re-interpretation is proving the permissibility and even necessity of a certain degree of man's free will.

In Hinduism, the reformist interpretation of the concept of God is manifested above all in the rejection of polytheism, of endowing God with anthropomorphic features and of idol worship, since the latter is justly seen as the most slavish form of religious worship.

Starting with a condemnation of idol worship and thus with the liberation of man from a shameful passion for ancient notions which, in the words of Marx, led to "the fact that man, the sovereign of nature, fell down on his knees in adoration of Kanuman, the monkey, and Sabbala, the cow",⁹ reformists then stressed the special role of man in the universe. Giving a new interpretations of the Vedanta, Swami Vivekananda not only asserted that man is the greatest of all living beings, his soul being part of divinity and therefore having divine potential—he proclaimed in fact the identity of man and God.

Why look for God, he asked. Aren't all these poor, miserable and weak beings gods? Why don't we pray to them first? Vivekananda's philosophical credo can be succinctly expressed in the thesis that the earth is higher than heaven, and therefore "we must have faith in ourselves first and then in God. He who has no faith in himself can never have faith in God".¹⁰

The concept of God and man is also reinterpreted in the same humanist key in the views of Moslem reformers. Imposing a very arbitrary interpretation on al-Ashari's atomistics, regarded as the ontological basis of orthodox Islam, Muhammad Iqbal has declared that although all bodies consist of atoms, there are "different levels of substance".

God is an Ego (with a capital E) generating a great many egos of various stages, each of which is an expression of God. "The world, in all its details, from the mechanical movement of what we call the atom of matter to the free movement of thought in the human ego, is the self-revelation of the 'Great I am'."¹¹ It achieves the highest level in man. "That is why," Iqbal concludes, "the Qu'ran declares the Ultimate Ego to be nearer to man than his own neck-vein." He then says: "Man ... possesses a much higher degree of reality than things around him. Of all the creations of God he alone is capable of consciously participating in the creative life of his Maker."¹²

Keeping on the whole to religious idealistic positions, reformists see God as a universal creator, but they are not inclined to accept the supranaturalist determinism characteristic of orthodoxy, substituting Providentialism, an attenuated version of fatalism, for absolute fatalism, or else ascribing the role of the first impetus to God.

In Burma, Buddhist reformers like U Otama and his followers obviously depart from canonical principles in insisting that epidemics, droughts, earthquakes, devastating wars, slave-hunting in Africa, the lynching of Blacks in the southern states of the USA, unjust distribution of wealth, annihilation of weaker peoples by stronger ones, etc., should make the thinking Buddhist doubt the thesis that the destiny of the world is determined by a reasonable Maker motivated by love.

The reformist interpretation of the ontological aspect of the concept of God provides a basis for a new view, corresponding to the spirit of the times, of the problem of man's role and place in the universe. Recognition of a certain degree of the freedom of will not only justifies the independence of human efforts aimed at transforming earthly life but also raises them to the level of a moral and religious duty. The main ethical principle of religious reformists is effective participation in the struggle for the transformation of society on a new basis (more humanist than the previous one), rather than renunciation of the world, asceticism and search for individual salvation.

The concepts of karma, maya, nirvana, mukti, and others are revised in Buddhism and Hinduism. The degree of radicalism in this revision varies, of course. Rammohun Roy and Devendranath Tagore rejected them out of hand, regarding them as logically unsubstantiated. Ramakrishna Paramahansa (1836-1886) and his followers saw individual enlightenment, or mukti, as a necessary stage in the salvation of others (just as the cars of a train can only reach their destination if drawn by a locomotive). The Burmese reformists U Otama, U Lun, U Timisara believed that the effort of achieving nirvana could only be justified after earthly salvation: nirvana was a liberation from slavery in life after death, from the wheel of births—but how could one aspire towards it, if there was no freedom on the earth itself? The pounji pray for nirvana; but it is well known that a slave can never attain nirvana; it follows that the pounji must pray for liberation from slavery in this world.

Vivekananda asserted that concern with personal salvation is in general sinful; his injunctions were: as long as you seek salvation for yourself, your path is towards Hell! Strive for the salvation of others, if you want to attain the Most High! Kill within you the desire for personal mukti!

The attitude to religious asceticism, to monasticism, also changes. Previously, an anagarika (lit. "homeless"), a wandering ascetic, was seen by Lankan Buddhists as a saint because of his complete

renunciation of worldly affairs. However, according to the interpretation offered by Anagarika Dharmapala, an anagarika is a person occupying an intermediate position between the monk and the layman, one that not only strictly observes all the injunctions of the Buddhist canon but also spares no effort in public activities (above all in the propaganda of Buddhism and in combatting Christianity). Moreover, even Buddhist monks, traditionally forbidden to interfere in politics, are said to have the right to participate in the life of society. In the 1960s and 1970s, Buddhist reformers in Kampuchea persistently spread the idea that, if political activity served justice, progress and prosperity of the Khmer people, it did not contradict the principles of Buddhism, for Buddha himself enjoined to do good in the service of the people. Monks ought to live for the people, helping them through socio-political as well as other activities; only then would they fulfil the behest of their teacher.

Even more radical are the positions of those reformers who, like Vivekananda, view working in the world as a higher form of manifestation of religious service than asceticism: "It is useless to say that the man who lives out of the world is a greater man than he who lives in the world; it is much more difficult to live in the world and worship God than to give it up and live a free and easy life."¹³

At the initial stage of the reformation, participation in the national liberation movement was regarded as a moral duty. It was natural for religious reformers, who expressed above all the interests of the rising national bourgeoisie, to aspire to put an end to mediaeval law and order, and to clear the way to social progress obstructed by the traditional way of life and the colonial regime.

Nationalism mostly appeared in a religious guise; here, just as in mediaeval Europe, "the sentiments of the masses were fed with religion to the exclusion of all else; it was therefore necessary to put forward their own interests in a religious guise in order to produce an impetuous movement".¹⁴ Nationalism and religion were even sometimes directly identified, so that every religious person could be enjoined to serve the cause of national liberation. Nationalism, said Aurobindo Ghosh (1872-1950), is a religion sent by God. He described the nation as an embodiment of one of the aspects of the divine element; he identified love of one's native country with worshipping God; India, with the Kali goddess, the Divine Maternal Force; in the name of saving India from the "vampire"—colonialism—one had to struggle and shed one's blood.

In an attempt to make the ideas of nationalism more accessible to the people, reformers "secularise" religious concepts, so that maya is perceived as a liberal illusion about the role of the British in India; boycott of British goods is termed yajna; the "Bande mataram" hymn becomes a mantra; shakti, a desire for the national liberation, etc.

But the concept of ahimsa, which is basic for Buddhism and Hinduism, has been transformed more than any other. According to Vivekananda, non-resistance is an ideal that is as remote as it is beautiful, and it is to be attained through willful resistance to evil. The reformer appealed to his countrymen not to listen to the "stupidities about non-resistance" but, on the contrary, to act, to fight: "Then only, when he has gained the power to resist, will non-resistance be a virtue."¹⁵

The fundamental permissibility and even inevitability of violent methods of struggle were recognised both by Aurobindo Ghosh and by Bala Gangadhar Tilak (1856-1920), leader of the left wing of the Indian National Congress. For several reasons, however, the political platform of anti-colonial movement in India became a more moderate Gandhist interpretation of ahimsa. Offering a new interpretation of one of the most authoritative sources of Hinduism—the Bhagavad Gita, Gandhi rejected the traditional meaning of the ahimsa principle as passive humility and non-resistance to evil, positing instead the principle of vigorous activity both in private and especially in socio-political life. Satyagraha (lit. "persistence in the truth"), which manifested itself in a boycott of government offices, disregard for colonialist laws, etc., was a "non-violence of the strong" ready to sacrifice themselves in the struggle for national independence.

In the Moslem countries, reformers sought for a moral substantiation of the struggle against colonialism in the concept of the jihad. The "holy war" was the slogan of mass sectarian movements that were the source of the Islamic reformation. Thus Muhammad Ahmad (1844-1885), leader and ideologue of Sudanese Mahdism, even raised the jihad to the rank of one of the six basic institutions of Islam. The babi movement in Iran in the 1840s and 1850s against feudal lords and foreigners was also run on the lines of a jihad.

Exploiting the contradictory nature of the Koran's pronouncements on the jihad, the ideologues of the reformation endeavoured to give this principle an anti-colonial slant, and to use it for the purpose of uniting the masses and organising resistance to foreign oppressors.

In the interpretation of Abul Kalam Azad, the first minister of education (1947-1958) in independent India, jihad is a means of achieving the divine attribute of justice. "Any labour and burden, any pain and suffering (mental and physical)," he wrote in the magazine *Al Hilal*, "in short, any sacrificing of life or property, any service with word or pen—all this, done in the name of truth and justice, is jihad".¹⁶ In this struggle, violence could be used, Azad believed. "It is my belief," he stated in his speech at a trial in 1921, "that such opposing of violence with violence is fully in harmony with the natural laws of God."¹⁷

Muhammad Iqbal sought a philosophical substantiation of revolutionary activity in the reformers' interpretation of the Islamic conception of good and evil. The philosopher-poet made use of the biblical legend of the fall of man and his banishment from Paradise (in the Koran, ayats 10-24, surahs 7). Tempted by Satan, Adam commits a sin, but on leaving Paradise, he becomes master of the earth. Thus evil engenders good. Iqbal's Iblis-Satan symbolises an active spirit (like Goethe's Mephistopheles) attractive to the poet. Without Satan, life would have lost its dynamic quality and would be dominated by deadening passivity. In the poem "The Conquest of Nature" Satan says this to the Most High:

You have created the bodies of stars, I gave them rotation, I am the soul of the world, I am the world's hidden life. You breathed a soul into the body, and I stirred it to excitement. You give men rest, which stops them, I push them forward through restlessness.

Iqbal was in favour of recognising the objective character of evil. This permitted the view that the causes of social difficulties lay in actually existing injustice rather than in subjective factors. In defending the thesis of dialectical interconnection of good and evil, and of their mutual transformation, he thereby proved the necessity and inevitability of actions against a social order that gave rise to evil.

With the attainment of political independence by the colonial countries the ethical orientation of the religious reformation has changed. The main purpose now is the struggle against obstructions in the way of building a welfare state.

Of course, at the first stage of the national liberation movement, the ultimate goal was also the idea of building "God's kingdom on earth", but that idea was abstract and egalitarian. Buddha and Muhammad, Rama and Krishna were presented as heralds of universal justice who did not recognise any racial, national, religious or caste barriers or even class divisions. The teaching of Buddha, insisted U Otama, shows that all men are equal, while the differences were invented by men themselves. Rammohun Roy expressed himself much in the same spirit: there is but one God to whom all his creatures are subject without distinction of caste, office or wealth.

After the achievement of independence, the ideal of welfare society had to be specified and, which is most important, practically realised.

Although caste discrimination is now prohibited by the Constitution and punishable by law, its practical elimination will require considerable effort yet, for the roots of the caste system are too deep. This explains the anti-caste protest of religious reformers decades after the founding of the Republic of India. Vinoba Bhave (1895-1982), leader of the Bhudan movement for voluntary giving away of land to the peasants, sharply criticised the institution of untouchability, asserting that giving land to the most oppressed and impoverished members of the Hindu community was a Hindu's

religious duty. He rejected the differences between the lower and the higher varnas and preached the ideal of the varnasharma, whose members would be guided by identical norms of morality and enjoy equal rights.

Polygamy is one of the most anti-humane establishments of Islam. From the very inception of the reformist trend in Islam the question of the position of women naturally became acutely controversial. The force of the conservative tradition was so great that even Muhammad Abdo and Iqbal did not believe it possible to condemn polygamy or the sharia practice of divorce. Still, there were voices in defence of women. In the Arab East, the leader of the movement for their emancipation was the Egyptian Qasim Amin (1856-1908). Zia Gekalp (1876-1927), a prominent ideologue of Turkish nationalism, kept reminding his co-religionists that the women's issue was part and parcel of the problem of social development as a whole. As long as a woman is seen as half a man in the law of inheritance and a quarter of man in marriage, neither the family nor the country can revive, he said.

To substantiate the need for recognising the equality of women, reformers reinterpret a number of ayats of the Koran (1:4, 4:123, 4:36, etc.). Professor Husein Alatas of the University of Singapore strives to prove, for instance, that in the Koran a woman is not regarded as a lower being by her very nature. Her rights and duties in society are the same as man's.¹⁸

On the question of elimination of conservative institutions religious reformers are on the whole unanimous; there is no unanimity, though, in their conceptions of the ways towards national renaissance and social progress, although it should be admitted that, however varied the standpoints may be, religious reformers of all directions are critical of capitalism in its Western variant, arguing for a path of development that is in keeping with the national and religious traditions. Hence the interest for those institutions or injunctions that are thought of as capable of ensuring social equality and justice. Buddhism raises to an absolute the principles of the structure of a monastic sangha; Hinduism revises the content of the terms dana, yajna and tapas to substantiate the Bhudan movement regarded as the first stage on the path towards sarvodaya; in Islam, zakat (the tax in favour of the poor), riba (an injunction against usury) and the sharia order of inheritance are seen as the pillars of the Islamic socio-economic system restricting the abuses of private property.

There are different motives for this invoking of religious propositions carrying, to some extent or other, humanitarian and egalitarian elements (characteristic of all faiths, especially at their emergence). In some cases the motive is advocacy of capitalism clothed in national and religious garb in order to overcome and suppress anti-capitalist attitudes. It is not ruled out, though, that the

motive is a sincere, if naive, desire to avoid the defects of capitalism through "improving" it with the aid of certain traditional institutions.

Taking into account the radical changes that have taken place in the world and the influence of socialist ideas, their popularity amongst the masses, the reformers often call their programmes for a national path of development varieties of "religious socialism", which is by no means always mere camouflage. Often attempts are undertaken to make real use of separate elements of socialist transformations (planning, expansion of public sector, etc.)—without any damage to the interests of private ownership, though. Regardless of the subjective intentions of religious reformers, their objective socio-economic and political views indicate their preference for the bourgeois path of development. The most convincing proof of this is their attitude to private property, to classes and class struggle. They either do not understand or purposefully distort the causes of social inequality. Typical of Buddhists and Hinduists is the view that men's social position is linked entirely with their karma, i.e. their actions and deeds in their former incarnation. They therefore believe that social inequality can be eliminated by observance of religious injunctions, accumulation of merits and improvement of karma. Instead of basic changes in production and social relations and elimination of private ownership of the means of production, an ethicisation of these institutions, mostly through the development of charity, is proposed. The mercy of the haves—that is what is supposed to aid national revival. In Kampuchea, Norodom Sihanouk, who advocated, before the 1970 coup, a programme of "Buddhist (or Khmer) socialism", constantly stressed the fundamental difference between Marxist and Buddhist socialism. "Marxism advises the 'weak' to rout the strong and to establish a 'proletarian' dictatorship... Buddhism, on the other hand, advises the powers that be to respect their subordinates, developing in them the feelings of kindness and compassion."¹⁹

Islamic reformers also assert the inviolability of private property. Just as their Buddhist and Hinduist brethren, they only permit partial restrictions and nationalisation of feudal and foreign property. They find the basis for eliminating landowners' right to land in a new interpretation of the Islamic thesis that "God is the supreme owner". Referring to the Prophet's words that "men are companions in three things—water, pasture and fire", the Egyptian A. Choumais, an ideologue of "Islamic socialism", draws this conclusion: "Taking into account the needs of contemporary society, the right of owning all this must belong to society ... rather than to one person or group."²⁰

The expropriation of foreign property is permissible only insofar as the property is regarded as not genuine: if zakat is not exacted from such property, it "does not serve the cause of Islam".

On the whole, social inequality is seen as established by God. The Pakistani H. A. Hakim insists that "God has not chosen to create dead equality and does not want man to create it by force".²¹ It is not elimination of private property but "improvement" of relations between workers and owners, curbing abuses of ownership through zakat and riba that constitute the basis of the "Islamic path of development", or "Islamic socialism".

The position of religious reformers on the issue of socio-economic and political order of young sovereign states does not rule out, however, some radical and progressive ideas. Radicalism is inherent in the views of politicians expressing the interests of the middle class and especially petty bourgeoisie suffering from competition with large national and, still more, with foreign capital, and therefore inclined to welcome state regulation of the economy, measures for curbing the abuses of big business, etc.

However, in regard of petty bourgeoisie as a whole (including petty entrepreneurs, artisans, peasants, etc.), a type of religious consciousness most characteristic of it is "revivalism" rather than reformism. Invoking the past in the hope of finding in the early doctrines of religion a means of solving contemporary problems is characteristic of precisely those strata of the population which, owing to their social position, take an unambiguous stand on the socio-economic shifts. Bearing the brunt of the feudal and prefeudal forms of exploitation, they hate them, but at the same time, suffering from the shortcomings of the bourgeois system, they do not accept capitalism either. The drive towards changes, and at the same time dissatisfaction with these changes, when they assume the forms of ordinary capitalist law and order, determine the vacillations of the petty bourgeoisie, which now joins the opponents of bourgeois reforms (let us call them "retrogressive revivalists"), now the ranks of the adherents of radical reforms ("progressive revivalists").

"Retrogressive revivalism" is an ideological trend that is close to orthodoxy. The common goal of both trends is opposition to social progress and conservation of the precapitalist order. Adherents of orthodoxy do that openly, while "revivalists", advocating change, place their hopes on the idealised past rather than the future, looking for salvation in the "purification" of religion and in restoring the institutions of its Golden Age.

The ideology of Jana sangh and Rashtriya svayamsevak sangh in India; Jamaat-i-islami in Pakistan, Afghanistan and India; the Muslim Brotherhood associations in the countries of the Arab East—are all characterised, despite differences in their religious doctrines and specificity of national conditions, by common typological features that indicate their retrogressive-revivalist nature. All of them claim the stature of preservers of the purity of faith or fighters for its purification.

A common feature of revivalists of this variety is their advocacy of theocracy. Religion and politics are regarded here as inalienably connected, therefore secularisation is rejected out of hand and the need for a theocratic state is proclaimed.

The establishment of theocracy assumes that God is recognised as the supreme sovereign, and religious injunctions, as social laws. That is precisely the slogan of the Muslim Brotherhood: "The Koran is our Constitution". Abul Hasa Ata, a Pakistani revivalist and chairman of the Jamaat-al-ulema-i Pakistan, thus explains the meaning of this slogan: "Since Islam is a perfect religion containing laws ... governing the whole field of human activity, there is in it no sanction for what may, in the modern sense, be called legislation."²²

The ideal Islamic state, according to "retrogressive revivalists", is one in which supreme executive power is concentrated in the hands of caliph or imam (heads of the religious community), in which sharia laws are effective, and the right to interpret them belongs entirely to the theologians, the ulamas, while justice is exercised by the sharia judges, the qadis. (The 1979 Constitution of Iran was an attempt at implementing this ideal.)

The socio-economic views of these ideologues demonstrate their desire to preserve the precapitalist order. They openly advocate the landownership, the caste system, polygamy, and insist on strict observance of injunctions slowing down the development of bourgeois relations. They are fanatical and intolerant towards dissenters. Invoking the thesis of the absolute nature of Muhammad's prophesying, Moslem revivalists insist on the supremacy of Islam with regard to all the other religions. Hinduist revivalists are just as stubborn. M. S. Golvalkar (1906-1973), leader of the Rashtriya svayamsevak sangh, insisted that the Indian people had a dharma unequalled anywhere; Hinduism was the only religion in the world worthy of high title. Hinduists and Moslem fanatics demand that members of all the other religions be deprived of fundamental civil rights. In a truly Islamic state, Moslem fanatics believe, the zimmi institution must be restored, in accordance with which non-Moslems are obliged to pay the state a special tax, must not carry arms, etc. Hinduist communalists insist that in the Hindi rashtra non-Hindus must adopt the culture and language of the Hindus, honour Hindu gods and venerate Hinduism, be fully subject to the Hindu nation without demanding any privileges or even civil rights.²³

The fundamental difference of "progressive revivalism" from its "retrogressive" version is the wholly imaginary quality of the former sort of revivalism. Formally advocating the restoration of the purity of the early doctrines, the progressives actually interpret them in accordance with their social aspirations.

Gulam Parwez (b. 1903), a Pakistani revivalist, calls on the younger generation of Moslems to reject the past, with the exception of the times of Muhammad's life and of the four "righteous caliphs",

for everything else was an epoch of darkness from which one could learn nothing. He believes that mediaeval Moslem law and theology are false, contradicting as they do the true spirit of Islam reflected in the Koran. He also rejects the holy tradition, asserting that "the hadits were not part of the religion".²⁴ The misfortunes of Moslems today are said to be due to the fact that two mutually exclusive systems exist in Islamic society, one based on the Koran, the other on the hadits. All that is bad in Islam is the product of the traditionalists' false religion.

In their turn, Hinduist revivalists, on the other hand, stress the infallibility of their Vedas and their unsurpassed authority, rejecting all later religious sources and traditions. The call for returning to the Golden Age of religion is a means of assertion and, most importantly, substantiation of egalitarian views. The achievement of social justice in modern society through a return to an idealised past, and attempts to find in that past answers to problems of today—such is the utopian positions characteristic of representatives of this trend as a whole.

Vinoba Bhave, an orthodox Gandhist, champions the building of a welfare society, which he identifies with the Ramaraj—the ideal Hindu state under King Rama (Vishnu's earthly incarnation). Wishing to destroy erroneous notions and to build a new society on the basis of religious ideas, he calls the Bhudan movement dharma chakra pravartan (lit. "a turn of the wheel of dharma"), which signifies a return to true religion.

Progressist revivalism is thus utopian and eclectic, its representatives are far from understanding the laws of social development, and their ideological positions are very unstable.

The growing activity of revivalist trends in the social thought of Afro-Asian, primarily Moslem, countries in recent years does not, however, signify curtailment of the religious reformation, as some Western Orientalists affirm. A pessimist evaluation of its prospects follows from the reduction of "revivalism" to a counter-reformist version of it, and neglect for the emergence of "progressist" concepts indicative of the expansion and deepening of the reformation process involving broad strata of the population, as well as of the democratisation and radicalisation of this process.

NOTES

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The Politico-Economic Foundations of Acceleration

From the Editors: The following round-table discussion took place at the USSR Academy of Sciences' Institute of Economics in October 1986. A number of the ideas and theses discussed during this meeting were subsequently reflected in the documents of the June 1987 Plenary Meeting of the CPSU Central Committee and of the session of the USSR Supreme Soviet which, in particular, adopted the Law on State Enterprise (Association). The purposes of this legal act were to confirm the fundamental changes in economic management brought about by the transition to predominantly economic methods of administration. It was intended to significantly widen the scope for independent activity and increase the responsibility of the enterprises while fully guaranteeing the rights that ensued from their leading role in socialist production; it was to determine the basic trends in the restructuring of activities by the state administrative organs. These proceedings have been prepared for publication by V. Novikov, an editor with *Social Sciences*.

L. Abalkin (Corresponding Member, USSR AS, Institute of Economics). We propose to discuss the problems involved in accelerating Soviet socio-economic development and intensifying production. In order to do so we must find a way of combining theoretical and politico-economic studies of the issues with the practical questions that arise from the decisions of the 27th Party Congress and subsequent Plenary Meetings of the CPSU Central Committee.

We would like our discussion to be a free exchange of views. The most important thing is to put forward constructive proposals and make a contribution to the overall increase in our specialist knowledge.

First of all, we must precisely define the goals with which an acceleration in the country's socio-economic development confronts us. Is acceleration a goal in itself or only the means for resolving other tasks? If it is only the means to an end then what is the final goal of acceleration to which it should lead?

It is furthermore essential to say what the actual concept of "acceleration" means. It is inadmissible to reduce it to an increase in

rates of growth. As we know, Soviet productive potential should double by the year 2000. Yet over the last 15 years, it has tripled. The essence of acceleration, therefore, does not lie in growth rates but in the transition to a new quality of growth based on the intensification of production.

To draw up a soundly-based action programme for the future we must state what we mean by a new quality of growth.

We must also define the factors, driving forces and sources that contribute to this acceleration. A correct and rational combination between the technological and socio-economic components of acceleration must be found, and this must primarily rely on the further improvement of production relations.

It is also necessary to say what is meant by such improvement in production relations, and how radically and deeply they must be restructured: should the deepest levels of these relations be affected, or will change be limited only to certain superficial forms?

V. Radayev (D.Sc.[Econ.], Moscow University). If we talk of acceleration in development as a law-governed process this expresses the general character of progress in human society. The determining material basis of this progress is the development of the productive forces, based on improvement in the material and human factors of production. We are talking, moreover, of an acceleration in society's development and not just of the forces of production: therefore the substance of this process and its criteria of success are linked to the socio-economic forms of development of the productive forces and, above all, of the relations of production. In Marxist-Leninist terms, the problem of acceleration is in practice viewed through the prism of social formations. Each such formation is characterised by a more progressive form of production relations, in connection with the forces of production, than the preceding formation.

The law-governed character of acceleration is not only manifested in the transition from one formation to another. Within the framework of a single formation there are historical levels each characterised by its own resolution of socio-economic tasks. The Soviet Union has now reached the stage of developed socialism and this forms the objective necessity for an acceleration in its development. Acceleration as a law-governed process "absorbs" both the preconditions and the tasks that have been formed by the present state of productive forces and of the relations of production.

In the sphere of the forces of production these are as follows. The widening scientific and technological revolution that is ensuring the transition of the entire productive process to a complex mechanisation, involving automation and robotisation. It also implies a major development of the worker: it is not just a growth in needs that accounts for the widening of his or her capacities and their character but also the qualitative changes in the structure of needs

that increase the non-material, and especially the social, components. The intensive type of expanded reproduction presupposes such a change in material and human factors.

As regards the relations of production, it was noted at the 27th Party Congress that the current situation had arisen because the necessary changes had not been made in good time: "The forms of production relations and the economic management and guidance system now in operation took shape, basically, in the conditions of extensive economic development. These gradually grew out of date, began to lose their stimulating effect and in some respects became a brake."¹ The Congress at the same time specified the most important ways in which currently existing forms of socialist production relations should change.

First, specific forms should correspond more fully to the real substance of production relations under socialism. Public ownership of the means of production should ensure a truly proprietary attitude to public property, a high level of labour activity by each worker, and socialist self-administration. An increasing fulfilment of social programmes should function as the basic law in expressing qualitatively new elements in the human factor of production. In relations of distribution the principle of distribution according to work done should be strictly observed, social justice should be ensured in practice, and various forms of unearned income should be combated. It is essential to grow out of a prejudice against commodity-money relations and give them more scope for action than before, and so on. Second, all forms of productive relations must be reoriented so as to ensure the acceleration of the scientific and technological revolution, and the overall intensification of production. Third, the human factor must play a greater role, for without it there can be no acceleration.

These new preconditions are closely linked to the tasks of achieving a qualitatively new state of society. As an economically law-governed process the acceleration of Soviet socio-economic development is characterised by the unity between the preconditions and tasks that have been objectively formed.

On the one hand, acceleration is intended to overcome the unfavourable tendencies that had taken shape in the Soviet economy in the late 1970s. On the other hand, it is a reflection of the objective demands of the qualitatively new stage that the country has reached.

S. Dzarasov (D.Sc.[Econ.], USSR AS Department of Political Economy). In present conditions the improvement of production relations under socialism means chiefly three things: improvement in the relations of public ownership of the means of production, the overall development of a responsible approach to one's specific tasks,

and the employee's responsibility for attaining good results in work and other activities.

It is not the level of socialisation that has led to a deformation in property relations but the bureaucratic distortion of its essence. Frequently bureaucratism is understood to mean artificially-created complications of a solution to some or other questions. However, this is only one of its many manifestations. At the socio-economic level the essence of bureaucratism is the substitution of formalities for reality: on this formal basis certain relations are in practice asserted in place of others. Under socialism people have equal property relations. But their alienation from the administration of production and decision-making deprives this equality of real content. Unfortunately, the transformation of the real into the formal is not without consequences. It leads to the infringement of the principle of social justice, weakens labour incentives, and so on.

In restructuring we have begun an allround democratisation of our social and political life, for without this it is impossible to create a system of economic management that is adequate to socialism.

Man's responsible position in the managerial system also gives rise to a responsible attitude to his work. When people do not participate in management and it becomes bureaucratized the workers cease to be the masters of production and responsible for its results: the formal fulfilment of the plan becomes more important than the results obtained, extravagance is tolerated in place of economically-run management, and supervision from below is either weakened or totally excluded. In recent years an indifference to the results of their activities, either in their collective or in society as a whole (social inertness), grew up among ordinary people and those in authority. In my view, this was the main reason for the non-fulfilment of plan targets, and for the irresponsibility, embezzlement and corruption in production, trade and the administration. If there had not been such passivity, people would not have allowed the appearance and growth of the above-mentioned negative phenomena in their work collectives.

The 27th CPSU Congress set the task of improving property relations by fundamentally changing the individual's position. It was stated at the congress that "it would be naive to imagine that the feeling of ownership can be inculcated by words. A person's attitude towards property is shaped, first and foremost, by the actual conditions in which he has been put, by his possibilities of influencing the organisation of production, and the distribution and use of the results of work. The problem is thus one of further intensifying socialist self-government in the economic sphere".²

To develop such self-government we must reorganise the managerial system in such a way that people can exercise a decisive influence over the organisation of production, and the distribution and use of the results of labour, through their work collectives. This

presupposes the widening of the enterprises' and production associations' economic independence, their transfer to complete *khozraschet* (cost-accounting), and the systematic introduction of the principle of being self-supporting (*samookupaemost*). However, up to now this principle has chiefly been understood as the surplus of income over expenditure. At the Volga Automobile Plant (VAZ) and the Sumy Engineering Combine, by contrast, to be self-supporting is taken to mean such a surplus of income over expenditure that can meet the need for expanded reproduction at the enterprise level.

As you will recall, discussion at the congress also covered the establishment of an economic mechanism under which wages depended on the enterprise's income while the necessary resources for renovating and extending production were earned by the collective. Yet what does "earning" mean when prices are fixed and there are variations in the technical equipment of enterprises and their supply with skilled labour power? When their outgoings on transport, tariffs and many other factors influencing the amount of income they receive, all vary?

The main task in improving *khozraschet* relations, in our view, is that of eliminating the influence of factors that do not depend on the activities of the collective: this should be done by re-examining wholesale prices, introducing payment for resources, and using various other deductions, allowances, discounts, taxes and other financial levers. We must thus find an indicator of labour contribution, whether it be of net production or pure profit. It is essential to establish equal conditions of economic management so that the result obtained really is an indicator of the work and efforts of the collective in question. It is not the redistributed income that should be the source of self-financing (*samofinansirovanie*), and the basis for the organisation of complete *khozraschet*, but the actually created income.

S. Pervushin (D.Sc.[Econ.], Moscow Institute of Economic Management). Scientific and technical progress is the chief strategic lever for accelerating socio-economic development, including the intensification of production: this involves the development of science and improvements in the methods of its technological application. However, many types of equipment that have been produced for the technical renewal of production are still quite often inferior to those being replaced; as a result the output of equipment for the USSR as a whole is growing in money terms while its productivity is decreasing.

One of the reasons for this situation is that there are no universally-agreed ideas about the criteria of technical value for money. As a result imperfect and uneconomical equipment is often brought into use. In specialist and general usage the meaningless epithets "new" and "most up-to-date" are widely used to describe the qualities of certain technology. No account is here taken of Marx's

fundamental proposition that the application of technology is restricted by economic considerations: it must not only ensure that economies are made on separate elements of expenditure but that production as a whole becomes more economical.

Until, we believe, economies in total expenditures are assured by the production and application of such machinery then neither will there be improvement in the indicators of socio-economic development. In existing conditions it would seem more sensible to concentrate efforts and resources on improving the technology to reach the technical and economic indicators that surpass those of the technology being replaced; the current needs of the national economy would thereby be met by making fuller use of existing technology and its modernisation.

Great hopes are placed on a growth in labour productivity which is regarded as a decisive factor in economic growth. Yet the dynamics of this indicator as it is now calculated and used in planning and statistics (as economies in living labour only) do not justify such hopes. Each step taken in this direction, i.e. substituting machine labour for that of human beings, is achieved at an ever greater price by growing expenditure on past labour: this therefore leads to a lowering of productive efficiency and, in the last instance, to a slowing down in rates of economic growth. Growth in labour productivity can only play the role of the decisive factor at the level of the national economy when its dynamics reflect, not so much the economy of living, as of past materialised labour.

A substantial part of the conception of acceleration is an improvement in the reproductive structure, including an optimisation of the ratio between Departments I and II. However, this aspect of structural policy has still not been adequately interpreted by economists. There are frequent assertions that faster rates of growth in Department I are necessary if technical improvement and the intensification of production are to occur. This is directly linked to the attempt to justify rising norms of accumulation: instead of being a temporary measure reflected in plans for the 12th Five-Year Plan period (1986-1990) these are claimed to be a universal law-governed necessity. This argument ignores the fact that the Soviet economy is not suffering from insufficient investment but from excessive accumulation and a surplus of basic production and current assets.

The implementation of complete *khozraschet* and an increase in the role played by economic methods of management provide the decisive condition under which the administration based on democratic centralism can be systematically improved and developed: this will combine centralised management with innovative and creative activity and a high level of responsibility by collectives at all managerial levels, and will lead to the wide involvement of working people in the management of production. Nevertheless, we still do not have precise conceptions of the essence of complete *khozraschet*. Some economists

equate it with the introduction of the principle of being self-supporting. However, the adoption of this principle was one of the very first steps taken to introduce cost-accounting in Soviet Russia when the transition was being made from War Communism to the New Economic Policy. This essentially meant that enterprises paid for all their expenditure out of their own earnings. Only simple reproduction using internal resources is assumed by this principle. One of the decisive features of complete *khozraschet*, on the other hand, is that it can provide for the *extended* reproduction from the resources of the enterprises on the basis of self-financing. However, this still does not give an exhaustive description of complete *khozraschet*.

Apart from the aspects mentioned above, complete *khozraschet*, as opposed to partial, informal *khozraschet*, presupposes that all the elements (or factors) of material production will be drawn into economic circulation on *khozraschet* principles. It assumes that *khozraschet* relations will be established between all the links in the economic mechanism, both vertical and horizontal—between branches of industry and their enterprises, on the one hand, and with territorial administrative organs, on the other: these will concern the conditions under which the economic resources within their departmental control will be exploited (this includes natural resources, labour, construction sites and others). It also refers to the development and exploitation of the productive and social welfare infrastructure. The transition to complete *khozraschet* involves the rejection of subsidised financing, an increased role for credit, and the reduction to a minimum of taxation of non-*khozraschet* forms of centralised incomes.

Academician A. Rumyantsev. The 27th CPSU Congress presented the social sciences with the task of providing a profound theoretical understanding of the processes taking place in our public and social life.

As I see it, we are saying that the time has come to shift from one form of democratic centralism in the economy to another. In Leninist terminology, this is a shift from dictatorship to *dirigisme*.

In the early period of the construction of socialism our economy was only typified by democratic centralism of the dictatorial type. Only on this basis, as Lenin showed, was it possible to lead the exhausted masses of workers, worn out by exploitation, in the right direction: there were many waverers among them and this was the only way to overcome the resistance of overthrown but still not defeated capitalism and strengthen people's awareness that they were the builders of socialism.³

Within the framework of the dictatorial type of democratic centralism enormous achievements in the development of socialism were attained by the Communist Party, the Soviet State and the

Soviet people. Most important of all, the question "who will win?" was resolved, and the socialist structure became the only one in the economy. Industrial potential rose immeasurably compared to the pre-revolutionary period, agriculture was collectivised, and science developed. From being semi-literate the country became one of universal secondary education. People's socialist consciousness was strengthened as was shown with particular clarity in their heroic struggle against the nazi invaders during the Great Patriotic War.

At the same time, it was becoming increasingly clear that the prevalence of administrative methods of management was leading to deformations of democracy and had become a brake on the further development of the national economy. The necessity of making a fundamental change in managerial methods, and therefore in the economic mechanism, made itself ever more strongly appreciated: the change was to be based on openness (*glasnost*), criticism, and the active involvement of the masses in all the public life of the country.

It was on this basis that the preconditions for the possibility and necessity of a transition to a *dirigiste* type of democratic centralism in the economy built up in society, and took their final shape. In my view, this is also laid down in the decisions of the 27th CPSU Congress. Soviet economists must gain an understanding of this process and uncover its inner depths; they will thereby provide practical help in the transition to a *dirigiste* type of democratic centralism, and aid the permanent acceleration of our society's socialist development.

R. Belousov (D.Sc.[Econ.], Academy of Social Sciences under the CC CPSU). There is no need for additional arguments supporting the necessity for acceleration of social and economic growth. This necessity is laid down by the sharply heightened contradictions in the sphere of the productive forces, and also by contradictions of economic character.

The main question is how these contradictions may be overcome. The social sciences must answer two questions, in my view. First, they must state which motive forces are strong enough to overcome an inertia not only of thought but of an outmoded system of economic mechanism. Second, they must say what the specific socio-economic mechanism of acceleration should be.

The basic advantage of our social system is its greater degree of socialised ownership. In this respect we have still not fully made use of our possibilities by a long way. Above all, I would like to draw attention to the insufficient level of standardisation and unification. For example, there are a very great number of types of parts intended for the same purpose. At the same time there is hardly any interchangeability of parts. For many years we have been saying that it does not make sense to produce about 30 different types of refrigerator when only 2 or 3 of them meet world standards in

quality. Why should we produce the remaining models? Can we really not benefit in practice from the advantage of socialised production?

Property relations are an important issue in relation to socialised production. Over the last decades Soviet economics has hardly made any progress in the theoretical analysis of these relations. At every state enterprise there are relations of personal and collective property and property of the whole people. They form a dialectical and interrelated unity in production relations. However, the relations of personal property at a state enterprise frequently predominate to the extent that they directly influence the conduct of employees.

All these types of relations work together although each is relatively independent. As is well known, ownership is expressed through interests. For example, it quite frequently happens in managerial practice that local interests and departmentalism predetermine the solution of a specific question. When are local interests and departmentalism? Behind them lie the interests of definite groups of people or of collectives and they prove decisive.

In practice the socialisation of production requires effective economic means for reconciling interests and not a mechanism of apportionment. In 1921-1922 the Soviet state gave up *prodrazverstka*,* or apportionment of foodstuffs, and introduced the *prodnalog*** or "tax in kind". Then in the 1930s policy again shifted from normative relations to the apportionment of foodstuffs, materials and finances. Such a system, however, depresses the interests of the collective and the worker.

A separation of administrative functions took shape. While Gosplan and the ministries were mainly concerned with the circulation of material funds the Ministry of Finance dealt with the financial side. Such a separation of production and management in material terms from the financial system led those responsible for finance, from the 1930s onwards, to look for their sources of income

* *Prodovolstvennaya razverstka*—a system for obtaining agricultural produce that was adopted by the Soviet state during the Civil War and foreign intervention from 1918 to 1920. In essence, the peasants were obliged to deliver all surpluses of grain and other produce to organs of the Soviet authorities at fixed prices. They were left with a portion of produce for personal consumption and the needs of their farms (according to fixed norms). This was an extreme measure of the policy of War Communism prompted by the food crisis and exceptionally difficult military and economic conditions in which the young Soviet state then found itself [Ed.]

** *Prodovolstvennyi nalog*—a tax in kind levied on peasant farms, it was introduced in March 1921 in place of *prodrazverstka* as part of the transition to the New Economic Policy. The aim of the tax was to give the peasants a material interest in restoring and extending their activities, increasing production, and selling more agricultural products. This was made possible because once the Soviet authorities had introduced a fixed tax in kind all the remaining grain and other agricultural produce produced by the peasants were theirs to dispose of—for their own consumption or for sale on the market. (The tax was low and intended to provide the state only with the most essential foodstuffs.) [Ed.]

in the spheres of distribution and turnover—not in production. This is a major contradiction that holds back processes of socialisation.

The new economic mechanism must aim to achieve a higher level of socialisation of production by reconciling various interests, and thereby reconciling the relations of property and of specific economic activities. It is now essential to have a mechanism that is based on economically-determined standards and norms, including a normative-sharing participation in the distribution of incomes.

V. Makarov (Corresponding Member, USSR AS, Central Economic and Mathematical Institute). Researchers who are analysing the process of reconstruction must examine the phenomenon of inertia in the system of social and economic administration. It seems that the administrative apparatus is the most inert and restricting element in this process. In principle it is right to say that bureaucratism is the main brake on acceleration but this is a rather narrow formulation. There are roughly 3 million people employed in the state's administrative apparatus. They form a distinctive social stratum which has its own laws, system of values, ways of thinking, and professionalism. Many administrators are professionals in their field and high grade workers. More often than others, administrators will speak in the name of the state although in practice they have their own "departmental" system of preferences.

The driving force behind acceleration is the initiative of the masses which should be supported and channeled in the right direction. This is one of the tasks of managerial staff at every level. Nevertheless, during the period of primarily administrative methods of management a style took shape among the apparatus that is distinguished by its use of the "braking layer" principle. This means that any suggestion or initiative is obstructed, whether it is good or bad. Today it is most important to destroy this style of work in the administration and train up a new generation who can administrate using economic methods. To implement new methods of administration employing computer technology it is essential that principle of the "braking layer" be destroyed and replaced by that of "accelerating selection", and for this new technological discipline to be mastered.

The replacement of administrative methods of management by economic methods, in our view, must be achieved by drawing the whole army of administrative employees into the sphere of economic relations. The particular ways of achieving such involvement are many and varied. First of all, this means the mutual economic and legal responsibility along the vertical axis, of the administering and the administered organs. It means gaining a measure of economic effect by making administration rational, and including administrative workers in *khozraschet* divisions and teams, etc. In a certain sense, administrative activities can be regarded as a distinctive branch

of an infrastructural type with its own "products", expenditures, efficiency and other economic categories.

V. Kashin (D.Sc. [Econ.], Institute of Economics). It is essential to further develop the system of economic relations. Many administrative-organisational relations should take the form of strictly economic relations between more or less independent economic subjects.

If we are talking about transferring enterprises to complete *khozraschet* then it is obvious that administrative-organisational relations will recede into the background. The team operating on *khozraschet* will also develop economic relations with the enterprise's administration and these will facilitate the attainment of a high level of efficiency in social production.

The spread of such relations entails the wide extension of the principle of compensation. This affects both specifically economic activities and the other essential auxiliary services.

The Leninist principle of the tax in kind (*prodnalog*) is most important. It can be widely applied in relation to many economic subjects; and to do so would greatly help the more effective economic stimulation of the activities of many links in the production chain and of those involved in management.

N. Klimov (D.Sc.[Econ.], Institute of Economics). To understand the substance of the process of acceleration it is important to look at it from two sides. First, there is the general aspect, the universal law-governed process of the increasing speed of development. Second, there is the specific aspect: this is represented by the varied circumstances under which real socialism is being constructed, including our shortcomings of the past decade. This approach will enable us to avoid an indiscriminative, evolutionary attitude to acceleration. Genuine acceleration can only be selective. Some processes must be accelerated, some slowed down, and others altogether eliminated no matter whether we are discussing kinds of production or forms of economy.

What is the criterion of such acceleration? It is apparent that only the kind of acceleration that gives scope to the progressive factors of growth and organisational forms, and that enables the "erasure" of outdated and outmoded factors and forms is justified. It is hardly right to only link bureaucratism with petty-bourgeois forms of being and consciousness. Large-scale machine production, or rather a particular stage in its development, also gives rise to elements of bureaucratism. It would also be incorrect to link bureaucratism only with the upper levels of the social structure. It is clearer if we begin with the most general and accurate definition of bureaucratism: the deformation of a system when ends and means are distorted and the latter replace the former. We then see that bureaucratism can be

nurtured among the workers themselves, and in the most varied of their groups.

Here I should say that bureaucratism, as one of the properties of industrial systems, obstructs everyone in the same way. For all the social differences between socialism and capitalism they share, in essence, one common problem. How can a centralism, that enables the development strategy to be defined and organised, be strengthened and the creative initiative of the productive links be stimulated? Capitalism attempts to solve this problem by strengthening and extending private property. We adopt other measures.

We cannot answer these questions without a qualitative deepening of our conceptions of property relations. They must be multi-dimensional and flexible. To understand the processes whereby ownership is exercised, for example, it is extremely important to study appropriation as the coexistence and mutual transitions of disposal, ownership and use. These must not to be dealt with as legal categories but as actual economic processes. No less important is a problem that Soviet academics have not studied at all: which, among all others, is the chief, historically-determined object of ownership? Has this always taken, and will it always take, the form of the material means of production (which we, honestly speaking, simply bow down and worship)? Perhaps under socialism such an object becomes something rather different? There is much work still to be done on this subject.

B. Smekhov (D.Sc.[Econ.], Institute of Economics). Soviet economics, it was noted at the 27th CPSU Congress, is too divorced from the needs of the day. Research in political economy must provide conclusions that can be practically implemented. I do not mean specific methods but the theoretically grounded propositions that could form the basis of applied research.

The strategy of acceleration makes new demands on the measurement of economic growth. The main task is to quantify the qualitative and structural changes taking place in the economy. It is time to work out the politico-economic bases for such quantification. From the general proposition about the nature of the use value and the value of commodity it follows that value indicators cannot serve the goal of harmonising production with specific needs. On the other hand, it is also necessary to measure the production dynamics of the totality of heterogeneous products. When we use fixed prices for this purpose, we must observe defined limits to the structure and quality of products in drafting plans; and when analysing the facts, we must evaluate divergences from these limits.

Planners are expecting real help in their activities from politico-economic studies. The current Five-Year Plan is witnessing the initial implementation of the Party's strategic policy. We must now already begin to think about the quality of the 13th and 14th Five-Year

Plans (1991-1995 and 1996-2000, respectively). Are present planning techniques capable of ensuring the now-required quality of economic growth? How shall we define the optimal shifts in the technological structure of production so as to obtain the greatest social results in our long-term plans? What are the bases of intensification of national economic planning using state-of-the-art computers? No general answers can be given to these questions without first determining their politico-economic bases.

I. Suslov (D.Sc.[Econ.], Academy of Social Sciences under the CC CPSU). I agree with the statement that acceleration is a universal law-governed process in the natural-historical development of society. However, this process is linked with contradictory factors. As we know, capitalism develops in a cyclical fashion. Economics has disclosed the main factors of this development and the reasons of stagnation and recessions. They are to be found in the forces of production, the relations of production, and in the superstructure. The socialist economy, however, has also experienced phenomena of stagnation, drops in the increase of production, and a lowering in particular periods of growth rates in the real standard of living.

Reality is such that the dialectics of socialist development is not unilinear. We must be able to explain not only increases but also declines in the growth of economic results. Without finding the causes it is difficult to disclose the entire mechanism of acceleration in increasing the production of material goods. Obviously such reasons are located in all three blocks: the forces of production, the relations of production, and the superstructural mechanisms. By reorganising, improving and refining the superstructural mechanism we influence both the forces and the relations of production; we intensify the links between them and within them, and strengthen the interaction between all the structural elements to achieve a positive growth and development.

It is important to emphasise that we are reorganising the superstructural blocks of the economic mechanism and not the economic laws and interests that form the substance of that mechanism. In reforming the normative-evaluative system and the legal-judicial and organisational-managerial structures we are proposing to give these economic laws and interests greater scope for activity: for it is they in the end that govern the economic processes. Working people and their collectives, once they have understood the purpose of their activities, should adapt their activities to the objective course of economic life.

That is why the way out of the present difficult economic situation to a large extent lies in the development of independence, self-management, and the self-financing of production collectives. These aspects must be supplemented by the development of cooperation between enterprises and a strengthening of ties with the

national economic managing centre. If these are not assured, then neither being self-supporting, independent nor self-financing will provide an accelerated movement of society as a whole. Political economists must uncover the deep roots of the administrative-bureaucratic mechanism and the conditions whereby it is reproduced, reinforced and extended. It is obvious that it will be impossible to overcome bureaucratism without a radical cutback in the administrative-managerial apparatus at all levels and in all links in the chain of production.

It is essential to increase the interest that the executive cadres in the state and economic organs of management take in raising the economic literacy of the majority of their staff. The requirement that all be informed about the economy, it should be said, has been insufficiently developed. Without overcoming this obstacle it is difficult to put the conception of accelerated socio-economic development into practice.

M. Kunyavsky (D.Sc.[Econ.], Byelorussian Institute of the Economy). I am convinced that accelerated economic development is identical to the intensification of production. The main factor in acceleration is the creative initiative and interested contribution of the working people; this is the only alternative to bureaucratism, and it is one that is very effective. How are these issues resolved in political economy today?

The widespread propositions concerning primary and essential relations speak of the working people's full creative initiative and their most profound interest in the development of production: they use the categories of "free and conscious labour", "directly social labour", and the "direct and unmediated combination of the factors of production". The reality, meanwhile, is far more complex and contradictory. I see the following general internal contradiction in our theoretical constructions which also reflects the contradictions of the restructuring process (*perestroika*). At the level of the most fundamental relations we draw a picture that, if it is not idealistic, is essentially ideal. At the level of productive relations, on the other hand, we dress up in pseudo-scientific terms the visible and superficial ties that took shape during the establishment of socialism: at that time it was largely the formal position of the working people as masters of production that was dominant for a number of subjective and objective reasons.

I see the practicability of working people being the masters of production lying first and foremost in the transition from "allocative" commercial accounting to a genuine cost-accounting (*khozraschet*) that is adequate to developed socialism. In our search for ways to improve our cost-accounting, we revolve around its transformed commercial axis and work within the categories of just such a phenomenon. Precisely because of this there arise numerous and

often fruitless discussions and experiments that “shuffle and reshuffle” the rights of departments and primary production links, indicators and so on. Hence the type of conviction that, for instance, self-financing must be at the expense of profit and nothing else: this is because profit is supposedly a natural and eternal indicator in conditions of commodity-money relations that shows the efficiency of local production links. Wages are an expense of production and must not grow quickly; payment to funds slows down technical progress; only the managers are responsible for all deficiencies and disorder—the workers simply carry out orders and have nothing to do with these shortcomings.

To a great extent, such ideas derive from the practice of reducing reproduction at the level of local production links to individual reproduction and to the categories of the reproduction of individual capital. We ignore the absence of individual reproduction and the presence of localised social reproduction under socialism. We have restricted the new content of commodity-money relations only to its compatibility with planning and are not thinking about the new forms that are to replace capitalist production expenses, profit and so on. Soviet political economy has still not made sense of the issue of *khozraschet* relations.

To solve this problem, in our view, it is essential to recognise the following preliminary propositions. First, the basic law of the communist mode of production and the communist principle of appropriation is not without an inner and objective dialectics of its own: it is far from being universal in its substance for the whole formation. At the socialist phase it is “harnessed” to the appropriation according to work contributed. Hence distribution according to work and *khozraschet*. Second, the essence of socialist cost-accounting (*khozraschet*) is that it distinguishes the actual work contribution and its commensurate reward. In these conditions the structure of expenditures changes but the wages, development funds, and social and cultural funds become a form of collective incomes for all the work collective. The collective income becomes earned by each member of the collective. Third, payments for resources occupy a quite special place in *khozraschet* relations. Their visible form is that of converted form. In essence they play a triple role: they even out the conditions of management and in so doing allow the work contribution to be defined; they ensure the normative expenditure on accumulation and extended reproduction; they constitute a mechanism restraining expenditure.

All of this shows that the politico-economic foundations of accelerated socio-economic development are to be found, above all, in the elaboration of the problems of *khozraschet* and its appropriate introduction into practical management.

Yu. Olsevich (D.Sc. [Econ.], Institute of Economics). Attempts have been made from the 1960s onwards to restructure the economic mechanism but none of them went far enough to ensure non-reversible long-term trends. To a great extent, this was because the historical specificity of the mechanism that had taken shape had not been elucidated. We suggest that its specific quality lies above all in redistributive functions subordinated to extensive growth. The whole system of plan indicators, wage funds and material funds, amortisation, price-formation, taxing, deductions from profit and so on, was subordinated to one central task: the maximum financial resources were to be concentrated in the state and ministerial budgets so as to create new production capacities, build housing, etc., while new human and natural resources were constantly being drawn into the economy. The key role in this economic system of extensive growth belongs to the ministries.

When transferring to intensive growth the main functions of the economic mechanism must be different. They must stimulate a rise in efficiency and quality through modernisation, the reconstruction of existing production by the STR, growth in employees' skills, economical use of resources and so on.

Today the redistributive purpose of the old mechanism is restricted to a great extent. The mechanism itself, however, continues to exist and reproduce extensive growth: and like any “living entity” it tries to “repel” or “digest” the partial changes that do not correspond to its specific character. An acute contradiction has arisen between the new tasks laid on the economic mechanism and its structure. It is only by structural change that this contradiction can be resolved. A new structure of economic relations must be formed with the full *khozraschet* of the work collective as its basic unit. The large combined research and production association plays a key role here.

A. Ivanenko (Cand.Sc. [Econ.]). I believe it is right to say that bureaucratism is the main brake on acceleration today. However, I would like to emphasise that it is not the only obstacle. If we reduce everything to the struggle with bureaucratism, I would argue, we shall be adopting a simplistic approach. Enterprise directors and section heads have become accustomed to working without initiative, only fulfilling orders from above: workers have become used to receiving wages that has little relation to their work contribution: for both it will not be easy to begin working actively. Therefore it is so essential to restructure the relations of production, linking the material interests of all working people to the attainment of the end results of production.

Such an improvement in the organisation of production, incentives and links in the economy is now being carried out. As we know, however, this is meeting with many difficulties. Far from all

the forms of management that suit present circumstances have been defined; those that have already been found are being slowly put into practice. The dogmatism of some managers is a hindrance. Another obstacle is the insufficient theoretical conceptualisation of the problems with which we have to deal.

Let us take the issues of the organisational structure of production. It is the large-scale, technically well-equipped and profitable enterprises, as a rule, that will be able to work well in conditions of self-financing. Therefore production associations and enterprises should be enlarged. However, if 50 enterprises are making a certain product there must inevitably be an agency to coordinate their activities, and this could lead to a loss of independence on their part. Therefore new organisational forms of production are necessary alongside the enlarging of production associations and enterprises.

Self-financing provides the economic preconditions to develop a democratised form of production management. And if management has not been democratised, on the other hand, enterprises will not be able to work successfully in conditions of self-financing. Yet to democratise management requires that we clearly understand the role of the subject of ownership in establishing economic relations at various levels of the management of production.

B. Rakitsky (D. Sc. [Econ.], Central Economico-Mathematical Institute). Today the most important problem is not to interpret the word "acceleration" but to uncover the deep-seated reasons for phenomena of stagnation and thereby prepare radical solutions. In my view, we must look for the main reasons of stagnation not in the economy but in the superstructure. There was not only stagnation in the management of the economy: it was also reflected in the social sciences. Here the reason is a certain loss of those advances in understanding provided by Marx's revolutionary contribution to the study of society: the dialectical vision of practice, and its link with the totality formed by the sciences of man. The CPSU now quite justifiably interprets *perestroika* as a revolution. It is the duty of social scientists to understand this as a substantial social commission to provide a theoretical grounding for the relevant questions.

In the 1930s and 1940s socio-economic relations in our country were deformed, and this deformation is preserved, to a certain extent, up to the present. Because of it we cannot explain contemporary problems by saying that the relations of production lag behind the development of the forces of production and that social consciousness lags behind social being. The type of the relations of production and social consciousness should be transformed in a revolutionary manner in the course of restructuring. It is essential to overcome this deformation and return to the path of progressive socialist development. In our view, that is how we must understand

the Party's directive for "more socialism", as expressing the tasks of restructuring. The profound essence of *perestroika* is the restoration of Leninist principles in our economic, political and social life. Only genuine democratisation can ensure that in our public activities we leave behind the deformation of socio-economic relations.

In the social sciences, including economics, democratisation means purifying Marxism-Leninism of alien propositions that distort it. Among the latter we may mention: extremely vulgarised interpretations of economic determinism, Proudhonism in approaching contradictions and the means of their resolution, and a lack of understanding of the mechanism of social progress. Many of these distortions became firmly established in the social sciences in the 1930s to 1950s by the elevation of Stalin's writings to the status of classic texts and the inculcation of his views by force while other approaches were repressed.

Today it has become fashionable to talk of political economy as a whole. There is no political economy as a whole, however. The fierce struggle between different schools and trends has not ceased in the Soviet Union although the efforts to renew Soviet economics in the late 1950s and the 1960s were seriously retarded. For us restructuring is quite essential and it is our duty as Party members and our obligation as professional economists to put it into practice.

There is yet another important point here. It is time to ask whether a social revolution from above is possible. As we all know, Marxism-Leninism has always denied that it is possible to make a revolution without the masses. This means that if we talk of *perestroika* as a social revolution then there must actually be an activation of the workers and a transition to a society that depends on the living creativity of the masses for its functioning. Only such a democratisation can ensure that we advance to a qualitatively new level of social development. Any other models will otherwise include inhibiting factors that, in one way or another, hinder the implementation of radical transformations.

V. Gromkovsky (D. Sc. [Econ.], Institute of Economics). The following aspects seem to be of fundamental importance. First, for a very long time it has been the ministries and departmental interests who have enjoyed the widest possibilities of shaping the economic mechanism. They have done so in helping to prepare the laws and decrees on economic issues, by working out the procedure and instructions for their application, and in implementing the practical direction of enterprises. Thus it was the administrative system that built up this mechanism, relying mainly on its own (ministerial) economic interests. It is not a question of the "evil intentions" of the ministries: simply they were not capable of acting against their own interests. In such conditions external pressure (e. g. political) could only counteract the actions of the ministries for short periods.

Second, it is essential to recognise that all the stable and self-reproducing elements and aspects of the economic mechanism that had taken shape (with all their virtues and vices) by the time we began restructuring are economic forms that express the interests of the ministerial-departmental system. In other words, certain features are thus not accidental obstacles but inseparable elements of the old economic mechanism: the orientation of production towards quantitative gross indicators, weak stimulation and even obstruction of the STR, indifference to product quality, unjustified rises in prices, and so on. It is not important whether the ministries and departments have a direct and unmediated interest in all these phenomena (such as growth in the volume of production), or whether the mentioned negative aspects are inextricably bound up with ministerial goals that are positive from society's point of view. It is only by creating a fundamentally new economic mechanism that these shortcomings in the economy can be removed. And since the old mechanism is born of the ministerial-departmental system, restructuring must begin with the radical transformation of the economy's management. The old system of administration is incompatible with the new economic mechanism.

Socialised production requires centralised administration and this cannot be achieved without having the corresponding apparatus and offices. However, the principles according to which such an administrative system functions can be changed without affecting the essence of socialism. If we preserve the old ministerial-departmental system of administration—not in its present specific configuration but in its working and organisational principles—this will inevitably lead, sooner or later, to the rebirth of the old economic mechanism with all its defects. To act thus would effectively be the same as rejecting restructuring and acceleration as a whole.

L. Abalkin. To judge by the comments of those contributing, this discussion has been useful. It has enabled us to uncover many problems and see their non-traditional aspects more fully. Our conversation has allowed us to air much of our accumulated experience and ideas although, naturally, it was difficult to keep within the bounds of the given programme. Perhaps in the future it will be sensible to put forward some conclusive or at least intermediary results of research in progress as well as to pose problems: this would enable us to hear an assessment of the conclusions being drawn and have the opportunity to correct them and be more specific. In our next discussion, in short, we shall look for different forms of discussion.

In conclusion, I would like to answer certain questions, including those that I myself posed at the beginning.

First of all, we must not give a one-dimensional interpretation of the word "acceleration". We now understand socio-economic accel-

ation as the definition of the Party's long-term strategy as laid down in the party programme and intended to last up until the very end of this century. That is the name given to a strategic policy. We could give examples of many names or titles that often have a wider and fuller content than their direct and etymological expression.

Then we must clearly understand the processes that take place when all spheres of life at the socialist stage in social development make the transition to a new condition. This transition embraces the forces and relations of production, and the political, moral and cultural life of the country. We must recognise that these changes have a qualitative or revolutionary character. In turn, such an acknowledgement demands that we re-examine certain established dogmas. In particular, everyone is familiar with the thesis in politico-economic literature (to be found in more than one book) that revolutionary forms of development are not typical of socialist society: and that since we are referring to the immutability of a qualitative state only an evolutionary path of development is possible. Many of us were brought up with such a view and such politico-economic conceptions and to the present they continue to predominate. If socialist society is of only one quality and profound, radical and fundamental qualitative changes do not take place during this first phase then the type of development is evolutionary. No restructuring or revolutionary shifts can occur here.

Today, however, our conception of socialism is considerably deeper. Socialism is a very complex phenomenon and a complex society with definite levels and stages of development. The transition to a new qualitative state is part of the dialectical meaning of the revolution. Naturally, by this we do not mean social revolution but in the sense of the profundity, scale, type and character of the transformations.

Here there arises the problem of defining the content of the acceleration process. In my view, this does not coincide with the concept of simple growth, especially in the traditional quantitative measurements. I will assert, and am willing to prove, that growth in the country's productive potential—let us say, its doubling—will require more and more time in each successive period. If it took us ten years to double potential the last time, and will take 15 up to 2000, then after that date we shall only double our potential after 20-30 years. The economic dynamics of modern society cannot be described by simple quantitative parameters. It is one thing to create a country's primary economic potential and for purely quantitative parameters to grow to the level attained: it is quite another, to pose the task of qualitatively transforming the structure of that productive apparatus and its modernisation and renewal. And that is the substance of acceleration. It must strengthen the dynamism of the economy, the pace of renewal, and the speed with which the system reacts to needs as they arise. This dynamism is expressed in such

complex concepts as the compression of time, and enlarging the volume of information, which is necessary to rework into unit time.

It is overall very difficult for us to conceive of a type of economic development and of expanded socialist reproduction without quantitative growth. We may take the training of engineers in the Soviet Union as an example. We have today reached such limits that it will not be necessary to increase the number of engineers before the year 2000. Nevertheless, there must be an extended reproduction of our engineering cadres but one that is based on intensification. This means the quality of training and its correspondence to the trends in scientific and technical progress, and changes in profile of training in accordance with changes in technology and the appearance of new forms of production. It means the rapid renewal of specialised knowledge and raising of skill levels over 15, 8 or even 3 years while the total number of engineers trained remains the same. This is what we mean by a new type of growth and acceleration of economic processes.

There is also one other major question. Today we must not talk of the relations of production or of cost-accounting without analysing the subjects of these relations. Moreover, to recognise and account for them raises problems of our study of the social structure of society, the distinction between certain social entities which are the bearers of particular relations, their mutual interconnections, and so on. This will lead us to an objective understanding of the problem of bureaucratism and allow us to examine it, not as alien to political economy, but as something organically linked with our understanding of that discipline's subject matter.

In this context I would like to cite a comment Engels made in his letter to C. Schmidt in which he tries to show this interconnection.⁴ As certain general functions arise in society so a particular group of people appears at times in the division of labour who fulfil these functions in the name of, and under instruction from, society. Once this group has emerged, however, it takes on a particular independent economic interest. Therefore questions concerning the economic interests of the system managing the economy are exceptionally important and complex. We must ask how and why the economic administration begins to have separate interests; how and why these interests separate and depart from those of society; and why a definite opposition arises between the interests of society and those of ministerial and territorial organisations.

There is another, no less complex question. By what mechanism can we guarantee that the interests of society as a whole are observed? What is its essence? We shall not be able to discuss this question unless we bring the entire range of socio-political problems into its analysis: for without recourse to all the forms of a democratised organisation of society (*glasnost*, supervision over the activities of planning and managerial organs, accountability, etc.)

there is no guarantee that the interests of society will be met. Only in this way, I believe, can we find a force that is not deflected by its own interests and which will directly express the economic interests of society and the people.

I would like to emphasise that we must overcome the artificial barriers that divide specialists into those studying the basis and those studying the superstructure. The two cannot be separated. It is no coincidence that our discipline is called political economy, and any departure of that subject from politics is a turning towards scholasticism. I think that no one could name a single work by Lenin on political economy that is abstracted from politics.

I shall not develop this thought further although it is an exceptionally interesting and not straightforward issue. We are planning to attempt a theoretical elaboration of all the problems linked to the mechanism of interaction between economics and politics in our institute.

NOTES

¹ Mikhail Gorbachev, *Political Report of the CPSU Central Committee to the 27th Party Congress*, Moscow, 1986, p. 47.

² *Ibid.*, p. 48.

³ V. I. Lenin, *Collected Works*, Moscow, Vol. 27, pp. 266-269.

⁴ K. Marx and F. Engels, *Selected Works*, Vol. 3, Moscow, 1970, p. 491.



Econometrics and the Methodology of New Classical Macroeconomics: a Critique

Alexander LIVSHITS

Given the influence of monetarism and the supply-side movement in today's non-Marxist political economy their critical analysis from a Marxist-Leninist standpoint should not only reveal their class substance but also show whether they provide a complete and accurate picture of the economic realities. This will make it possible to determine their practical value and, consequently, the effectiveness of policy decisions based on them.

Such an analysis is all the more called for because the exponents of new classical macroeconomics (neo-conservative schools) insist on the validity of their ideas and claim that their significance transcends the boundaries of economics. According to J. Wanniski, one of the founders of the supply-side school, the supply model should be accepted as "the framework for policy-makers for at least the next generation or two".¹ In the 1980s calls for the "politicisation" of the neo-conservative economic theories materialised in the economic policies of the Reagan Administration, which to a considerable extent are based on the monetarist and supply-side ideas.

Most neo-conservative authors see econometric models as a means of matching their theoretical conclusions to the economic realities.

It should be pointed out from the outset that the econometric models they use have been produced in accordance with the methodological principles of Frisch-Tinbergen² and are not based on actual facts. The non-Marxist economics have developed their own sets of problems, initial assumptions, axioms, constraints and variables, as well as links between them formalised in the form of equations. That is why the econometricians' claims that they "are

trying to model the real world and estimate the models from actual data"³ are misleading, to say the least. These models are rooted in different schools of non-Marxist political economy; they remain its part as an element of the methodology of economic theories (whose ideological underpinnings are patently clear).

The fundamental principles of the methodology of neo-conservatism have been elaborated by Milton Friedman. Foremost among them is the combination of formal logic in the elaboration of theories, which has become a tradition in the classical economics, with empirical studies. Dispensing with a straightforward analysis of actual data, Friedman identifies empirical studies with econometric investigations. In the view of Friedman and other theorists of neo-conservatism, the latter should only be used as additional proof of their findings, which are primarily arrived at as a result of reasoning (e. g. on the government regulation of the economy). This will also serve as proof of their usefulness to policy-makers.

Friedman's approach to the fundamental assumptions of economic theory is quite different: here all verification, including that with the help of econometric models, is considered irrelevant. His reasoning is that if theoretical conclusions are borne out by model-based computations this only goes to show that the precepts have done their methodological job well and proved valuable tools of theoretical analysis. "...The only relevant test of the *validity* of a hypothesis," writes Friedman, "is comparison of its predictions with experience."⁴ In the final analysis, Friedman and other neo-conservative economists claim, the reality of the end results makes completely irrelevant the question of the unreality of the postulates.

This idea, which plays a central role in the methodology of monetarism and the supply-side movement, is utterly untenable. First, if the initial methodological assumptions are not an abstract expression of the substance of the actual capitalist economy—and this is something freely granted by Friedman et al.—the theories based on them will inevitably present a distorted picture of the real world. This process of distortion is as inexorable as formal logic itself and no amount of econometric investigations will help, because the econometric models are based on correlations which have been arbitrarily arrived at by non-Marxist economics and do not provide an accurate picture of the capitalist economy.

Second, and what is more important, the postulates are not merely instruments of logical analysis. Here are some examples found in practically all neo-conservative economic theories: free market competition is an ideal economic mechanism; competition is taking place among socially homogeneous rational subjects, who are operating in the circulation sphere with a view to optimising their welfare; the objective of the government policies is to ensure unimpeded functioning of the market system, correct its deficiencies, etc.

These postulates, which are in obvious contradiction to the realities of today's state-monopoly capitalism, are at the same time the foundation stones of the Western economists' ideological positions. They have been chosen for this function because they are based on such tenets of economics as the refusal to recognise capitalism's social antagonisms and class nature, the acceptance of the exchange approach and the claim that free competition is a timeless factor. Thus the monetarists and suppsiders "are in effect recapitulating the ABC of the neo-classical economic theory"⁵. They are trying to explain reality not on the basis of facts but on the strength of inadequate abstractions in the neo-classical manner, thus keeping alive the methodological tradition of Western economics. In a critique of Proudhon's ideas Marx wrote: "Instead ... of regarding the political-economic categories as abstract expressions of the real, transitory, historic(al) social relations, Monsieur Proudhon, thanks to a mystic inversion, sees in the real relations only embodiments of these abstractions. These abstractions themselves are formulas which have been slumbering in the heart of God the Father since the beginning of the world."⁶ This observation of Marx's is fully applicable to the theories of the present-day neo-conservatives.

Monetarists and suppsiders offer different interpretations of the methodological role of econometrics. However, for all their differences, most neo-conservatives give pride of place to reasoning, with mathematical statistics and, to an even lesser extent, econometrics playing only a subsidiary role.⁷

Today's status of the monetarist and supply-side theories in contemporary non-Marxist political economy is as follows.

On the one hand, they represent a departure from the fundamental principles of the classical economics exhaustively formulated by the authors of the marginalism. Their present-day followers, such as, for example, Friedrich von Hayek and other members of the Austrian school, reject mathematical models and statistical estimates as unnecessary tools borrowed by economists from natural scientists, and generate their theories solely by means of logical reasoning. While sharing Friedman's ideological views, they are at the same time opposed to his methodology.

On the other hand, the neo-conservatives' platform is criticised by Western positivists, who feel that statistical generalisations are more important than logical constructs. Neo-conservative ideas have also drawn fire from econometricians, who believe that mathematical statistics should be combined with purely mathematical operations. It should be obvious therefore that neo-conservative econometrics are in poor agreement with mathematical economics. For example, K. Arrow and G. Debreu, who disagree with Friedman and stress the overriding importance of mathematical methods, see the empirical usefulness of a theory not in statistical estimates but, for example, in its capability to prescribe conditions under which the equations of

competitive equilibrium have a solution,⁸ irrespective of the fact whether these conditions provide an accurate and complete picture of the real world.

In short, the neo-conservative economists have adopted a compromise position which is an eclectic combination of the views of the representatives of the above-mentioned schools on the methodological role of econometrics in economics.

This is not new in Western economics. A similar attempt was already made by W. Leontief, who built his input-output equations by combining American statistics with L. Valras' model of market equilibrium. Similarly, I. Fisher married the logical reasoning of the old Chicago school (F. Knight, J. Viner, and G. Simons) to mathematical-statistical computations characterising the impact of monetary policies on the capitalist economy. From the methodological viewpoint the ideas of neo-conservative economists differ from the theories of Valras-Leontief and Fisher mainly in the specific characteristics of the immediate object of analysis. Whereas Fisher's theory is limited to matters of monetary regulation and the Valras-Leontief theory does not concern itself with the analysis of aggregate demand and the economic role of the government, the monetarists and the suppsiders are dealing with a broad range of problems in the economics and policies of today's capitalism. The neo-conservatives' theories lay claim to having provided answers to such major problems of the capitalist world as stagflation and the slowing down of economic growth.

Methodology-wise, present-day neo-conservative theories are characterised by greater logical consistency than purely positivist models, less brazen dogmatism than the ideas of the Austrian school and greater realism than the mathematical economics. Its methodological, theoretical and ideological underpinnings have made neo-conservative theories eminently acceptable for the ruling quarters of certain capitalist countries which were looking for an alternative to the Keynesian strategy of economic regulation.

As far as the subject-matter of economic science is concerned, the monetarists and suppsiders share the traditional Western economists' view. As a result, the equations in the neo-conservative models are but formalisations of irrelevant abstractions about the apparent aspects of the capitalist economic mechanism. It might be added in this connection that all econometric models are usually based not only on postulates of some economic theory but also on certain assumptions. Friedman and his followers, however, have not only dispensed with empirical testing of their fundamental postulates but also with proving the validity of their initial assumptions. In their models the inclusion of certain categories as variables and the relegation of others to the status of assumptions is dictated by what the economists are out to prove and by the prototypes arrived at by reasoning.

This has led to the belittling of the role of econometrics in the works of monetarists and supplysiders. Setting out to prove the validity of their logical conclusions, they perform econometric investigations on the basis of carefully selected sets of variables and assumptions, statistical data, time horizons and even countries. If the end result is what that they set out to prove it is elevated to the rank of factual proof of the validity of theory, whose fundamental provisions are hailed as economic laws. What we have here, however, is nothing more than a different, statistical form of presenting the neo-conservatives' ideas. To put it in other words, econometrics is being adapted to neo-conservative theories and largely transformed from an analytical tool into a form of presentation.

Further on, since Friedman's methodological principles are now shared by many Western economists there is a growing area of confrontation between the supporters and opponents of neo-conservative economics mainly over problems subjected to econometric analysis. The opponents are making their case with the help of investigations based on different models, different statistics, different time horizons, etc. This debate is not fortuitous. It is no accident that the econometric weapon is most actively used in the controversy over the effects of Keynesian macroeconomic regulation on the capitalist economy. In the final analysis this clash of opinions is the reflection of the clash of group interest caused by fear of both the rampant inflation, largely triggered by Keynesian regulation, and budget deficits and unemployment, largely brought about by the implementation of the neo-conservative political doctrine. The role of econometrics has thus been reduced to the provision of statistical arguments for the principal movements in non-Marxist economics which for all their differences have the same main objectives.

Criticising bourgeois statistical economists, Lenin stressed that in the process of scientific analysis "...we must take not individual facts, but the *sum total* of facts, without a *single* exception, relating to the question under discussion,"⁹ because otherwise subjective evaluations may appear, which sometimes even border on the deliberate doctoring of statistical data. That this observation is also applicable to the neo-conservative school is evidenced by its use of econometrics.

One of the central provisions of monetarism is that the main factor determining the short-term dynamics of production is the fluctuation of money supply. The entire concept of monetary regulation is based on this precept. For example, it is suggested that long-term monetarist policies be adopted and the growth of money supply stabilised. This, in view of the adherents of the school, would make it possible to avoid cyclic fluctuations of production and employment. In the final analysis this thinking is based on the axiom of the predominant role of money in the capitalist economy, which is simply not the case.

These precepts of the monetarist theory have found expression in econometric models permitting the estimation of time lags in different scenarios of monetarist policies and the obtaining of arguments proving the case of the Western economists in question. These models are based on the mathematical-statistical analysis of dynamic series reflecting the rates of growth of money supply and the gross national product in real terms. These econometric models have the same ideological underpinnings as their underlying monetarist assumptions.

R. Barro, a prominent theorist of neo-conservatism, performs his econometric computations on the basis of similar principles. The central feature of his model is the econometric analysis of the dependence of fluctuations in unemployment levels on changes in the money supply, unexpected for rational subjects. According to him, the criterion of unexpectedness is the conduct of a Keynesian monetary policy, i.e. for the short-term regulations of interest rates, the financing of budget deficits and so on. As a consequence, the neo-conservatives view such computations as a proof of another logical conclusion: namely that Keynesian monetary policies are equivalent to the state interference in the functioning of the labour market, as a result of which the unemployment rate deviates from the natural rate characteristic of the free competition system. These econometric evaluations are used as an argument against the Keynesian and the countercyclical regulation of the economy in general and as a case for neo-conservative economic policies, in which, as Barro puts it, "there is no countercyclical role for money".¹⁰

M. Feldstein's models are mathematical formulations of a number of provisions of the supply-side theory which claim among other things that an imperfect taxation system and federal social spending exert a negative influence on private saving and investment.

These models are in effect based on neo-classical thinking. For example, blindly idealising free enterprise system the neo-conservatives think that the marginal level of taxation in the developed capitalist countries is too high and as a result leads to the deviation of the marginal efficiency of the factors of production from values characteristic of free market economy. As a result, they go on to say, owners of capital refrain from new investment. Private saving also dwindles, because federal social programmes encourage the rational men not to save but to spend extra income. In what amounts to a demonstration of the neo-conservatives' ideologies Feldstein calls on the governments to phase out federal pension schemes and other social programmes.¹¹ It is obvious that speculation on the imperfections of the taxation system and the federal social security schemes are used to justify the policies of conservative governments which grant tax concessions to business and erode the living standard of working people.

As we have already pointed out, the above reasoning and their econometric versions present a distorted view of the real economic mechanism. It is common knowledge that the dynamics of capitalist production are determined not by money supply fluctuations and monetary shocks brought about by Keynesian regulation, but by capitalism's objective economic laws.

The neo-conservative economists claim that their econometric estimates and the statistical data they are based on are in good agreement with their logical constructions. On this score it is first of all necessary to point out that the latter are in effect a rather abstract discussion of rational men who function in conditions of free competition and whose preferences are affected by the "wrong", i. e. Keynesian, economic policies. To put it differently, these logical constructions operate with *microeconomic notions* borrowed from various marginalist theories and describing the rational men's behaviour. As for econometric investigations they are a different story altogether: the models compare *macroeconomic aggregates*—gross revenue from taxation, unemployment rate, money supply, government spending and so on. These notions are used to describe the economic mechanism as a whole.

Since the neo-conservatives' logical constructions are confined to arbitrary economies which have little in common with the real world, it turns out that the neo-conservatives ratiocinate in one conceptual language, while their econometric studies have a different object and use a different language. Such computations for obvious reasons cannot serve as an econometric proof of the validity of logical constructions. The inevitable conclusion is that *neither the neo-conservatives' initial postulates nor their logical constructions are supported by actual facts*. What remains is the conclusions of Western economists concerning economic policy, for example, that government social spending and high taxes reduce private saving (Feldstein), or that Keynesian monetary policies increase unemployment (Barro).

Matches between statistical indexes and the precepts of neo-conservatism do not guarantee the validity of the latter. The degree of realism of the econometric models used by Western economists depends, first, on their quality, for example, on the realism of their assumptions and the adequacy of their statistical data to the phenomena they purport to measure. Thus Friedman's followers build into their models their erroneous views of the capitalist economy. Many important factors are either relegated to the status of assumptions (whose importance is considered to be negligible) or completely ignored. In contrast minor factors are not infrequently built into models as variables. It should be noted in this connection that, emulating Friedman, most other neo-conservative economists pass over in silence the question of the correctness of their assumptions and reject the need of testing their validity. What is

more, the justification of the choice of statistical data is usually dispensed with.

Second, in an ideal situation the realism of econometric results is the function of their universal application to all times and countries. The universality of the neo-conservative models, however, is rather limited, because their results are contradicted by the numerous findings of the opponents of monetarism and the supply-side economics.

It looks like the outcome of "the war of the models" will not be in favour of the monetarists and the supply-siders. Over the last few years Western economists performed many econometric studies of the impact of government social programmes on private saving and investment. About 75 per cent of them disprove Feldstein's conclusions. The lion's share (70 per cent) of the remainder were obtained by Feldstein himself,¹² who is thus on a sort of lonely Crusade.

The overall conclusion is that although neo-conservative econometrics is in many instances perfectly sound mathematically it provides but a distorted view of reality. This is a deficiency from which the whole of the non-Marxist political economy suffers. What is peculiar to neo-conservative econometrics is that it substitutes a mathematical-statistical justification for factual proof.

For example, Western economists erroneously regard the findings of Barro and Feldstein as factual proof of the fact that the problems of the capitalist economy are due exclusively to the "wrong", i.e. Keynesian, policies of the Western governments, and that they can be solved by means of neo-conservative economic policies. The Political Report of the CPSU Central Committee to the 27th CPSU Congress had the following to say on this score: "The problems and crises experienced by the capitalist world arise within its own system and are a natural result of the internal antagonistic contradictions of the old society."¹³ Unemployment and inflation along with the economic slowdown are manifestations of the aggravating general crisis of capitalism, which does not depend on policy changes of any one government. They are the result of the workings of economic laws under monopoly capitalism.

At the same time it has to be conceded that there is a degree of realism in the econometric assessments of neo-conservative economists: they do provide a glimpse of the functional, unstable links between the different parts of the capitalist economic mechanism. For example, government intervention in the circulation sphere (including that along Keynesian lines) does affect (sometimes negatively) production and employment under capitalism. The realism of neo-conservative econometrics is limited to the discovery of the crisis in the post-war system of government regulation.

In his methodological manifesto of neo-conservatism Friedman pointed out that all of his conclusions should be put to the test of econometrics. This intention notwithstanding, there are precious few

neo-conservative econometric results that support the monetarist and supply-side positive programmes, rather than reveal the deficiency of the Keynesian-style regulation. For example, the central provision of monetarism, viz. that the slower growth of the money supply should stabilise prices and reduce production fluctuations, has not been proven statistically. Neither has the idea that the curtailment of government social spending would have a beneficial effect on the capitalist economy, nor any other highly abstract recommendations of the monetarists and supplysiders.

Let us take, for example, the so-called Laffer effect, which holds a central place in the supply-side theory. Its main idea is that tax cuts would stimulate business activity and in the longer run lead to the growth of investment, employment and revenue from taxation.¹⁴ This effect, far removed from the realities of present-day capitalism was formulated by the US economist A. Laffer strictly in accordance with the methodology of the mathematical economic theory.

Meanwhile all attempts to place an econometric foundation under it have proved futile. For example, Feldstein's calculations, in addition to other deficiencies, were shown to contain an error, whose correction also led to the disappearance of matches proving the existence of the Laffer effect.¹⁵ An econometric study carried out by opponents of neo-conservatism has shown that for the Laffer effect to be triggered it would be necessary to raise income tax in the USA to at least 70 per cent(!).¹⁶ Only in this case will its reduction produce the effect predicted by the neo-conservative economist. In reality the income tax rate in the United States is only one third that assumed in the Laffer model, which goes to prove its speculative character.

The same holds for other econometric studies called to corroborate neo-conservatism's positive provisions. It is a matter of record that the supply-side theory is full of internal contradictions. For example, there is poor agreement between its presentations of tax and monetary policies. On the one hand, on the strength of their theory of the marginal efficiency of production factors, the monetarists hope to be able to stimulate investment by means of marginal tax rates. On the other hand, fully in line with monetarist philosophy, they insist on strict controls on the growth of the money supply, which normally leads to higher interest rate and prevents the growth of private investment. That this contradiction cannot be resolved either in theory or in practice is evidenced by the results of the 1981 tax law in the USA, which fell far short of the Administration's forecasts about the rates of growth of private investment proved to be wrong.

Nevertheless the US neo-conservative economist T. Roth decided to take on this task. He contended that tax cuts lead to the falloff in the aggregate (net) money demand. In this situation the decrease in the money supply, on which the monetarists insist, would correspond to a lower demand and would not lead to higher interest rates and

shrinking investment, which in T. Roth's view, removes all contradictions in the supply-side theory.

The Roth model is worth a second look, because it is not only a rare attempt to conduct an econometric analysis of neo-conservatism's positive elements. It is also based on US statistical data of the Reaganomics vintage. Roth uses mathematical statistics techniques to calculate the impacts of certain factors determining the money demand and finds that the most important of them is the ratio between the volumes of profit and wages—the greater this ratio the lesser the money demand. Since according to Roth tax cuts are accompanied by the growth of this ratio, the contradictions in the theory are said to be removed. This leads him to hail econometric assessments as a proof of the fact that "...supply-side tax cuts—including cuts in marginal tax rates and saving incentives generally—can be reconciled with steady, systematic reductions in the rate of increase of the money supply".¹⁷

Such calculations cannot be accepted as proof of the validity of the positive provisions of the supply-side economics. First, the statistical aggregate used by Roth to define the money demand is less than the mass of money in circulation. Neither does it adequately reflect the total money demand. The choice of a different aggregate would have led to a different statistical estimate. Second, the ratio between profit and wages is the principal only among the factors which Roth included in his model, dispensing with the need to justify their choice. Third, the dependence between tax cuts and the increase in the profit-to-wages ratio was simply postulated by the author of the model. In our view, like Barro and Feldstein Roth resorted to dubious devices: while estimating the impact of the profit-to-wages ratio on the money demand he draws conclusions about something different, namely about the impact of the tax rate on this demand. We submit that in reality the relationship between the dynamics of profits and wages is mainly due not to the tax rate fluctuations but to the operation of the universal law of accumulation under capitalism.

The US economic record in the 1980s shows that the neo-conservative theory and policies based on it contain certain internal contradictions. This notwithstanding, supply-side econometric studies, including that of Roth, set out to prove the contrary. For all their mathematical and statistical soundness they are at variance with the facts.

The conclusion is that the monetarists and supplysiders use econometrics less for the verification and justification of their positive recommendations on economic policy than for criticising Keynesian ideas. Their recommendations about changes in the existing system of government economic regulation, arrived at by means of reasoning and purely mathematical techniques, are divorced from life. The ideological function of econometrics, which on the whole

plays a subsidiary role in the methodology of monetarism and the supply-side economics, is primarily to provide factual proof to the neo-conservatives' conclusions that were postulated a priori.

NOTES

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- ⁴ M. Friedman, "The Methodology of Positive Economics", *Philosophy and Economic Theory*, Oxford, 1979, pp. 22-23.
- ⁵ I. M. Osadchaya, *Conservatism vs. Reformism (Two Trends in Western Political Economy)*, Moscow, 1984, p. 186 (in Russian).
- ⁶ K. Marx and F. Engels, *Selected Correspondence*, Moscow, 1955, p. 45.
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- ¹² *Public Finance*, The Hague, 1984, Vol. 39, No. 2, pp. 288-291.
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- ¹⁴ For more on the subject see: A Livshits, "A Critique of the Supply-Side Economics", *Voprosy ekonomiki*, 1985, No. 10, pp. 116-118.
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The Ecological Imperative

Nikita MOISEYEV

Humanity has entered a new era of its existence when the potential of the environment modification means it has created becomes commensurate with the potent natural forces of the planet. This generates not only feelings of pride but also apprehension for it is fraught with aftereffects which not so long ago we had no grounds to ponder in earnest but which—and now this all too obvious—can sound the death knell for civilisation and even for every living thing on Earth. The above means that all those who bear the burden of responsibility for scientific and technical progress and, what's more, for using its achievements for practical purposes are now confronted with an objective demand to take into account the vulnerability of the natural environment, not to allow anything exceeding the "permissible limits", to gain a deeper insight into the very essence of the complex and interrelated phenomena inherent therein, and not to go against the laws of nature so as to avoid triggering irreversible processes. A scientifically justified prognosis should form the basis for any environment modification actions. Meeting this demand is a must, irrespective of whether a given measure is regional, continental or global in scale. We call this demand *an ecological imperative*. It should be respected not only by those engaged in economic activities but also by political leaders whose actions determine ways of dealing with international problems.

The term "human ecology" has appeared in recent decades. In Greek, "ecology" means a study of one's *home*. For mankind, however, the whole planet is its home. Consequently, in using this term we have in mind problems of a global magnitude, problems of studying our habitat as an integral planetary whole in the complex of interrelationships between social and natural factors, with the social being moved to the fore because this is conscious and purpose-

oriented human activity in vigorously pursuing interests of people. This means a need to take into account not only the power of the modern-day productive forces but also the nature of production relations which are superimposed by a complex structure of appropriate social institutions. This superstructure, as we all know, also includes the totality of spiritual phenomena, the "ideal" that leaves its imprint on the form and content of human activity. Among those phenomena we list, in particular, ecological awareness underpinned by the ecological imperative as realisation of the objective necessity to take into consideration not merely the laws of nature but also the "technical conditions" which nature puts before us. I wish to qualify at once the expression "technical conditions" for, although representing an occupation which has nothing to do with the humanities, I have a negative attitude to the technocratic or scientism-oriented view of the world and of practical transformative activities. Indeed, "man is the measure of all things", according to an ancient philosopher. Within the limits set by nature herself, first and foremost, I see the interests of man who lives by nature, transforms it through his work and thus creates himself. "History itself is a *real* part of *natural history*—of nature's coming to be man."¹

It is quite clear that the natural-scientific and the humanitarian aspects form an integral whole within the ecological imperative. I believe that the two things are so closely intertwined that one should be seen in the other, and vice versa. An active "alloying ingredient"—not a mechanical impurity but an organic effective factor which imparts special attributes—is political awareness that is reflective of social orientation. Speaking of the ecological imperative, we do not abstract ourselves from political realities and do not try to "rise above" them but perceive the whole complexity and contradictoriness of today's world in which, concurrently with the exacerbation of global trends (predicated on the growing industrial pressure and consequences of the scientific and technological revolution), the interrelationship of heterogeneous economic and social processes gains in strength. From this standpoint, an important place in ecological sciences is given to the problem of averting global ecological crises.

Throughout the history of our planet, ecological crises and disasters have more than once shaken the biosphere, killing many a living species and substantially changing the genotypical constitution of the living world. Those catastrophes have been triggered, apart from the geological processes on Earth itself, by predominantly external, cosmic things such as, for instance, clashes with interplanetary wanderers or changes in the parameters of the Earth's orbit and in the position of the axis of planetary rotation. No matter how improbable such things might appear, they cannot be ruled out in future as well. Generally speaking, the human race has to take into account the possibility of this kind of ecological crisis.

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Today we are much more concerned, however, about ecological crises generated by people. As society evolves, man's impact on nature is becoming more sizable. It has more than once brought about catastrophic consequences. For instance, at the dawn of civilisation, mismanagement of irrigation and excessive cattle grazing resulted in rendering infertile the lands of North Africa and the Middle East. There are numerous other examples of ecological crises predicated on the historical limitations of both practice and scientific knowledge.

But the past ecological crises, caused by practical actions, were local in their implications and posed no threat to humanity as a whole. Now, given the enormous increase in the technical might and energy power of civilisation, the picture has become quite different. The contradiction between man and his environment is aggravated by social contradictions. Under capitalism, they are antagonistic in nature. The question of an ecological imperative at the international level was raised sharply for the first time when atomic energy was harnessed and used for military purposes.

After the tragedy of Hiroshima and Nagasaki the whole world has set to studying the possible consequences of a nuclear war, i.e. the destruction from the most powerful of blasts, the spread of radiation, and biological devastation. Over recent years, research into climatic effects has also been conducted. Attention was drawn to them in the late 1970s following a theoretical analysis, conducted in the West German Max Planck Institute, of possible massive fires. It was established that nuclear strikes against major cities would produce thick clouds of soot which would all but obscure the sunlight. Depending on the kind of fire, only one-thousandth to one-millionth of the light usually coming to the Earth would penetrate those clouds. Under their black mantle total darkness would descend accompanied by a sharp drop in temperature.

On the basis of his calculations, American astronomer Carl Sagan has drawn up several "scenarios" of the climatic after-effects of a nuclear war. According to his estimates, even a fraction of the currently stockpiled nuclear potential is more than enough to put impenetrable soot clouds over a considerable part of the northern hemisphere. Words such as "nuclear night", "nuclear winter", etc. appear in the press.

The next move was made by the Computer Centre of the USSR Academy of Sciences which, as specialists acknowledge, created the first version of the biosphere's mathematical model. We undertook efforts in this direction in the early 1970s in order to get a toe for studying the biosphere as an integral whole. By the early 1980s, we already had a *computing system*. A computing (or simulating) system is a complex of mathematical models, simulating a phenomenon being

explored, interconnected by a guiding programme into an integral whole and equipped with essential mathematical software that makes possible complex mathematical experiments with objects which do not lend themselves to direct experiments. The system was able to assess peculiarities of the global processes transpiring in the biosphere, primarily, in the atmosphere and ocean. By then, the USSR had accumulated experience in carrying out large-scale experiments, using the above-mentioned computing system. It was only natural to use it for exploring various effects of a nuclear war, following the available "scenarios", and in particular for tracing the fate of the soot clouds produced by fires which would start as a result of nuclear strikes against cities. The calculations were made by the Computer Centre staff in the summer of 1983. They showed the climatic changes that would result from the events described in Sagan's "scenarios".² It was ascertained that, within the first month following a catastrophe, all soot clouds would merge into a single cloud. This would totally revamp the structure of atmospheric circulation. Gradually, the black cloud would shroud our planet in a thick, all but impenetrable mantle.

The optical thickness (that is the degree of light penetrability) of the soot blanket would depend on the scale of the nuclear disaster. If the nuclear strikes measured 10,000 megatons (i.e. one half million Hiroshima bombs), only one-ten-thousandth to one-hundred-thousandth part of the light would reach the Earth's surface. Should it measure merely (sic!) something like 100 megatons, which is equivalent to the atomic strike of several modern submarines, the planet would nonetheless be shrouded in a soot cloud, through which about a one-hundredth part of the usual amount of sunlight could penetrate.

Lacking solar energy, the Earth's surface would cool rapidly, with the average temperature dropping by 15 to 20 degrees or even more in the very first month following the catastrophe. This means that there would be a sub-zero temperature over the entire landmass, with abnormal and quite substantial drops below the freezing point in some regions (in Saudi Arabia, Yakutia and on the eastern coast of the United States it would fall by 40 degrees or more). Above-zero temperatures would be registered only on the surface of the oceans which constitute huge reservoirs of heat. The atmosphere would become very stable, convection would disappear, and return to normal conditions would occur very slowly.

The clearing up would depend on the force of the weapons used, i.e. given an aggregate force of 100 megatons, it would begin at the end of the third month following an explosion, but with a 10,000 megaton strike the soot in the atmosphere would not clear up entirely even after a whole year, and the biosphere parameters would substantially change.

The model constructed in the Soviet Union made it possible to assess the nature of climatic consequences for a one-year period. Similar calculations were then made in the USA. The American experts used an atmospheric circulation model that enabled them to assess the situation only for the first month following a nuclear disaster. But one year thereafter the US also carried out extensive calculations which yielded results, to all intents and purposes identical with ours.

Generally speaking, even at the laymen's level, without sophisticated mathematical experiments, it is not hard to guess that nuclear strikes of the presently available yields are disastrous for the biosphere as a whole. Nevertheless, demagoguery has often prevailed over common sense in the political thinking of many Western politicians. Now, the scientists have put on the table of discussions new arguments which being based on mathematical calculations graphically show the consequences of a dangerous situation, both in general and in particular. Besides, the results obtained have become the subject of open scientific discussion by broad cross-sections of scholars all over the world, who stand on different ideological and political positions.

Prof. Thomas Malone of the United States, for example, stated at a scientific meeting that none of the scholars had ever intended to become nuclear strategists. The current perilous trend in international affairs, when certain sober voices can be heard discussing the possible continuation of life on Earth after a nuclear war, has compelled many scientists to set about calculating and checking the arguments adduced by champions of this viewpoint. They arrived at the conclusion, according to Prof. Malone, that a modern-day nuclear war would be the terminal tragedy in the history of humanity. If this grave truth is realised by all those now living on Earth, then scientists are hopeful that it will force humankind to find a way of understanding each other and will make them think in new ways and, mindful of the past mistakes, take care of our future. As regards assessing the aftereffects of a nuclear disaster, most scientists, whether Soviet or American, are of one mind.

The 1983 studies have conclusively demonstrated that a nuclear war would be fatal for all humanity. The very fact of a nuclear strike entails retribution on those who dealt it, and in the event of such a war no one will survive, no matter where they are: in Europe, Asia, America or Africa. In 1984-1985, within the framework of the international programme SCOPE (Scientific Committee on Problems of the Environment), in the Computer Centre of the USSR Academy of Sciences Yu. Svirezhev conducted a detailed analysis of changes in the biosphere, that could occur as a result of a nuclear war. It became clear that the biosphere would be drastically altered. The higher animals and plants in their majority would probably die. The equatorial zone and median latitudes would suffer most. It is quite

possible that after a while the biosphere would revert to being a realm of procaryotes.

The above-mentioned works deal with the effects of fires caused by a nuclear war rather than with consequences of the war itself. But there will be other physical and physico-chemical effects. What's more, the fires and clouds of soot may well occur even without nuclear strikes. Hamburg in 1943 and Dresden in 1945 were totally destroyed by fire whirlwinds (or fire tornadoes, in modern usage) triggered off by conventional weapons. Imagine what would happen if advanced nuclear weapons were employed, weapons whose yields are incomparably greater than everything the armies had during the Second World War. Thus, the studies conducted in the 1980s have manifested the deadly peril of using modern weapons of mass destruction.

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No less harmful are the "creeping calamities" in which the danger approaches invisibly. Such situations were also analysed at the Computer Centre of the USSR Academy of Sciences.

The boundaries of changes in the biosphere parameters, which make possible the existence of civilisation, form a surprisingly narrow corridor. For instance, a drop of 3.5-4 degrees in the average annual temperature of the Earth would entail grim consequences. Conversely, no less dangerous is an increase by 4 or 5 degrees. Withal, given a further extensive growth in power generation, the Earth's climate will inevitably get warmer. Were it not for the greenhouse effect due largely to man-made water vapour and carbon dioxide, the planet's average temperature would be lower by 33-34 degrees. This means that life on Earth would be impossible. The concentration of carbon dioxide in the atmosphere keeps rising, and now it is 17 per cent higher than at the beginning of the century. In 50 years it will double. What will be the result? A respective analysis was conducted in 1980 with the aid of our biosphere models system. As it turned out, such an increase in the carbon dioxide concentration is enough to substantially change the structure of atmospheric circulation, moisture transfer and, consequently, the distribution of the biota productivity. Further aridisation (desertification) would affect many regions of the world, in particular the Great Eurasian Steppe. Accordingly, a decline in the agricultural potential is to be expected in those areas. At the same time, in Central and North Western Russia, the Soviet Baltic Republics and Byelorussia, as well as in the north and west of the Ukraine, agricultural production conditions will improve for it will be warmer and more humid there. Such information acquires not only scientific but also practical significance.

Bearing in mind the potentialities of computer-assisted mathematical experiments, we are preparing research into the effects of certain

other large-scale anthropogenic impacts. For example, the Ocean is steadily being polluted, which results in a changing relationship between the Ocean and the atmosphere, that may sometime in the future noticeably affect the planet's climatic conditions. In the polluted harbour areas, evaporation from the ocean surface is the principal source of earth humidity, the basis of life on our planet.

And what about the acid rains? Caused by power generation and chemical industries, they have turned into a real calamity for vast areas, altering their natural characteristics.

I don't even dare mention all sorts of engineering projects such as diversion of river run-offs or changing ocean streams, etc., which are technically feasible but can cause irreversible changes in the human habitat as a whole. Dangers linked with the mismanagement of today's technological might lie in wait for us everywhere, and the further development of mankind and progress of civilisation increasingly require a scientific prognosis of possible situations with due regard for the ecological imperative.

To put it briefly, the ecological imperative compels humanity to think and to live in a new way. This call was clearly voiced at the 27th CPSU Congress. We see our task in putting it into practice.

In terms of ecological policy, a point of departure is the achievements of modern science which regards man, humanity and the environment as an integral whole.

I believe that Soviet science rests on a sound methodological foundation. Russian natural scientists have always been known for materialism, systems approach and a longing for broad generalisations based on a spontaneous dialectic approach. Of major significance for the issue under discussion are, within the framework of this tradition, the works by Vladimir Vernadsky. Late in the last century he got down to formulating concepts of how the biosphere would develop in the future. In his opinion, the entire image of our planet, its landscapes, its thick sedimentary rocks, and chemism of the atmosphere and ocean are accounted for by the influence of living matter. Life is not nature's play of chance but a sequel of the processes of self-organisation transpiring therein, a natural stage in the evolution of the space body called Earth. Another natural step is the appearance of man and human society. It marks a new quality in the life of the biosphere, with its evolution being increasingly predicated on human purpose-oriented activity. Proceeding from general cultural premises, Vernadsky was well aware that man would have to bear the burden of responsibility for the fate of the biosphere. This is an essential condition for the evolution of civilisation.

The human environment governed by scientific intelligence has been called by Vernadsky a noosphere, and his scientific manuscripts are full of his reflections on it. The transition of the biosphere into the noosphere implies not only a qualitatively new stage in the

evolution of the human community but also a new phase in the development of our space home.

Of great importance in Vernadsky's teaching was a clear understanding of the fact that the transition could not take place automatically. Man has always changed the environment to suit himself, simultaneously adapting to its peculiarities and changes. For a while this process transpired ever so slowly and spontaneously. But gradually man's impact on nature grew stronger. Vernadsky presumed that a time would inevitably come when man would be the dominant factor in the biosphere's evolution, and then the environment features would change so rapidly that mankind would have to work out a single strategy for the development of the biosphere and new standards of its organisation and lifestyle.

The desire of eminent natural scientists to cognise life around them and to comprehend trends in its development as well as attempts to picture a future society are a typical phenomenon. According to Lenin, scientists and experts would come to recognise communism through data provided by their respective sciences, in their own peculiar ways. This is the trend that becomes evident in tracking back the evolution of Vernadsky's views. It is not incidental that during the hard years towards the end of the Second World War he wrote that we were entering the noosphere. What is most important for us, however, was the fact that the ideals of our democracy were advancing abreast with the erratic geological process, with the laws of nature, and were in keeping with the noosphere. Therefore we could look into our future with certainty. It was in our hands. And we would not let it out.

The problem reflected upon by Vernadsky is full of uncertainties for we do not yet know many things, we are not yet aware of the full extent of our possibilities in critical situations, and we are in for new scientific discoveries and technological breakthroughs. There are tremendous difficulties inherent both in the objectively existing multitude of conditions necessary for the evolution of society and in the divergence of goals and the contradictoriness of aspirations and value patterns of people living in various social and natural conditions, etc., etc. Nonetheless, because of the ecological imperative it is necessary right now to look for and take decisions dictated by them.

In problem situations, as is prompted by our scientific experience, there is no use to search at once for a "definitively best" solution or to work out an "absolutely optimal" strategy. It behooves us, first and foremost, to study peculiarities of the task and to define actions that cannot be permitted under any circumstances. This is a somewhat simpler job. Our analysis of the consequences of a nuclear war is an illustration of such a solution. Such an approach does not impose a single mode of action and preserves a certain freedom of choice, making it possible to meet various additional provisions and

to settle the contradictions which cannot be foreseen in the initial scenario.

In a nutshell, the ecological imperative expresses the need to assess the consequences of any activity, entailing interference in the natural environment. Such assessments call for analysing the versions of solutions at the national or international level and, consequently, setting up respective institutions and establishing appropriate legal principles and a system of procedures which link together either intrastate (interdepartmental, interregional) interests or those of various states.

Today, numerous projects are put forward within the national framework of various countries, which might lower ecological stability and gradually erode the biosphere's state necessary to mankind's existence. Such projects are every now and then geared to satisfy only narrow departmental interests. What is needed to avoid mistakes is openness, *glasnost* of the decisions taken and account of the views of not only decision-makers but also of the large scientific community and people in general. It is needed to provide legal support for such *glasnost* and to work out a clear-cut procedure, especially when it comes to major regions with multimillion populations (for example, in dealing with problems concerning a regional reallocation of water resources) in order not only to enhance the responsibility of specialists but also to secure high scientific quality of the projects themselves.

It is imperative to enact a guaranteed procedure under which any project that substantially affects ecological conditions should be subject to analysis within a special interdepartmental research programme. And it must be interdepartmental, i.e. capable of forming an objective opinion in keeping with the interests of the whole nation.

Apparently, social and ecological development will increasingly compel society to interfere drastically with the biosphere structure and to change its local characteristics. But each and every case of such interference should be preceded by an in-depth preliminary study of the situation, and a decision should be taken only after it has been scientifically proved beyond any shadow of doubt that it is simply impossible to go on living, unless the new project is implemented, and that its implementation would not adversely affect the ecological situation. In the USSR, such studies can be conducted by the Academy of Sciences in cooperation with sectoral academies and ministries. In enterprises of this kind there should be no departmentalism, parochialism or guild-type exclusiveness. Nor should there be a monopoly of scientific information when it comes to ecological problems touching upon the interests of vast territories and calling for involvement in their solution of representatives of various fields of science and practice, various agencies and institutions. The ecological imperative presupposes high professional ethics

for which nothing is more important and meaningful than the truth of science and civic duty.

A system of preliminary integrated ecological expertise should be supported by the entire intellectual and professional potential of the country. Legal and institutional structures of such research are a separate subject. Yet, it is self-evident that ecological expertise should have a clear-cut and sound legal status and should be provided with resources. The USSR Academy of Sciences has now drafted a provision concerning ad hoc scientific collectives. Apparently, such a form is also convenient for carrying out preproject studies.

Yet, national means and national organisations alone may prove inadequate for assessing and comparing versions of large-scale human actions. This calls for international cooperation. Today, many environment modification arrangements by one or another country may have diverse and far-reaching implications affecting ecological conditions in other countries and likely to influence the biosphere as a whole. For instance, if polluted, the Gulf of Mexico where the Gulf Stream originates can change the latter's characteristics so drastically that it would immediately affect the climate of Europe. The effect of ecological phenomena generated by the expanding chemical industry and the use of coal in power production, as well as other economic activities, continues to rise rapidly.

Finally, nuclear power stations also constitute a factor of ecological tensions. We have all learned grave lessons from the Chernobyl accident. The Politburo of the CPSU Central Committee discussed the report prepared by the governmental commission on the results of the inquiry into the causes of the accident and measures to eliminate its effects, as well as to ensure the safety of nuclear power production.

Chernobyl has added urgency to the need for broad international cooperation and joint efforts by various countries in the area of nuclear power generation. True to its principles, the Soviet Union is willing to work with other countries in order to reduce to zero the likelihood of atomic power plants accidents.

Nuclear power production is a new social phenomenon that raises the ecological imperative to a qualitatively higher level. Evidence of this is a report of the Nuclear Regulation Commission, published in Washington in July 1986, listing the "worst managed" nuclear reactors in the US. The report was prepared for the Energy and Commerce Subcommittee of the House of Representatives.

Negligence and inattention to removing minor defects, poor management and technical maintenance have been listed among major factors that place the listed atomic power stations on the verge of a dangerous accident fraught with unpredictable consequences.

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The other side of the problem of safety of the nuclear power facilities is to avoid their deliberate destruction as a result of hostilities or terrorist acts. The Politburo has stated that efforts should be made to design a reliable system of measures to prevent nuclear terrorism in any manifestation whatever.

Lasting security on our planet is inconceivable without putting an end to nuclear war preparations and doing away with all means of nuclear warfare. The Soviet Union is fully determined to work, despite the fierce opposition of the military-industrial complex, for putting into practice the proposed programme for ridding the world of nuclear weapons well before the end of the current century. Since its introduction on January 15, 1986, our country has tabled concrete proposals at all arms limitation and disarmament talks that would facilitate arriving at real agreement.

A turning point in building international security should be the curtailment of the nuclear arms race and transition to genuine measures to reduce nuclear weapons and halt testing.

The international symposium "Science, Technology and Peace", held in Moscow in 1986 and devoted to the 40th anniversary of the World Federation of Scientific Workers, reiterated the call to cease and totally ban nuclear testing.

The message addressed by the forum to the heads of state or government stated, in particular: "We appeal to the leaders of all states possessing nuclear weapons not to conduct nuclear tests, to promote an early agreement on their general prohibition, accompanied by the strictest and broadest possible verification whose effectiveness may well be ensured by modern technical means and on-site inspections.... We support the idea of pooling the efforts and scientific and technological potentials of all countries for the sake of peaceful uses of outer space and finding solutions to the global problems of humanity. We are deeply convinced that the achievements of science and technology should serve the welfare of people, peace and progress rather than development of ever newer engines of destruction and annihilation."

Humanity is a community of various countries, peoples, classes, and groups. They all have different goals and interests but one common planet, the only one of its kind in visible space. They also have one common alternative, namely to preserve peaceful life on Earth and to secure for mankind a road to genuine wellbeing and social progress. The ecological imperative also implies a common strategy to secure peace on our planet.

Is it possible in principle to secure such a harmonisation of efforts in our politically split world? Proceeding from research over the past 15 years, I would give a positive answer to that question.

It stands to reason that a natural scientist has his own arguments, possibly less perfect than those of politicians and philosophers, but nonetheless worthy of attention, in my view. In any case, at the level, if I may say so, of the routine scientific awareness of a representative of a non-humanitarian profession, in a language that can be understood by our colleagues with political perceptions different from ours, it appears to be possible to build upon the aforesaid on the basis of models. Among the evolutionary processes that ensure continuation of life, cooperative mechanisms have always played a significant role. They have acquired special importance with the appearance of man and his labour activity. Cooperative mechanisms are possible only if and when people have common interests and common goals. Only in this case is it possible to speak of cooperation. It is worth noting that they presuppose some give and take, i.e. something may be given up in the interest of reaching a common objective that becomes dominant under certain conditions. Common goals alone are not always sufficient to come to a cooperative agreement. Then, what are the conditions permitting a compromise, that is a joint agreement of benefit to all those participating? In the early 1970s we decided to model such a task in the Computer Centre of the USSR Academy of Sciences.

The first important class of such tasks was discovered by Yu. Guermeyer. It embraced a good many ecological situations. Here is a simple example. Let us assume that there are two enterprises belonging to different departments and located on the shores of one and the same lake. Each one has objectives of its own, i.e. reaching definite plan targets, meeting particular social requirements, etc. In a word, their interests are different (neither contrary nor identical). Yet, both enterprises require clean water. Thus, apart from their "egoistical" purposes, they have a common objective, i.e. the cleanliness of the reservoir. Both enterprises have to funnel a portion of their profits into shared reservoir-cleaning efforts. Any departure from the agreement promises only losses. The compromise proposed in theory is optimal in a certain sense, satisfying both partners. All its proof is based on a definite pre-set feature of the situation in point, namely the more funds allocated for water purification purposes, the cleaner it will be. This feature of the *monotony of a common purpose-oriented function* is certainly not typical of all situations in which their parties (partners or opponents) possess, apart from their respective goals, one common objective. This is why we proceeded with our research and in subsequent years received new results. For instance, in 1984 we succeeded in proving that in a complex conflict situation such as the nuclear arms race there was a certain objective line which it would be fatal to cross. There is one condition to prevent trespassing, i.e. those taking part in the arms race must seek to reduce the risk of nuclear war. Unless this condition is met, there can be no agreement, indeed, for it is senseless to tell a pathological

suicide that it is dangerous to walk the edge of a tall building.

The upshot is that lately there has been a definite understanding of the instrumentation for analysing numerous models pertaining to the problems of the stability of the ecological situation on our planet, in particular with due regard for political factors.

The successfully evolving methods of mathematical modelling make it possible to assess consequences of large-scale actions and to identify the outer limits which mankind cannot cross under any circumstances. A basis has been laid for a mathematical theory making it possible to find "cooperative agreements", that is to work out solutions, helping to dovetail individual goals with common interests.

Vernadsky was certainly right in assuming that, as the transformative activities of mankind progress, science would play a decisive role in arranging the biosphere on a new basis and would determine a mode of human behaviour. We must continue to bear a sense of responsibility for the fate of our planet because awareness of the ecological imperative should stimulate human efforts and desire to comprehend and to translate into reality the biosphere-into-nososphere transition.

Modern science has already laid the groundwork for providing, so to speak, support of natural sciences for the possibility of and need for international cooperation in efforts to avert possible ecological crises. But the ecological imperative cannot be confined only to such research and actions. It demands a great deal more, namely new norms of conduct and thinking, on the part of all people rather than only scientists, that would completely agree with the tasks and conditions of the current complex stage in human history. Mankind must accept it as something of the greatest urgency since there is no other alternative if we wish to survive and to preserve life on Earth.

NOTES

¹ Karl Marx, *Economic and Philosophic Manuscripts of 1844*, Moscow, 1967, p. 108.

² N. N. Moiseyev, V. V. Alexandrov, A. M. Tarko, *Man and the Biosphere*, Moscow, 1985 (in Russian).



Conference of Philosophers

A conference devoted to the 100th anniversary of Engels' *Ludwig Feuerbach and the End of Classical German Philosophy* was held at the Philosophy Department of Moscow University. It was sponsored by the section of the history of philosophy of the USSR Philosophical Society and the University chairs of history and philosophy.

V. Sokolov, on opening the conference, emphasised that Engels' book belonged to the major works on Marxist philosophy and was, according to Lenin, "a handbook for every class-conscious worker" (V. I. Lenin, *Collected Works*, Moscow, Vol. 19, p. 24). It is exceptionally rich ideologically, it deals with the cardinal problems of dialectical and historical materialism and the principal questions of the history of philosophy, and reveals the essence and significance of Marxism's revolutionary transformation in philosophy. The speaker pointed to the need for a creative approach to the works of the founders of Marxist-Leninist philosophy. He dwelt on Engels' stand against the absolutisation of the existing level of scientific knowledge, as well as the great methodological significance of his ideas about the laws of the historical-philosophical process.

I. Narsky (Academy of Social Sciences at the CPSU Central Committee) emphasised Engels' characteristic of the revolutionary shift made by Marxism in philosophy. Engels disclosed the essence of that shift in three aspects: by analysing Marxism's attitude to its three theoretical sources; by examining the very essence of Marxist philosophy; by revealing deep-going changes in the comprehension of the subject and tasks of philosophy connected with the emergence of Marxism. The speaker dwelt further on Engels' study of the essence and significance of the principal question of philosophy. He expressed the view that the three categorical definitions of this question in Engels' work (the relationship of the nature and spirit, being and thinking, and matter and consciousness) correspond to the three stages in the development of comprehension of the principal question of philosophy in pre-Marxian (before the 19th century), Hegelian and finally Marxist philosophy. The speaker disagreed with the view according to which the main question of philosophy as defined by Engels is divided into two completely independent questions, with its first aspect allegedly being absorbed by the second. In actual

fact, and this was convincingly shown by Lenin, Engels had in mind the two interconnected sides of one and the same question of both a conceptual (ontological) and epistemological significance. As is known, Engels considered the theory about matter and its attributes, the theory of objective (natural and social) dialectics, and the dialectics of thinking and cognition in unity with the previous one, to be the component parts of the philosophy of Marxism. For it was Engels who introduced the terms "dialectical materialism" (K. Marx, F. Engels, *Selected Works*, Moscow, 1970, Vol. 3, p. 131; F. Engels, *Anti-Dühring*, Moscow, 1969, p. 35) and "historical materialism" (K. Marx, F. Engels, op. cit., pp. 102-103, 484). I. Narsky emphasised that an attempt to find in Engels' works some restriction for philosophy to be confined to epistemological problems only, was completely unfounded.

M. Gretskey's (Moscow University) paper was devoted to the problem of the formation of Marxist philosophy. It is a known fact that in the very beginning of their activities Marx and Engels joined the Young Hegelians who had posed the question, in philosophical form, "on the destruction of traditional religion and of the existing state" (ibid., p. 343). But why did the Left Hegelians start with criticising religion? In answering this question two circumstances should be borne in mind: first, it was necessary to oust religion from the place it occupied as the dominating form of ideology; secondly, it was also necessary to undermine the connection of religion with "the existing state", which was proclaimed sacred and inviolable. Engels wrote that "the main body of the most determined Young Hegelians was, by the practical necessities of its fight against positive

religion, driven back to Anglo-French materialism" (ibidem). Ludwig Feuerbach belonged to those resolute, uncompromising opponents of religion, which was demonstrated by his book *The Essence of Christianity* (1841). M. Gretskey paid attention to the fact that Lenin in his article "Karl Marx" had mentioned another book by Feuerbach which had exerted considerable influence on the movement of the Left Hegelians, namely, "Principles of the Philosophy of the Future" (1843). This specifies the time of Marx's transition to Feuerbachianism—1843. This date is corroborated, for one thing, by modern investigations carried out by Hans-Martin Sass (FRG) who established that the article "Luther als Schiedsrichter zwischen Strauss und Feuerbach" (Luther as an Arbitrator Between Strauss and Feuerbach) had been written in 1842 by Feuerbach, but not by Marx. This is not only of factual importance. To think that Marx could take to Feuerbachianism before 1843 means to overestimate the role of purely theoretical aspects in the formation of the philosophy of Marxism. Actually, this transition was conditioned by a shift in Marx's political views. At that time Marx began for the first time to criticise not only the feudal, but also bourgeois state, in which he saw a gap between the formally recognised general interest within the state sphere and the real life of people in the sphere of society. This shift compelled Marx to take to Feuerbachianism, inasmuch as Hegel's philosophy, with its absolutisation of the state as an embodiment of reason and common interest, could no longer satisfy him. Hence the conscious perception of Feuerbach's philosophy by Marx precisely in 1843. Naturally, that was "unorthodox" Feuerbachianism, but Marx

was also an "unorthodox" Hegelian.

B. Meyerovsky (Moscow Institute of National Economy) dwelt on historico-philosophical problems in Engels' work. An analysis of the essence and specific features of the philosophical revolutions in France in the 18th and Germany in the 19th century allowed Engels to come to the following conclusions: philosophical revolutions take the form of ideological preparation for political, social revolutions; philosophical revolutions are a radical change of the dominating views, systems and methods of thinking that have taken shape earlier; the more resolutely ripe socio-political transformations implemented in the course of revolution, the more radical is the character of philosophical revolutions preceding these transformations and preparing them theoretically. The speaker pointed to an important methodological premise of Engels about the genuine motive forces of the development of philosophy, especially, in the new epoch: "...During this long period from Descartes to Hegel and from Hobbes to Feuerbach, the philosophers were by no means impelled, as they thought they were, solely by the force of pure reason. On the contrary, what really pushed them forward most was the powerful and ever more rapidly on-rushing progress of natural science and industry" (ibid., pp. 347-348). Engels paid attention to the fact that the connection of philosophy with the development of natural science was most pronounced among the materialists. However, even idealistic systems (for example, Hegel's system) acquired ever greater number of materialistic features, along with the development of science and technology. B. Meyerovsky drew attention to the fact that Engels' work pointed to the importance and

necessity to examine a personal aspect of the historico-philosophical process. He studied Feuerbach's philosophy by analysing not only the objective conditions of Feuerbach's activity, but also the subjective, personal aspects of the latter's development. Our historico-philosophical works often lack that organic fusion of objective and subjective aspects of research into the creative heritage of the thinkers of the past.

N. Prigoda (the Higher School of Trade Union Movement attached to AUCCTU) touched in his paper on problems connected with the main question of philosophy. Any one of its solutions contains the two essential elements of the world surrounding us—matter and consciousness. The latter is social, but not individual consciousness. The essence of social consciousness is revealed by the theory of knowledge and historical materialism as a whole, without which there can be no scientific theory of knowledge. However, it is necessary to take into account the interconnection of individual and social consciousness, a relative independence of the latter, and conditionality of social consciousness by social being and practice. Thus, the principal question of philosophy only seems simple. In reality it is very complicated, if one is to consider all ties, direct and indirect, objectively existing between matter and consciousness.

V. Kuznetsov (Moscow University) pointed out that Engels' interpretation of the history of philosophy as the confrontation of its two principal trends—materialism and idealism—was a scientifically substantiated view on philosophy (from the positions of the materialist understanding of history), which had been taking shape among most outstanding thinkers from antiquity to the modern epoch.

Engels' work *Ludwig Feuerbach...* (just as other works by the founders of Marxism-Leninism) calls for singling out the qualitatively different historical forms of materialism and idealism in their development; secondly, for giving a concrete characteristic of the specific features of each philosophical theory under examination; thirdly, *Ludwig Feuerbach...* turns attention to conceptual difference and even contradictoriness of these theories; fourthly, it took into account the real possibility of problem-containing idealistic systems (the Hegelian system, for example) being able to exert a positive influence on the historico-philosophical process.

G. Sudyin (Moscow University) criticised the attempts of bourgeois scholars of Marxism to oppose Engels' *Ludwig Feuerbach...* to Lenin's *Materialism and Empirio-Criticism*, particularly on the question of the correlation of being and thinking. As is known, Engels, in examining the second aspect of the main question of philosophy, pointed out that "in philosophical language this question is called the question of the identity of thinking and being" (ibid., p. 346). If one closely looks at the corresponding passage in Engels' work, one will become convinced that thinking, consciousness is identical with being only in a sense that it is an adequate reflection of the latter. Such understanding of this identity is also characteristic of Engels' *Anti-Dühring* and *Dialectics of Nature*, which emphasise that dialectical thinking (or subjective dialectics) is a reflection of objective dialectics, the dialectics of the surrounding world. Lenin, coming out

as he did against the concept of the identity of social consciousness and social being, put forward by A. Bogdanov, also rejected the idealistic reducing of being, of objective reality to consciousness, thinking. He emphasised that being did not depend on consciousness, but, on the contrary, determined it, whereas consciousness was a reflection of being. "Materialism in general recognises objectively real being (matter)," he wrote, "as independent of the consciousness, sensation, experience, etc., of humanity. Historical materialism recognises social being as independent of the social consciousness of humanity. In both cases consciousness is only the reflection of being, at best an approximately true (adequate, perfectly exact) reflection of it" (V. I. Lenin, *Collected Works*, Vol. 14, p. 326). Thus we see that the classics of Marxism-Leninism resolutely opposed the concept of identity of consciousness and being, just as the absolute contraposition of matter and consciousness, the latter being only the "supreme product" of matter. They stressed the dialectical unity of matter and consciousness and insisted on "our thinking [being] capable of the cognition of the real world" and "produce a correct reflection of reality", as Marx and Engels put it (K. Marx, F. Engels, *Selected Works*, Vol. 3, p. 346).

Summing up the results of the conference, V. Sokolov noted that Engels' work *Ludwig Feuerbach and the End of Classical German Philosophy* is of intransigent significance for philosophy and stimulates its further creative development.

B. Meyerovsky

Concept of Peace in History and the Present

An international conference under this name was held in Moscow on June 22-23, 1987. It was attended, apart from Soviet historians, by about 40 specialists in ancient, mediaeval, modern and contemporary history and international relations from 15 countries of Europe, Asia and America.

Interest in this subject is legitimate and stable. For many years now the problems of the preservation of peace and the role played in this by scientists and scholars have been discussed at international forums of historians. That was the case at the 15th and 16th International Congresses of Historical Sciences and also at several multilateral and bilateral conferences and meetings.

The conference was sponsored by the National Committee of Soviet Historians. They decided to hold a broad exchange of views between representatives of most diverse scientific schools, fields of history and trends in order to determine, in a free discussion, the main avenues along which to direct their study of this major problem.

The participants in the conference were greeted, on behalf of the Presidium of the USSR Academy of Sciences, by its Vice - President, Academician P. Fedoseyev.

The conference heard more than 60 papers and communications. It passed in an informal atmosphere of frank debates on the most diverse, and sometimes quite opposite, views. But all the speakers voiced their deep concern about making the peace more stable and removing the threat of nuclear war.

The main paper was presented by the Chairman of the National Committee of Soviet Historians, Academician S. Tikhvinsky—"Concept of Peace in History and the Present". It noted, among other things, that it is the task of history to accumulate and preserve the experience gained by mankind and warn against the grave consequences of past errors. It emphasised the exceptional importance of the tasks facing humanity in our epoch of the rapid-paced development of science and technology. In postwar years it has led to the emergence of various types of the weapon of mass destruction, the conscious or unconscious use of which, just as carelessness with regard to nuclear energy and chemical and biological substances, is fraught with disastrous consequences not only for man, but for all forms of life on our planet.

The speaker said that culture and war were two opposite sides of

human history. One of the manifestations of culture was the striving for accord between the nations as an inalienable part of humanistic consciousness. The paper cited numerous concrete historical examples, from Herodotus to our day, when the most outstanding scientists and cultural figures put forward practical proposals to eliminate wars. For centuries the experience of the struggle of the popular masses and progressively-minded thinkers for the implementation of the ideals of peace has accumulated. The best minds of humanity have clearly perceived the organic connection of ideals common to all mankind with profound changes in the social system. The progressively-minded Russian thinkers of the 18th and 19th centuries, from Radishchev to Tolstoy, actively championed the ideas of peace.

Touching on the present epoch Academician S. Tikhvinsky emphasised that the October Revolution was, in essence, a revolution rejecting war. The impact of the Decree on Peace and other foreign-policy acts of the Soviet government had largely determined the publication of individual declarations and protocols of the League of Nations, and international treaties banning war as a political means.

The speaker then said that today, against the background of the powerful peace movement of the peoples, the ethical and legal acts against wars and the use of force in international relations did not look so utopian as they had previously been considered. The efforts of scientists and scholars in various fields, including historians, are aimed at humanising international relations. Many Soviet scholars are engaged in the elaboration of the problems of peaceful coexistence. Scientists in our country believe that all differences between the socio-political sys-

tems and their ideologies notwithstanding, the comparison of social values and priorities, the mode of life and world outlooks should not be transferred to the military-political sphere or become a source of prejudice, mistrust and confrontation. On the contrary, it should promote better understanding of one another and a search for joint solutions of the problems facing mankind.

The paper presented by Academician Tikhvinsky triggered off a lively discussion at various levels and on diverse subjects. Participants in the conference had an opportunity to see an impressive panorama of both resolved and unresolved problems in the study of the concepts of peace in history.

Premises contained in Tikhvinsky's paper were supported by Professor Th. C. Barker (Britain), a member of the International Committee for Historical Sciences. Seeing the nature of wars in the aggressiveness of some people's character, he considered it necessary to orient them towards constructive, not destructive, aims. Stressing the importance of the preservation of peace, which should be used not for preparing war, but for solving the urgent problems of hunger, health care, ecology and disarmament, Professor Barker pointed out that a certain original "volume of friendship" already existed between historians of different countries, and he called on them to work jointly for the sake of a peaceful future.

Academician Zs. Pal Pach of the Hungarian Academy of Sciences supported the idea of joining the efforts of historians of different countries in the struggle for peace.

Academician B. Piotrovsky (USSR) spoke about the role of culture in human history and its ennobling influence on man. Culture creates an

inimitable image of each people, whereas war destroys it and violates the harmony of human relationships. It becomes especially dangerous at a time when the technical aspects of our life are pushing aside the spiritual ones. The propaganda of culture and human values contributes to the strengthening of the atmosphere of trust and peace.

Opinions differed on some of the questions discussed. The President of the International Commission for the History of the Second World War, Professor J. Vanwelkenhuyzen (Belgium) noted that in our day the Clausewitz formula that "war is nothing but a continuation of political intercourse with the admixture of different means" could no longer be applied. He emphasised the need to strengthen trust and understanding between the peoples and the importance of recognising various approaches to complex problems.

The West German historian W. Mommsen dwelt on the task of the scientist in revealing the mechanism of the beginning of wars and finding ways and means of their elimination. He also spoke about the topical nature of Clausewitz' ideas.

The other five representatives of historical science in the Federal Republic of Germany raised most diverse questions in their papers—from the problems of peace in the epoch of feudalism (A. Nitschke) to the sources of peaceful coexistence (U. Hörster Phillips).

West German scholars took an active part in the discussions that followed, sometimes initiating them. They expressed the view, widespread in the West, that the Soviet Union was a direct successor to the course of the Russian Empire (I. Geiss). In his opinion, the USSR is a land empire of Sparta type, where the autocracy of tsar was replaced by the autocracy of Stalin. These views,

however, were at variance with the general spirit of discussions and were not supported by their participants. The Soviet scholars A. Filitov, B. Marushkin and V. Tishkov took issue with his views.

H.-A. Jacobsen raised the "German question". West German scholars tried to prove that the reunification of Germany would not spell any threat to peace. But it was said in response that the divided Germany, too, can make its contribution to the cause of peace.

The range of problems discussed at the conference was quite broad. Mention should be made, among other speakers, of E. Sácz (Spain) who told the audience about the programme of peace research in his country, including the work carried on since 1963 by the Supreme Council of Scientific Investigations of Spain on the publication of mediaeval documents pertaining to the problems of peace. The Japanese scholar Shinichi Arai outlined certain trends in the study of the problems of peace in his country. Corresponding Member of the USSR Academy of Sciences Z. Udaltsova said that Byzantine culture had been permeated with the ideas of peace, kindness, the protection of the weak and noble deeds. V. Tishkov spoke on the nature of wars and the formation of stereotypes. J.-R. Chotar (Canada) dwelt on the cold war as a lesson for the preservation of peace. M. Duverger (France) described the situation when peace is maintained in the relations between the great powers, but wars between small countries continue to rage. He outlined France's position based on the policy of nuclear deterrent. Speaking about the historian's responsibility before the world, J. Carayannopoulos (Greece) said that the task facing the scholar is to disprove pseudo-scientific conclu-

sions aimed at justifying imperialist inclinations and violent instincts. The paper read by the Canadian scholar J.-P. Simon was devoted to the Warsaw Treaty Organisation as an alliance which contributed to the preservation of peace in current history. He used a number of interesting sources. The problems of pacifism were touched on in the papers and communications delivered by R. Ilyukhina (USSR), K. Holl (FRG) and F. Klein (GDR). B. Faloon (Ireland) spoke about the need to preserve peace in any form; M. Lasko (Hungary) dwelt on pseudo-threats and the dangers connected with them. Ch. Chatfield (USA) called on

scientists to study the impact of changes in technological development on society.

A. Chubaryan (USSR) spoke about the evolution of the concept of peace in the 20th century. He called for a better understanding of the new situation in the world and the pivotal idea of ensuring security, that is, interdependence and competition.

The conference formed a permanent committee of 17 noted Soviet and foreign scholars and issued a communique calling for the creation of a climate of greater mutual understanding in the struggle against the threat of war.

V. Shilov

Chronicle

* *An International Scientific Conference "The Development of Socialist Constitutional System"* dedicated to the 70th anniversary of the Great October Socialist Revolution which was held in Moscow on June 15-17 attracted Soviet and 60 foreign researchers from 18 countries. It was opened by Academician Pyotr Fedoseyev, Vice-President of the USSR Academy of Sciences.

A. Lukyanov, Secretary of the CC CPSU, emphasised in the main report that history had fully confirmed Lenin's prevision that the working masses would use their political supremacy as a basis for the socialist reconstruction of society; that the development of democracy to a full swing, search for the forms of such a development and their testing in practice would be a major part of this great work, with socialist democracy being a durable lever in society's progress which would affect the economy, give impulse to its

The review covers the events of May-July 1987.

transformation and in its turn itself would be subjected to the influence of the economic development.

The reporter stressed that the road covered by the Soviet state was not easy, since it was a road of pioneers; but on the whole the progress is obvious as is obvious a new socio-political system, a powerful multinational state of the working people striving constantly to renew and advance their society. Such a search for possibilities of renewing and accelerating socialism's progress, Lukyanov noted, is especially experienced now in the process of restructuring. The crucial character of the April 1985 Plenary Meeting of the CC CPSU, the lesson of the truth given by the 27th CPSU Congress, the democratisation concept elaborated by the January 1987 Plenary Meeting of the CC CPSU—these are the Great October Revolution's ideas in their progress and action. Then Lukyanov analysed the main stages in the historical development of the Soviet statehood in the course of socialist construction. In

conclusion he said that life would put before law students ever new problems. First of all it concerns the sphere of democracy and self-government where they have not only to eliminate gaps in theory but to generalise the experience that has already been obtained, to study and recommend for practice the most effective forms of involving masses in the management of production and all the affairs of the state and society. The time dictates a new approach to defining economic functions of the state of the whole people, boundaries of state regulation in various spheres of social relations, problems of national-state construction, combination of industrial and territorial management, interrelation between the individual and society, between the citizen and the state. The conference's discussion attracted Soviet and many foreign participants: Academician W. Weichert (GDR), Professor A. Łopatka (Poland), Professor Zh. Milanov (Bulgaria), Academician M. Čič (Czechoslovakia), Professor I. Fujita (Japan), Professor L. Ficere (Hungary) and others.

* *A plan of scientific relations between the USSR Academy of Sciences and the Academy of the Social Sciences of the PRC for 1987-1989* was signed in Beijing. The document envisages the principle of reciprocity of the visits of researchers for reading lectures, exchange of experience, and participation in conferences and other scientific affairs, the exchange of books, journals and other specialised publications. The signing of the plan was a result of the return visit of the USSR Academy of Sciences' delegation to the PRC. During its stay in China, the delegation visited some academic institutions of the PRC's Academy of Social Sciences, universities, read lectures and made some

communications. The parties stressed the similarity of a number of problems now under consideration in the Soviet Union and China which prompts the mutually advantageous exchange of experience in the sphere. Chinese scientists showed great interest in the profound reconstruction of all spheres of life in the Soviet Union and in the activities of Soviet social scientists under new conditions. The parties expressed their desire to further expand their relations.

* *"Problem of the Rational in Cognition and Activity"* was the theme of the conference held by the Institute of Philosophy, USSR AS, at Zvenigorod (near Moscow). The introductory speech was made by V. Lektorsky, Chairman of the Organising Committee. The conference considered four themes which were highlighted in the main papers: "Rationalism and Expediency" (A. Nikiforov, B. Pruzhinin), "Measuring the Rational" (V. Porus, I. Kasavin), "Rationalism of Socio-Humanitarian Knowledge" (V. Fedotova, N. Avtonomova), and "Rationalism as a Problem" (V. Shvyrev, G. Batischev, M. Rozov, S. Krymsky, M. Mamardashvili). Approximately 30 participants took part in the discussions.

* *The International Commission on the History of the Great October Revolution under the International Committee of the Historical Sciences held in Odessa a scientific conference "Classes and Political Parties in the October Revolution in Russia"*. It was opened by Secretary General of the International Commission S. Khromov (Director of the Academy's Institute of the History of the USSR). The plenary sessions heard the following papers: President of the International Commission Academician I. Mints (USSR),

"Classes and Parties of Russia in the October Revolution. Results of the Studies and Non-Resolved Problems"; P. Dukes (Great Britain), "Classes and Political Parties of Russia in the October Revolution. Certain British Views". Sectional meetings heard 40-odd papers including by: A. Moritsch (Austria), Academician Kh. Khristov (Bulgaria), P. Flenleu (Great Britain), F. Mucsi and T. Haidu (Hungary); H. Lauenroth, E. Kalbe, G. Rosenfeld (GDR), Zafar Imam (India), Chen Zhihua (China), A. Czubinski (Poland), W. Rosenberg and A. Rabinowitch (USA), T. Vihovainen (Finland), M. Ferro and F. Coquin (France), B. Bonwetsch (FRG), K. German and J. Křížek (Czechoslovakia).

* Moscow hosted the *First Session of the Joint Soviet-Polish Commission on the History of Relations between the Two Countries*. It was carried out in accordance with the Declaration on the Soviet-Polish Cooperation in Ideology, Science and Culture which was signed by General Secretary of the CC CPSU Mikhail Gorbachev and leader of the Polish United Workers' Party Wojciech Jaruzelski. The session was attended by the commission members—outstanding Soviet and Polish historians headed by Corr. Mem., USSR AS G. Smirnov, Chairman of the Soviet part of the commission, and Professor J. Maciszewski, Chairman of the Polish part of the commission. The parties were guided by the Declaration's premise on the necessity of using historical experience for stronger cooperation between the two countries. The commission outlined the main trends and forms of cooperation, considered concrete proposals on organising scientific researches, using new documents and material and preparing joint monographs, including *International Cooperation between the*

CPSU and the PUWP. The History and the Present Day. The parties came to the agreement on preparing a number of joint studies on various aspects of Soviet-Polish relations and elaborated measures on highlighting the studies' results. The Institute of Marxism-Leninism under the CC CPSU transferred a number of funds of Polish revolutionary organisations to the Central Archive of the CC PUWP.

* *A Conference of USSR and USA Historians "Soviet-American Relations. 1945-1950"* held in Moscow was opened by Academician S. Tikhvinsky, Academician-Secretary of the Department of History, USSR AS, and George F. Kennan, head of the US delegation. The introductory speeches were delivered by Vice-Chairman of the National Committee of Historians of the Soviet Union A. Chubaryan (head of the Soviet delegation) and Prof. J. L. Gaddis. Soviet historians read the following papers: A. Borisov, "Was the Cold War Unavoidable?"; V. Malkov, "Roosevelt and the Problem of Soviet-American Relations. 1944-1945"; A. Filatov, "Planning the Backgrounds of Postwar World within the Anti-Hitler Coalition and Soviet-American Relations"; A. Shapiro, "Economic Results of the Second World War and Problems of the Postwar Economy"; A. Utkin, "Strategy and Diplomacy"; R. Bogdanov, "Diplomacy of Nuclear Weapons"; N. Egorova, "International Crisis, 1945-1950: Experience of History"; B. Marushkin, "Development of Postwar Europe and Soviet-American Relations. 1947-1950 (Including the Origin of NATO)"; N. Ivanov, "Stereotypes of Political Thought and Soviet-American Relations. 1945-1950". Reporting from the American side were G. C. Herring, "The Legacy of

Wartime Cooperation"; Th. G. Paterson, "Toward Spheres of Influence: United States Postwar Planning and Soviet-American Relations"; E. R. May, "Strategy and Diplomacy"; D. Holloway, "Nuclear Weapons in Soviet-American Relations from 1945 to 1949"; A. L. George and S. M. Fisch, "Superpower Management of the Crisis in Iran, Berlin and Korea. 1945-1950"; V. Mastny, "Europe as an Issue in Soviet-American Relations. 1945-1950"; D. W. Larson, "The Cold War as a Spiral of Misperception". Prof. W. Taubman and A. Chubaryan delivered concluding speeches.

* Tallinn was the venue of the *Soviet-American Conference on Quantification in Agrarian History* sponsored by the National Committee of Historians of the Soviet Union, the Social Sciences Division of the Estonian Academy of Sciences and the Institute of History of the Estonian Academy of Sciences. It was opened by Academician J. Kahk of the Estonian Academy of Sciences, head of the American delegation A. L. Olmstead, and A. Chubaryan of the National Committee of Historians of the Soviet Union. The conference considered the following themes: "Quantification in Agrarian History", "Machines in Agricultural Production", "Labour and Work in Agricultural Production", "Agricultural Population Mentality and Social Protest", "Types and Trends in Agricultural Development". Reporting from the Soviet side were: Corr. Mem., USSR AS I. Kovalchenko (delegation head) and L. Borodin, "Two Ways of Capitalist Agrarian Evolution in European Russia: Multivariate Typological Analysis"; K. Khvostova, "Application of Quantitative Methods in Studying Mediaeval Agrarian Relations";

Academician J. Kahk, "Machines in Agricultural Production in Baltic Sea Area: the Late 19th-Early 20th Century"; V. Tyukavkin, "Machines in Russian Agriculture in the Late 19th-Early 20th Century"; N. Selunskaya, "Landlord's Estate and Peasant's Farm in European Russia in 1917: Production Level and Wage Labour"; B. Shpotov, "Farmers as a Source of Working-Class Formation in American Industry (First Half of the 19th Century)"; O. Bukhovets, "Self-Consciousness of Russian Peasantry During the Revolution of 1905-1907: Quantitative Analysis"; B. Mironov, "Peasants' Literacy in European Russia in the 19th-Early 20th Century"; I. Suponitskaya, "Toward the Problem of American Farmers' Social Structure in the 19th Century"; L. Milov and I. Garskova, "Serf Labour Productivity Trends in the Late 18th and First Half of the 19th Centuries". Reporting from the American side were: W. N. Parker, "Quantification in American History, 1850-1910: a Re-examination"; A. L. Olmstead and P. Phode, "An Overview of California Agricultural Mechanisation. 1870-1930"; G. Wright, "American Agriculture and the Labour Market: What Happened to Proletarianisation?"; R. Ransom and R. Sutch, "Land, Slaves and Wealth: the Impact of Emancipation on the Plantation Economy of the South"; M. Rothstein, "US Farmers' Movement and Farmers' Protests"; P. H. Lindert, "The Determinants of US Agricultural Land Values since 1800". The American side was represented at the conference by C. Leonard, J. Atack, D. Field, G. W. Grantham.

* *The Eighth Symposium of Soviet and Japanese Historians* held in Moscow was addressed at its opening by Academician S. Tikhvinsky, Corr.

Mem., USSR AS G. Kim (Deputy Director of the Institute of Oriental Studies, USSR AS), and Keiji Nagahara, Chairman of the National Committee of Historians of Japan. The symposium discussed three themes: "International Aspects of 20th-Century Russian Revolutions", "Problems of Periodisation of Japan's History of the Pre-Contemporary Period", and "Problems of Peace and Security of the Far East after the Second World War". Soviet historians delivered papers: A. Ignatyev, "International Situation in the Period of the Russian Revolutions of 1905-1907 and 1917"; A. Tolstoguzov, "Periodisation of the History of Pre-Capitalist Societies (on the example of Japan)"; N. Leshchenko, "The Question of the Boundaries of the Modern Times in Japan's History"; V. Popov, "A Contemporary History of Japan"; V. Lavrychev, "The Question of Periodisation of Russia's History of the Capitalist Period"; K. Sarkisov, "Japan's Policy in Asia and Problems of Peace and Security in the Pacific Asia"; S. Verbitsky, "The Evolution of Japan's Regional Policy". Reporting from the Japanese side were: Masayuki Yamauchi, "The Russian Revolution and Middle East (1920-1921)"; Takeo Hirose, "The Siberian Railway in the First Russian Revolution and the Russian-Japanese War"; Keiji Nagahara, "Problems of Periodisation of Japan's History of the Pre-Contemporary Period"; Kaichiro Oishi, "Periodisation of the Modern and Contemporary History of Japan"; Nobuo Shimotomai, "The End of NEP (1929-1936)"; Ryuji Sasaki, "Problems of Security of Eastern Asia after the Second World War". Some 20 people, including Haruki Wada and Tadashi Kano from Japan, participated in the discussion of the papers.

* *An international conference "Africa: the Challenge of Economic Recovery and Accelerated Development"* held in Abuja (Nigeria) attracted participants from 36 countries and some 50 international organisations. The Soviet participant in the conference A. Sorokin (Institute of Africa, USSR AS) read his paper "The Challenge of Africa's Economic Recovery and the Concept of International Economic Security". The conference adopted a final document "Abuja Statement on Economic Recovery and Long-Term Development in Africa".

* Jyväskylä (Finland) played host to the *European Population Conference "Issues and Prospects"* organised by the International Union for the Scientific Study of Population (IUSSP), the European Association for Population Studies (EAPS), and Finnish Consortium for Population Conference Organisation (FINNCO). The conference attracted demographers from 23 European countries, including Bulgaria, Czechoslovakia, GDR, Hungary, Poland, Rumania, USSR, and Yugoslavia and demographers from 10 countries of North and South America, Asia, Africa and Australia. The participants heard 7 plenary papers. The Soviet researcher A. Vishnevsky was a leading opponent on the paper "Demographic Change, Economic Growth and Social Welfare". Then the conference work proceeded in 25 panels. Soviet researchers actively participated in four of them. K. Katus read his paper "Evolution of Fertility in the Estonian SSR" in the "Long-Term Fluctuations in Fertility" panel; O. Staroverov delivered his paper "Problems of Population Movement Simulation" to the "Economic-Demographic Models" panel. V. Bodrova headed the "Family Policy and Population Change"

panel and A. Isupov headed the "1990 Round of Censuses" panel.

* Jyväskylä (Finland) was the venue of the *Soviet-Finnish demographic seminar "Population and Social Development"*. The Soviet delegation was headed by L. Rybakovsky (head of the department at the Institute of Sociological Studies, USSR AS), and Professor A. Majava headed the Finnish delegation. Reporting from the Soviet side were: L. Rybakovsky, "Seventy Years of Demographic Development in the USSR"; G. Kiseleva, "New Methodological Approaches in the Study of Demographic Processes in the USSR"; I. Ushkalov, "Scientific and Technical Progress and the Mobility of the Population"; I. Zhuravleva, "Health and Self-Preservation Behaviour"; M. Cherednichenko, "Ageing of the Population of the USSR and Social Problems of the Aged in the Scientific and Technological Revolution"; P. Eglite "Social Changes of the Subject of Demographic Behaviour"; T. Ivanova, "Demographic Development of Ethnic Groups of the Population (Kola Lapps)"; G. Romanenkova, "Historical Aspect of the Evolution of the Population of Petersburg-Leningrad"; F. Borodkin and S. Soboleva, "The Accuracy of the Regional Population Projections". Finnish researchers delivered papers: "H. Hamalainen, "The Accuracy of the Regional Population Projections in Finland in the 1980s"; V. Notkola and T. Valkonen, "Socio-Economic Differences in Perinatal and Infant Mortality in Finland. 1976-1982"; T. Martelin, "Effects of Changes in Smoking Habits on Morbidity and Mortality: a Simulation Experiment"; P. Parkkinen, "Ageing Finland up to the Year 2030"; S. Lallukka, "Changing Age-Sex Composition as an Indication of Ethnic Reidentification: the Mord-

vins"; O. Turpeinen, "Population Disasters in Finland in 1808-1809 and 1866-1868".

* "Raising the Efficiency of Using Scientific and Technical Potential" was the theme of the *Second All-Union Scientific-Practical Conference on the Problems of Managing Science* held in Moscow and organised by the USSR State Committee for Science and Technology, Scientific Economic Society, Department of Economics of the USSR AS and the USSR AS Scientific Council on Economic Problems of the STR. Plenary sessions heard and discussed 16 papers including: "Economic Problems of Integrating Science and Production" (Academician A. Aganbegyan), "Economic Forms of Integrating Science and Production" (V. Groshev), "The Direction of Restructuring Scientific and Technical Potential" (N. Obratsov), "The Improvement of the Economic Mechanism in Intensifying Science" (Corr. Mem., USSR AS V. Makarov), "Economic Levers of Managing the Development of Scientific and Technical Potential" (S. Perminov). Then the work of the conference proceeded in the panels: "Comprehensive Problems of the Economy of Science", "Problems of Forming a Network of Scientific Organisations", "The Theory and Practice of Comprehensive Analysis and Assessment of Scientific and Technical Activity", "The Improvement of the Mechanism of Management and the Planning in Science", "Raising the Efficiency of Using Scientific Personnel and Material and Technical Resources of Scientific Organisations", "Information Backing of Managing Science", "The Improvement of Organisational and Economic Levers of Introducing Scientific and Technological Achievements in Production", "Economic Problems of Integrating

Science and Production". Some 150 papers were read at the panels, approximately 1,700 people from 50 cities of the USSR took part in the conference.

* Geneva played host to the *15th Pugwash Workshop on Nuclear Forces* which discussed two subjects: "The ABM Treaty and Strategic Defence" and "Deep Reduction and Minimum Deterrence". It attracted representatives of 13 countries, including: China, Czechoslovakia, Poland and USSR. The Soviet delegation was represented by Chairman of the Soviet Pugwash Committee Academician M. Markov (delegation head), Academician V. Goldansky, Corr. Mem., USSR AS An. Gromyko, Corr. Mem., USSR AS V. Trukhanovsky, Corr. Mem., USSR AS N. Fedorenko, and N. Chervov.

* Mragowo (Poland) was the venue of the *49th Pugwash Symposium on Common Security in Europe* which brought together representatives of 22 countries, including Bulgaria, Czechoslovakia, Hungary, Poland, Rumania, USSR, and Yugoslavia. The Soviet Union was represented by Academician O. Reutov and V. Mazing.

* *The Constituent Conference of the Multilateral Problem Commission of the Academies of Sciences of the Socialist Countries "Problems of Peace and Disarmament"*, which was held in Moscow, was attended by academics from Bulgaria, Cuba, Czechoslovakia, GDR, Hungary, People's Democratic Republic of Korea, Mongolia, Poland, USSR, and Vietnam. They adopted forms and guidelines of the commission's work and plan for 1988-1990.

* A round table "Disarmament and Development" organised in the Insti-

tute of the World Economy and International Relations of the USSR AS by the participants of the conference jointly with representatives of some developing countries discussed the theses "Concept of the Interrelation between Disarmament and Development" which had been prepared by the institute.

* London was the venue of an *international conference "Politics: Rationality and Ideology"* sponsored by the Politics Philosophy Study Group of the International Political Science Association (IPSA). The conference was conceived as a continuation of the Moscow International Forum "For a Nuclear-Free World, for the Survival of Humanity" and simultaneously as a preparatory stage to the 14th International Congress of IPSA to be held in Washington in August 1988. Academics from 15 countries took part in the conference. Corresponding Member of the USSR AS V. Mshvenieradze (Deputy Director of the Institute of Philosophy, USSR AS) read his paper "Meditations on New Political Thinking".

* *Scientists and public figures met in Moscow to continue discussions of new approaches to securing durable peace in the nuclear and space age* which had taken place at the Moscow forum "For a Nuclear-Free World, for the Survival of Humanity". The meeting was organised by the Soviet Committee for European Security and Cooperation, the Committee of Soviet Scientists for Peace, Against Nuclear Threat, the Scientific Council for Studying the Problems of Peace and Disarmament of the USSR AS, the USSR State Committee for Science and Technology, and the Soviet Peace Committee. Communications on the conceptions of military detente, in particular non-offensive de-

fence, being elaborated now were read by A. von Bulow, Deputy of the SDPG to the FRG Bundestag; Professor R. Neild of University of Cambridge (Great Britain); Professor F. von Hippel (Princeton University, USA); Professor A. Boserup (Denmark); Professor E. Boeker (Free University of Amsterdam); Dr. A. von Müller (the Max Planck Society for Developing Science, FRG). W. Konarski of Poland informed the meeting on his country's proposals in the field of reducing armaments and promoting confidence in Europe.

* *The International Scientific Seminar on Problems of Security and Development in the North Pacific* sponsored in Sapporo (Japan) by the Fletcher School of Law and Diplomacy (USA) and Hokkaido University attracted researchers from Canada, China, Japan, Korean People's Democratic Republic, South Korea, USA, and USSR. The Soviet Union was represented by researchers from the Institute of US and Canadian Studies, USSR AS. The following papers were delivered: "On Current Military and Political Situation in the North Pacific" (G. Trofimenko, delegation head), "The Countries of the North Pacific and the Challenge of the 21st Century" (A. Kortunov). A. Parkansky and K. Pleshakov took part in the seminar.

* *Problems of security and relations between East and West* was the theme of an international conference organised in West Berlin by the local branch of the Aspen Institute for Humanistic Studies (Aspen, Colorado). It was attended by experts from France, FRG, Great Britain, USA, and USSR. The Soviet Union was represented by Deputy Director of the Institute of US and Canadian Studies, USSR AS R. Bogdanov (delegation head), researchers of this

institute S. Plekhanov and A. Bobrysheva, researchers from the Institute of the World Economy and International Relations V. Baranovsky and A. Savelyev. Processes developing in the USSR and the USA and their impact on the East-West relations were in the centre of discussions. Great attention was paid to the speeches of Soviet participants which were devoted to the restructuring under way in the USSR and to decisions of the June 1987 Plenary Meeting of the CC CPSU.

* Washington D.C. was the venue of a Soviet-American seminar which discussed the prospects of Soviet-American relations, nuclear disarmament and the problem of strengthening strategic stability and reducing conventional forces. It was organised by the Atlantic Council of the United States and the Institute of US and Canadian Studies of the USSR AS. The Soviet side was represented at the seminar by: Director of the Institute Academician G. Arbatov, Corr. Mem., USSR AS V. Zhurkin, Admiral N. Amelko, G. Trofimenko, M. Milstein, V. Shustov, R. Entov, and S. Karaganov. Participating from the American side were: Chairman of the Atlantic Council General A. Goodpaster, General B. Skowcroft, J. Woolfy and other experts.

* *The Soviet-Japanese symposium on the problems of peace and security in Asia* was held in Tskhaltubo (Georgian SSR). The Soviet delegation was headed by Academician E. Primakov, Director of the Institute of the World Economy and International Relations, USSR AS. Professor K. Saeki headed the group of Japanese experts from the Council of National Security of Japan. The participants in the symposium discussed the questions of disarmament, security and cooperation in

the world and in the Asian Pacific as well as the questions of Soviet-Japanese relations. The parties stressed the necessity of implementing in practice the principles of new political thinking in the development of international relations, of searching for ways to reducing the level of war danger and of deepening mutual understanding and confidence.

* *"Political Institutes and the Acceleration of Socio-Economic Development"* was the theme of the Third All-Union School of Young Political Scholars sponsored in Moscow by the Soviet Association of Political Science. The plenary session heard the paper of Corr. Mem., USSR AS V. Mshvenieradze (Deputy Director of the Institute of Philosophy, USSR AS) on the tasks of political science in the conditions of restructuring, and the paper of I. Bestuzhev-Lada (Institute of Sociological Studies, USSR AS) on the process of democratisation and problems of overcoming red tape. The panel meetings considered two questions: the role of political institutes in restructuring and the restructuring of political institutes; and the role of political institutes in the socio-economic development of the capitalist countries at the present stage. The round-table discussions were devoted to: new thinking and military policy in the nuclear age; philosophical and methodological problems of studies in politics (epistemology of politics); collective and individual leadership in politics; new legislation and the restructuring; the sociology of self-government: readiness No... (empirical studies of socio-political processes in the USSR); religion and politics.

* Dubrovnik (Yugoslavia) hosted a session of the Research Committee on Sociology of Regional and Urban Development of the International Sociologi-

cal Association on the theme "Technology, Restructuring and Urban-Regional Development". It attracted academics from 15 countries, including Hungary, Poland, USSR, and Yugoslavia. Soviet participants submitted the following papers: "Modern Technological Restructuring and Changes in the Socio-Professional Structure of Urban Population in the USSR" (O. Shkaratan), "Regional Differentiation of the Life Conditions of the Population and Socio-Economic Mechanisms of Its Regulation" (L. Khakhulina).

* *"The Social Organisation of Work: Problematic Aspects"* was the theme of the First Soviet-American Sociological Seminar sponsored by the Soviet Sociological Association and the American Sociological Association in Vilnius. The seminar discussed the following questions: the relationship between the larger social structure and job conditions in socialist and capitalist societies; alternative structural arrangements for the organisation of work; social psychological aspects of work motivation; historical trends in the social organisation of work; modern technologies and man: employment, working conditions, communication, personality development. The seminar heard 15-odd papers, including the joint Soviet-American paper "Indices of the Use of Time by Urban Dwellers" prepared by V. Andreykov, V. Patrushev (both of the USSR) and J. Robinson (USA); papers by Soviet sociologists: "Tendencies to Enriching the Paradigm of the Sociology of Labour" (V. Yadov), "The Development of Democracy at the Enterprise and the System of Social Guarantees of the Right to Work" (B. Rakitsky); and papers of American sociologists: "Position in the Class Structure and Psychological Functioning" (M. Kohn et al.), "Jobs and Work"

(J. Miller), "Goal Incongruence, Interdependence and Decision-Making in a 'High-Technological Firm'" (W. Bielby), "Technological Change, Skill Requirements and Education" (K. Spenner).

* *The Colloquium "International Crimes and National Penal Law"* organised by the International Association of Penal Law in Hammamet (Tunisia) attracted experts from 18 countries, including GDR, Hungary, Poland and USSR. Director of the Institute for the Studies of the Crime Causes and Elaboration of Crime Prevention Measures I. Karpets (USSR) delivered his paper on international crimes and the crimes of international character.

* *"Legislation and Juridical Review—an International Comparison"* was the theme of an international symposium held in Bad Homburg (FRG) and organised by the Institute of the Political Sciences under Heidelberg University which was attended by law students from Austria, France, FRG, Greece, Italy, Poland, Spain, USSR, and USA. There were submitted 9 papers to the symposium on the control of the constitutionality of laws in respective systems of law. Great interest was arisen by the paper of Polish representative L. Garlicki on the organisation and activity of the Constitutional Tribunal recently established in the country. V. Tumanov (department head at the Institute of the State and Law, USSR AS) read his paper "Guarantees for Constitutionality of Legislation in the USSR" in which, at the request of the participants, much attention was paid to legal aspects of the restructuring under way in the Soviet Union.

* *The Soviet-West German colloquium "International Law and Municipal*

Law" held in Kiel was organised by the Max Planck Institute for Foreign Public and International Law (Heidelberg), the Institute for International Law at the Christian Albrecht University (Kiel) and other scientific legal institutions. Corr. Mem., USSR AS G. Tunkin, Chairman of the Soviet Association of International Law, headed the Soviet delegation and Professor R. Wolfrum headed the West German delegation. The colloquium discussed four themes: "Incorporation of Customary International Law into Municipal Law", "The Relevance of Resolutions and Declarations of International Organisations for Municipal Law", "Incorporation of International Treaties into Municipal Law", and "The Relevance of Acts of International 'Super-National Organisations' for Municipal Law".

* *"Legal System and Restructuring"* was the theme of an all-Union scientific-theoretical conference carried out by the Institute of the State and Law, USSR AS at Zvenigorod (near Moscow). Some 160 leading scientists of law, representatives of legal research institutes, institutions of higher learning and practical workers took part in the conference opened by Deputy Director A. Vasilyev. Papers were submitted by: A. Vasilyev, "Law and Restructuring"; V. Kazimirchuk, "Strategy of the Development of Soviet Legislation"; V. Savitsky, "Justice and Restructuring"; and V. Nersesyants, "New Legal Thinking under Restructuring". Discussion of the papers attracted some 40 people. The main theoretical theses propounded in the papers and discussions were reflected in the recommendations adopted by the conference.

* *The Second Congress of the International Society of Applied Psycholinguis-*

tics (ISAPL) held in Kassel (FRG) brought together researchers from 25 countries, including Bulgaria, Hungary, Poland, Rumania, USSR, and Yugoslavia. The participants gave much thought to methodological and theoretical problems in studying extralinguistic factors of verbal communication and to analysis of the results of experimental research in the field of verbal communication, first language development and second language development. E. Tarasov, a researcher of the Institute of Linguistics, USSR AS, read his paper "Ontology of Verbal Communication".

* Swansea (Great Britain) played host to the *Eighth International Congress on Celtic Studies*. It attracted academics of Canada, France, FRG, Finland, Great Britain, Ireland, Poland, USSR, and USA. The Soviet Union was represented by V. Kalygin and A. Korolev, researchers of the Institute of Linguistics, USSR AS.

* *The Tenth Annual Conference of the International Society of Political Psychology* held in San Francisco brought together some 400 academics from 30 countries, including Hungary, Poland, and the USSR. Soviet researchers from the Institute of US and Canadian Studies, USSR AS delivered the following papers: "Contribution of Social Science to Policy Making: a Soviet View" (Yu. Zamoshkin), and "Image of the Enemy and New Political Thinking" (A. Melvil).

* *In the Ninth Biennial Meeting of the Society for the Study of Behavioral Development (ISSBD)* in Tokyo sponsored by the Society jointly with a number of Japanese scientific centres participated some 800 academics from 28 countries, including Hun-

gary and the USSR. A. Mitkin, a researcher from the Institute of Psychology, USSR AS, read his paper "Eye Movements and Visual Functions in Infancy. The Problem of Interdependence".

* Mexico-City was the venue of an *international seminar "The Origin of Man in America"* which attracted scientists from Canada, Mexico, Peru, USSR, USA, Venezuela and some countries of the Western Hemisphere. Corr. Mem., USSR AS N. Dikov delivered his paper "The Palaeolithic Period of Kamchatka and Chukotka and the Problem of the Earliest Settlement of America".

* *In a symposium "Dynamics of Geosystems: Monitoring (Control) and Forecasting"* organised in Moscow and Nalchik by the Commission on Geographical Monitoring and Forecasting of the International Geographical Union (IGU) participated 43 researchers from 13 countries, including China, Czechoslovakia, GDR, and USSR. Chairman of the Commission S. Evteyev (USSR) delivered the introductory speech. The symposium heard 40 papers, including "Global Environmental Problem: Socio-Economic Reasons of Its Emergence" (E. Alayev, USSR), "For a Monitoring of the Urban Systems Deterioration: the Case of Morocco" (A. Fadloulah, Morocco), "Environmental Quality Assessment and Monitoring Problems at the Urban Eastward Expansion in Florianopolis" (C. A. de Figueiredo Monteiro, Brazil), "Monitoring Ecological Change in the Wake of Agricultural Modernisation in India: Evidence from Indo-Gangatic Divide" (A. Ahmad, India), "Forecasting of the Geosystems Change Due to Intensification of Tourism" (B. Barcelo i Pons, Spain), "Man-Induced Impact on Geosystems: the

Tasks of Socio-Economic (Geographical) Monitoring" (G. Sdasyuk, USSR), "Development of Industry and Landscape Changes in Czechoslovakia (History and Perspectives)" (L. Kopačka, Czechoslovakia), "Noosphere: a Historico-Geographical Approach" (V. Annenkov, USSR). The participants familiarised themselves with the work of some scientific institutions.

* The Institute of the International Working-Class Movement, USSR AS, organised a session of the Problem Commission for Multilateral Cooperation of the Socialist Countries "The Working Class in the World Revolutionary Process" which was dedicated to the 70th anniversary of the Great October Revolution. The participants in the session—researchers and leaders of scientific institutions and practical workers, discussed questions of the acceleration of the socio-economic development in socialist society, the role of the working class in the present-day revolutionary processes, the struggle of the working people for peace and social progress.

* "The Great October Revolution and the Battle of Ideas in the Contemporary World" was the theme of an international meeting of scientists sponsored by the European Institute of Sociology and Politics and carried out in Athens. Reporting from the Soviet side were: Corr. Mem., USSR AS T. Timofeyev (Director of the Institute of the International Working-Class Movement—IWCM), "The Great October Revolution, the Working Class and the Battle of Ideas"; Corr. Mem., USSR Academy of Medical Sciences S. Fyodorov, "Medicine and Science in the 20th-21st Centuries"; Deputy Director of IWCM B. Koval, "Politics and the Masses in the Contemporary Epoch". M. Rayevsky, a researcher of IWCM, took part in the meeting.

* The 30th Session of the Permanent International Altaistic Conference (PIAC) was organised in Bloomington (Indiana) by Indiana University. It was attended by academics from 13 countries, including China, GDR, Hungary, and USSR. The Soviet side submitted the following papers: "The Problem of Typology of Morphological Categories in Altaic and East and South-East Asian 'Sprachbünde' (Plurality and the Zero Form)" (Corr. Mem., USSR AS V. Solntsev), "The Names of Monetary Units in the Old Turkic Languages of Inner Asia" (Corr. Mem., USSR AS E. Tenishev), "On Turco-Finno-Ugric Language Contacts" (K. Musayev), "The 'Qutadgu Bilig' as One of the Earliest Evidences of Aesthetic Thought of Turkic Speaking Peoples" (B. Nazarov), "New Runic Inscriptions in the Altai" (D. Vasilyev). D. Sinor (USA) was re-elected Secretary General of PIAC for a new five-year term. The 31st Session of PIAC is to be held in 1988 in Weimar (GDR). H. P. Vietze (GDR) has been elected its President.

* The Second International Scientific Ecclesiastic Conference devoted to the History of the Russian Orthodox Church, held in Moscow, brought together representatives of the Orthodox and Old Oriental churches, the Catholics, Lutherans and Baptists from 28 countries, including Bulgaria, Finland, France, FRG, Greece, Hungary, India, Poland, Yugoslavia. Participating from the Soviet side were researchers of the Institutes of the Academy of Sciences of the USSR: of the Russian Language, World Literature, Archaeology, Slavonic and Balkan Studies, the History of the USSR, lecturers of Moscow University's Philological Department, researchers of the Andrei Rublev Museum of the Old Russian Art and of other institutions. The

conference heard 94 papers on the history of church, development of the Slavic written language and literature, the impact of Christianisation on the social life and culture of Old Russia. Soviet researchers from the above-mentioned academic institutes delivered 11 papers, including S. Averintsev, "The Byzantine Heritage in the Russian Tradition of Perception of the World"; A. Alexeyev, "Textological Significance of the Gennadi Bible"; S. Schmidt, "Metropolitan Makari of Moscow and State Reforms in Russia in the Mid-16th Century"; A. Rogov, "Christianisation of Rus and the Western Slavs"; G. Prokhorov, "Exhortation of Metropolitan Kiprian to a Newly Ordained Priest". The conference paid much attention to the peace-making activity of the Russian Orthodox Church in promoting trust among the people, in overcoming an enemy image in other person, and in supporting the ideas of universal disarmament.

* Charles University in Prague played host to an international conference "Science and Universities" which attracted scientists from 10 countries, including Czechoslovakia, Poland and the USSR. Corr. Mem., USSR AS Yu. Kukushkin delivered to the conference his paper "History of Universities in Russia".

* "The 70th Anniversary of the Great October Socialist Revolution and the World Revolutionary Process" was the theme of the Czechoslovak Scientific Conference carried out in Prague by the Czechoslovak-Soviet Institute of the Czechoslovak Academy of Sciences. It gathered outstanding historians, philosophers, sociologists and economists. Director of the Institute A. Dolejša delivered the introductory speech and his paper on the subject of the conference. The sec-

ond paper "Ideas of the October Revolution and the National Liberation Movement" was read by A. Kaufman (Institute of Oriental Studies, USSR AS). Besides, the conference heard 10 papers which considered various aspects of the main theme.

* The 18th Scientific Conference on Studying Australia and Oceania, organised by the Institute of Oriental Studies, USSR AS in Moscow, was opened by the introductory speech delivered by a department head of the Institute K. Malakhovsky. The participants heard and discussed some 40 papers, including "Australia and ASEAN: Political and Economic Relations. 1970s-1980s" (V. Arkhipov), "The Alignment of Forces in the US Political and Academic Quarters on the Question of the 'Pacific Community'" (V. Yakubovsky), "Integrational Processes in the Pacific Basin and Conferences of the Pacific Economic Community" (A. Suchkov), "Australia's Economy in the Mid-1980s" (A. Chuikov), "The New Guinean Diaries of N. N. Miklukho-Maklai" (N. Butinov), "The Problem of Polyneesian Polytheism in the Museum Exposition" (M. Butinova), "A Voice of the Musical Instrument is a Voice of the Ancestor" (L. Abramyan), "The First Experience of Oceanian Literary Studies" (A. Petrikovskaya), "The Role of the Creole Languages in the Cultural Processes of Melanesia Today" (V. Belikov), and "The Australian 'Hero of Our Times' (David Malouf, *Johnno*)" (O. Zernetskaya).

* Moscow was the venue of a general meeting of the All-Union Association of Orientalists which was organised by the Institute of Oriental Studies, USSR AS. In his introductory speech Director of the Institute M. Kapitsa

pointed out to the significance of the Association established in 1982 and stressed the necessity of invigorating its activity and expanding its influence on the scientific and cultural life of the country, on relations between nationalities and on strengthening scientific ties with foreign countries. L. Alayev, Deputy Chairman of the Association, summed up its activity for the recent five-year period. He said that the Association had 11 branches in Union republics and large scientific centres as well as 8 regional groups. It unites 39 scientific, educational and cultural institutions and more than 1,700 individual members. Corr. Mem., USSR AS G. Kim (Deputy Director of the Institute) was elected Chairman of the Association.

* The Institute of Oriental Studies, USSR AS organised at Zvenigorod (near Moscow) the *Eighth Readings in Memory of Academician W. Barthold (1869-1930)*, the outstanding Soviet scientist, author of many works on the history of Central Asia, Iran, Islam, the Arabian caliphate, and many writings in Oriental studies. The readings were opened by G. Girs, head of the department of literary texts at the Institute of

Oriental Studies. The participants considered the following themes: methods in studying Oriental Arabic graphic sources; archaeographic reviews of written texts; documents and diplomacy; metrology, epigraphy, sphragistics; automation and source studies; literature and folklore as a historical source. Approximately 90 papers were heard and discussed, including: "Some Aspects in Studying Biographic Information of Middle Age Arab Authors" (V. Beilis), "Hagiographic Literature as a Historical Source" (B. Akhmedov and I. Saidakhmedov), "Old Turkic Texts as a Source for Studying Old Turkic Culture" (S. Klyashtorny), "Difficulties and Methods of Ascertaining the Authenticity of Date on Coins with Arabic Inscriptions" (E. Davidovich), "Documents on Taxation in the Bukhara Region in the Late 19th Century" (K. Khakimova), "The Source Studies Aspects in Examining the Georgian-Persian Bilingual Documents" (T. Abashidze), "Georgian Sphragistics and the Condition of Its Studies" (A. Bakradze), "The Question of the Automated Data Bank for Mediaeval Persian Texts" (G. Beradze, G. Zhorzholiani, and N. Nakhutsrishvili).



BOOK REVIEWS

Структура народного хозяйства в условиях интенсификации экономики. М., изд-во «Наука», 1986, 268 с.

The Structure of the National Economy in Conditions of Intensification, Moscow, Nauka Publishers, 1986, 268 pp.

The monograph under review is one of a series of books published by the USSR Academy of Sciences' Institute of Economics on the problems of perfecting the structure of the Soviet Union's economy. It examines the methodological questions involved in evaluating the efficiency of this structure at a time when an intensive type of extended reproduction is being established and developed.

It should be admitted that the consolidation of technological links between branches and industries and cooperation and combination in production, lead to the agglomeration of branches and industries and their increased unity and interdependence. Moreover, new branches and industries are emerging which are born of the scientific and technological revolution and the intensification of the social division of labour. It ultimately leads to the breaking down of the traditional economic structure and requires adequate changes in the economic mechanism.

The point is to achieve the necessary degree of proportionality and balance in the economy. These and a number of new premises contained in the first two chapters are of great interest. They analyse contemporary problems of structural policy and its specific features and trace the dynamics of the basic indices of the functioning of the economy and the efficiency of structural changes.

The authors put forward the thesis of the priority of some branches as a phenomenon characteristic of a majority of countries with a developed structure. At stages of rapid economic growth these countries register "the subordination of the entire economy mostly to the interests of the development of key branches of heavy industry".

In studying the principal characteristics of reproduction and inter-branch proportionality during the period of transfer to a predominantly intensive type of economic growth, the authors single out changes in the correlation between Departments I and II of social production, as well as that between the resources of live and materialised labour; changes in the influence of the principal material factors—the workforce and the means of production—on the results of production, and in the structural proportions of individual parts of the national economic complex.

In analysing the reasons for an increase in the capital-output ratio, the just conclusion is drawn that "high concentration of production assets should not lead to an increase in the capital-output ratio, which depends on the technical level of the assets, the degree of their utilisation, coordination and balance in the development of the basic and auxiliary industries, the correlation of the dynamics of the prices of equipment and its productivity, and other factors".

One cannot but agree with the authors that the problems of radical improvement of the normative basis, the introduction of a resource-saving technology and the orientation of planning and material incentives to a most strict economy of resources are acquiring importance today. The book emphasises the need to make the system of payment for work of those engaged in social production dependent on the extent to which raw materials, fuel and power are economised on, inasmuch as at the present stage the thrifty use of resources has become a principal strategic course of the country's economic development.

The authors devote considerable

attention to the question of improving the structure of the engineering industry and modern trends in comprehensive mechanisation and automation, perfecting the structure of the machine-tool industry, and producing the means of mechanisation and automation. Regrettably, the long-term proposals for developing and perfecting the machine-building complex are confined largely to branch aspects.

The chapter devoted to perfecting the structure of the agrarian-industrial complex examines a wide range of problems dealing with its formation, trends towards intensification of production, the provision of agriculture with products manufactured by the asset-producing branches, the improvement of the quality of finished products in this complex, and the development of the infrastructure in the complex, which is, in our view, quite justified.

The book is a useful contribution to the study of the problems of efficiency in social production in the new economic conditions taking shape in the USSR, and will be of great interest to economists.

O. Volkov

A. И. АНЧИШКИН. *Наука—техника—экономика*. М., изд-во «Экономика», 1986, 384 с.

A. I. ANCHISHKIN, *Science—Technology—Economics*, Moscow, Ekonomika Publishers, 1986, 384 pp.

The monograph by Academician A. Anchishkin (1933-1987) analyses the economic developmental laws of science and technology. It discusses a range of questions logically connected and subordinated to the main

aim—the substantiation of planned management of the great potential of the scientific and technological revolution in socialist society.

All parts of the book are based on similar initial methodological principles: the singling out of economic aspects of scientific and technical progress; an approach to science as a key branch determining the rates of extended reproduction; differentiation of the general historical and specific features of scientific and technical progress. Science is regarded not only as a condition for

the growth of national income, but also as a major element of society's national wealth.

Marx' reproduction theory and his teaching on the dual character of labour take pride of place in the initial principles. This enabled the author to analyse the qualitative and quantitative specificities of labour in the sphere of science, the use value and the value of a product or service it creates, the degree of its complexity, and the socially necessary expenditures connected with it. The monograph singles out the basic historical stages of the materialisation of science in the means of production, and the organisation of the productive forces, including manpower.

The book examines the subject of political economy in a new way. In contrast to traditional views, according to which this discipline studies only production relations, their laws and categories, the author proves that the subject of political economy is the mode of production, that is, the productive forces and production relations and their interaction in the reproduction process.

It is known that a number of works published here discusses the correlation of the productive forces and production relations, particularly, the question as to whether the development of the latter can outstrip that of the former. Touching on these problems, the author maintains that the perfection of production relations is organically connected with the dialectics of the development of society's productive forces and with the forms of the organisation of labour. An analysis of the questions of improving production relations in isolation from the study of the productive forces, in the correct view of the author, is a futile attempt to reduce the essence of the process of such improvement

to the construction of one or another hypothetical model of production relations. In this context the book devotes considerable attention to the problem of the socialisation of the productive forces.

Political economy does not participate directly in the process of planning scientific and technical progress; this task is tackled by applied sciences. But it is precisely political economy that makes it possible to disclose both general and specific features of scientific and technical progress under socialism. The monograph shows that the planned development of science as a direct productive force of society is reflected in the correlation between the measure of the socialisation of production and the functions of nationwide centralised planning, between the structure of socialist property and the forms of the organisation of production, between the systems of economic interests and the methods of their consideration in economic activity; it shows that the efficiency of the nationwide planning of scientific and technical progress largely depends on the development of all structures of socialist property, their use and forms of their realisation in the complex of economic interests.

A balanced scientific and technical progress presupposes the distribution of its results in proportion with the socially necessary expenditures of labour in all spheres of its application. The author comes to the conclusion that the effect of scientific and technical progress should largely be socialised in the hands of the state for solving the national economic tasks, and should remain only partially in the hands of the producers and consumers of new machines and equipment.

Socialist ownership exerts a specific influence on the social as-

pects of scientific and technical progress. Under socialism, social restrictions have a special nature, expressing, as they do, the requirements, peculiar to this system, that man and society make of living and working conditions. These restrictions must accord with man's motives and value orientations, the level and quality of the socialist mode of life, and urgent tasks of its improvement. They should be reckoned with in determining the criteria of the use of machines under socialism, and new technologies, in releasing workforce in a planned manner, in allocating means earmarked for the protection of the environment, and in solving all questions bearing on the connection of scientific and technical progress with the vital activities of people.

A combination of a theoretical analysis of problems with the real facts of economic practice, which is a specific feature of this monograph as a whole, enabled the author to newly approach the question as to how the concept of the productive forces can be correlated to the division of the economy into the productive and non-productive spheres, which is accepted in statistics and planning. Academician Anchishkin is against such a division. He writes: "It seems that the economic role of the non-productive sphere, which forms qualitative, including scientific-technical, characteristics of the material elements of the productive forces and manpower, allows us to regard these forces as a sum total of all economic resources, irrespective of the sphere of their utilisation." The author's premise about the singling out of the basic and infrastructural branches, within the structure of reproduction, also merits attention. The mounting role of science in extended reproduction presupposes that the capacity of infrastructural branches will overtake the

growth of the capacities of the key industries.

The author contributed considerably to the study of the law of labour saving and the growing role of scientific and technical progress in it. Examination of the labour saving category in various aspects of scientific and technical progress keynotes the entire monograph. In effect, labour saving reflects the efficiency of the interaction of science, technology and the entire economy in the reproduction process. Labour saving obtained as a result of implementing scientific advances ultimately becomes the main source of social progress.

The book also examines the role of science in the intensification of the subject of production relations, the formation of his interests, and the motivation of his labour activity and value orientations connected with the use of the results of scientific and technical progress at the various levels of the organisation of the productive forces: man and his work place; the intra-industrial cooperation of labour; the production object, inter-object and national economic (state) forms of production cooperation; the world economy. The book shows that the interaction of the various levels of the organisation of the productive forces under socialism is effected on the principle of democratic centralism and is based on the improvement of technological and economic ties and the active use of all levers of commodity-money relations.

Man as a subjective factor of social progress is an important object of investigation. The monograph describes the socio-economic foundations determining his interests and requirements in the conditions of scientific and technical progress. They are not connected with man's anthropological specific features, are

not inherited and cannot be influenced by genetic engineering. The motives of labour and the social behaviour of man are determined by the dominant social relations, the forms of the realisation of property relations, society's social structure, historical and national specificities, and institutional forms. The author thoroughly substantiates the premise that under socialism the orientation of scientific and technical progress to man's social requirements and rising living standards becomes more pronounced. New scientific knowledge is materialised primarily at a higher educational and skill level of workers, and in man's comprehension of the character of the natural and social productive forces used by him in the labour process. All this complicates labour, but raises its productivity.

The monograph also dwells on the "moral obsolescence" of knowledge. Timely refreshing of knowledge is the basis for personnel competence, skill and professional qualities, corresponding to the achieved new technological level. A gap between them has a negative effect on the development of the productive forces.

Speaking about a balance between knowledge and technology, the author justly maintains that highly-skilled labour can, at least partially, compensate for shortcomings in technology, and the expenditures of social labour for the creation of a "surplus" technical level of the means of production cannot be compensated for by anything. Timely refreshing of knowledge presupposes a redistribution of resources channelled into the training and upgrading of personnel. If, for example, the volume of scientific and technical information doubles approximately every ten years, it means that during his 30-year period of

work man should double or triple the knowledge he began with. Consequently, expenditures for "reconstructing" and refreshing knowledge should comprise a considerable part of the overall allocations for education. In the present epoch the expenditures of labour for the transfer, mastering and preservation of scientific knowledge can quantitatively be compared with the expenditures of labour in production.

In terms of political economy, the most interesting chapters of the monograph are those devoted to the insufficiently studied problems of scientific and technical progress. Among them are: the correlation of fundamental and applied research in the "science—production" cycle; the improved methods of planning, forecasting, management and organisation of scientific and technical progress; social requisites, criteria and limitations of accelerated scientific and technical progress, the realisation of the value orientations of science within the range of economic interests.

An analysis of these problems enables the author to disclose the laws of the movement of the extensive and intensive factors of economic growth. As scientific and technical progress is becoming the main source of labour saving, the role of the intensive factors of the growth of production and satisfaction of social requirements is increasing. All this determines the close connection of the law of labour saving with the main economic law of socialism.

The monograph under review is a serious contribution to the theory of socialist reproduction and the practice of economic planning. It will, undoubtedly, contribute to better utilisation of scientific achievements for accelerating socio-economic development of society.

P. Savchenko

СССР—развивающиеся страны. Торгово-экономические отношения. М., изд-во «Международные отношения», 1985, 240 с.

The USSR and Developing Countries. Trade and Economic Relations, Moscow, Mezhdunarodniye otnosheniya Publishers, 1985, 240 pp.

A sound theoretical work with a wealth of factual material, the book poses some pressing, at times debatable, questions about ways of developing further the USSR's economic relations with young independent states.

The monograph opens with a chapter on the foundations of the alliance between socialism and the national liberation movement. Emphasising that any exploiter society "inevitably breeds a system of domination and subordination in interstate relations", the authors show that to cooperate with developing countries in the anti-imperialist struggle is the natural thing for the socialist countries to do. The book concentrates attention on the disintegration of colonialism and the emergence of the group of countries of socialist orientation. As a result, the progressive alternative to capitalist development has come into being for the newly free countries.

The chapter also deals with the legitimate process of broadening the spheres for joint action by the USSR and developing countries in the international arena. Comparatively recently the leaders of many of these countries considered opposition to the arms race to be a secondary matter related to the sphere of East-West interests. However, in the early 1980s, everybody began to realise the direct connection between the present international situation

and the possibilities of solving the tasks of economic development. The heart of the matter lies not only in the direct threat of a thermonuclear catastrophe, but also in the squandering of enormous resources on the arms race and the onslaught of imperialism on the positions of the newly free countries.

The book characterises the basic principles of the USSR's economic ties with young states. Among them, the strict observance of sovereignty and the renunciation of the use of any political or other pressure on the countries receiving assistance; cooperation with a broad range of partners; the creation with Soviet participation of enterprises (mainly in the key industries) which are wholly owned by the young states; emphasis on the transfer of material resources and know-how necessary for production; favourable terms of granting Soviet credits; technical assistance on favourable terms and the training of skilled national personnel; increasing Soviet imports of finished goods from developing states.

The chapter on the main forms of economic relations between the USSR and newly free countries is of considerable interest. It deals with trade, cooperation in the field of capital construction, the setting up of joint-stock companies with Soviet participation, multilateral cooperation with participating partners from capitalist countries, as well as credit and financial relations and mutual accounts. The material cited describes the changeover to more complex types of joint activity in the sphere of material production which enables the USSR to more actively tackle "the tasks of rendering assistance to developing countries in the restructuring of their economies and the entire social life along the lines of progress through foreign economic ties".

The chapters on joint-stock companies and multilateral cooperation contain a lot of information. Mention should be made of the ideas of raising the efficiency of such forms of ties as the ascertaining of most promising industries and branches, the ensuring of a higher level of technical and economic substantiation of proposals, and determination of the optimum proportion of Soviet participation.

Analysing credit and financial relations—one of the most acute problems facing developing countries—the authors state that the USSR is rendering credit to more than 60 of them. This is closely connected, as a rule, with scientific and technological assistance and with the transfer of new technologies and their development, and radically differs from the financial aid of capitalist countries, which is more often than not accompanied by shackling conditions. At the same time, the book examines the question of raising mutual benefits from credit ties. On the one hand, progressing inflation should be taken into account, and on the other, the fact that the credits granted by socialist states to developing partners are not the result of financial surpluses invested abroad, as it was noted in a joint statement of these countries at the 4th session of UNCTAD.

Considerable attention is devoted to the USSR's cooperation with newly free countries on a compensation basis, which enables the latter to repay Soviet loans and find markets for their products. The book describes the broad scope of compensation operations (about 60 corresponding inter-governmental agreements), their most widespread spheres and mutual advantage.

One of the chapters discusses the results of cooperation with the USSR in the sphere of tackling the social

problems in developing countries. We have in mind the expanding and strengthening of the public sector, the formation of national personnel, greater employment, and the improvement of medical services.

The chapter on the anti-imperialist struggle in the sphere of international economic relations is short, but it does contain a wealth of factual material. The USSR's activity in inter-governmental organisations, which, as is known, began in the first years of Soviet power with the direct participation of Lenin, is solidly dealt with in the chapter. The chapter traces its stages, for one the adoption, at the suggestion of the Soviet Union, of the Declaration on the Granting of Independence to Colonial Countries and Peoples, the USSR's initiative on the reduction of the armed forces and the use of part of the means thus relieved to render assistance to developing countries. Analysing the progressive premises of a programme for the establishment of a new world economic order, the authors mention certain inconsistencies of that document (ignoring the task of the struggle for international detente and the need for social transformations in developing countries, searching for ways to reorganise world economic ties only within the framework and by the methods of the capitalist economic system).

There are, of course, certain shortcomings in the work. In our view, the book cites, without criticism, the overrated assessments of experts from international organisations of the long-term rates of increase of the USSR's trade with newly free countries in the 1980s. Meanwhile, the progressing differentiation of our partners in this group (a majority of which are still going along the capitalist path), and the inconsistency of their policies show

that forecasting in this respect should be made more cautiously.

In conclusion, it should be said that this monograph is a tangible

Н. И. ГУБАНОВ. *Чувственное отражение: анализ проблем в свете современной науки*. М., изд-во «МЫСЛЬ», 1986, 240 с.

N. I. GUBANOV, *Sensual Reflection: Analysis of Problems in the Context of Modern Science*, Moscow, Mysl Publishers, 1986, 240 pp.

The book under review examines the problems of sensual reflection on the basis of the wealth of material made available by the natural sciences, psychology and cybernetics. A considerable part of it is introduced in the range of epistemological problems for the first time.

Chapter I declares that the attempts to divide the imaginary and the real in sensual knowledge, an undertaking which began in ancient times and took final shape during the 17th and 18th centuries, have been expressed in the theory of primary and secondary qualities.

Giving an epistemological characteristic to this theory, N. Gubanov shows that it is correct in its main idea (colour, smell, taste, etc. do not objectively exist, although they do have objective causes), but is expressed in inadequate concepts, which leads to the following paradox: objects seem to possess some specific features, which, in actual fact, they do not have. In reality, "secondary qualities" are not the specific features of objects, but the sign components of sensual reflection, denoting the physical nature of the elements of the objects reflected. These sign components seem to belong to the objects because the sensual images localised in the brain as the informa-

contribution to the elaboration of the pressing questions of the USSR's foreign economic ties.

L. Sabelnikov

tion content of neurodynamic codes are unconsciously projected to external objects. In this connection the author suggests that the concept "secondary specific features" be replaced by the concept "sign components of sensual images".

N. Gubanov notes that attempts made by philosophers to single out specific secondary qualities hinted at the presence of sign elements in sensations. He examines the views of Sechenov (who believed that objective realities are reflected in the psyche in two ways: by their similarity and in the form of signs), Plekhanov who exaggerated the role of signs in sensations, as well as the views of modern Marxist philosophers on the problem of the image and the sign in sensual reflection. Of special significance in this chapter, in our view, is the combination of a historico-philosophical analysis with the attempt to put forward positive solutions to the problems discussed. The author reveals the epistemological sources and methodological foundations of "physiological" idealism and symbolic agnosticism (the theory of symbols), originating from J. P. Müller and H. von Helmholtz and popular, in a modified form, in modern Western philosophy. The theory of symbols, including in its modern variants (the so-called causal theory of perception and the theory of topography) absolutises the sign form of sensual reflection and ignores its image content. Representatives of "physiological" idealism acknowledge a subjective parameter (of sensual modality) in sensation and perception, disregarding the exist-

tence of their objective parameters (intensity, continuity, spatial projection and spatial structure), or consider all characteristics of sensation and perception equally subjective, confusing subjectivity with relativity.

The book shows that to ignore the presence of signs in sensations and perceptions, which leads to a naive realistic premise about the full coincidence of a sensual picture of reality with reality itself, means to run to the other extreme. The author discloses the negative role of the theory of symbols and naive realism, which is unable to substantiate methodologically a positive programme of special research into the brain and psychology.

The concept of sensual reflection as a dialectical unity of image content and sign form, put forward by the author in the book, overcomes the two opposing trends in the theory of sensual knowledge and "removes" the metaphysical extremes of the theory of symbols and naive realism.

N. Gubanov interprets the sensual sign as a component of psychic reflection which does not have a cognitive-image similarity with an element or feature of objective reality corresponding to it. The image character of reflection, that is, a correspondence of the structures of the reflection to the original, is determined by the laws of the interaction of the reflecting and reflected objects. The sign form of reflection is connected with the fact that the modalities of the image, by virtue of their ideal character, cannot be similar in substance as the material elements of the original. This is why the modalities of the image are justly regarded by the author as special natural signs of the physical nature of the elements of the original. This conclusion is corroborated by data of the theory of

information, and the physiology and biophysics of analysers.

Along with signs, the author singles out the following image, or analogous, characteristics in sensual reflection: intensity, continuity, spatial projection, and spatial structure which reproduce the corresponding parameters of the reflected reality by definite laws. The dialectics of sensual reflection lies in the fact that out of psychic modalities that are natural signs of the physical nature of the elements of the objects reflected the images of these objects are formed in the process of perception-object activity, which, in turn, reproduce their structure.

The singling out of these characteristics enables N. Gubanov to disclose the basic objective and subjective aspects of sensual reflection. In its essence, the modality of reflection is subjective, all other characteristics are relatively objective. All five characteristics are subjective in form, but objective by their outer reason.

These epistemological conclusions in the book are based on and confirmed by the concrete data on the coding of information in man's nine analysers (visual, audial, gustatory, olfactory, tactile, temperature, kinaesthetic, vestibular, visceral). The author's epistemological interpretation of the parameters and specific features of kinaesthetic, vestibular and visceral sensations, which have not up to now been analysed epistemologically, although they fulfil important functions in knowledge and practical activity, as shown in the book, merits attention.

In Chapter III the author examines the significance of perception-object activity for sensual reflection. He criticises scholars who believe that the object activity serves as the direct bearer of consciousness, including sensual images. Their sole bearers, as demonstrated in the

book, are definite brain neurodynamic systems. The functions of perception-object activity with regard to consciousness and sensual reflection show that it is: 1) a major condition of the historical and individual formation of consciousness; 2) a factor of a purposeful investigation of the surrounding world; 3) a criterion of the truth of knowledge; 4) a guarantee of adequacy of sensual reflection and the spatial correlation of images with the objects reflected. In the view of the author, the general scheme of the stages of sensual reflection is as follows: the interaction of an object with the organs of sense—an image with a low degree of adequacy (a sum total of sensations)—perception-object activity—an image with a high degree of adequacy (perception).

N. Gubanov also showed that the spatial parameters of the ideal, forming mental images, are not accessible to the individual. His own thought seems to him spaceless, as it were.

Basing himself on the data provided by psychology, pathopsychology and neurophysiology, the author proves that sensual images, being the information content of the neurodynamic systems of the brain and localised in it, are psychologically projected to the outside objects perceived. Hence, the sensual images of the objects seem to be placed where these objects themselves are localised, due to which we reflect space. The author regards this specific feature as the law of the spatial projection of sensual images.

The epistemological analysis of pathopsychological phenomena (hallucinations, illusions), and the discrepancy and disintegration of the epistemological unity of images and reality contained in the book shows that this medically-established disintegration reveals a difference between the

image and object, the brain localisation of images and their projection to the surrounding world. This convincingly disproves the basic principle of subjective idealism about the substantial and spacial identity of the image and object, consciousness, and being.

Chapter IV expounds an important premise about the social determination of knowledge as the highest manifestation of the activity of reflection, when it corresponds not only to the specific features of the organism of the learning man and his personality, but also to the requirements, orientation, values and aims of social groups and society as a whole. It describes in detail such forms of the activity of sensual reflection as the purposeful selectivity of reflection, the functioning of perceptive orientation and the categorisation of perceptions. Three levels of the determination of the selectivity of reflection are singled out: structural-genetic, adaptive-physiological and socio-personal. The author notes that the strength of perceptive orientation depends on the expected probability of the phenomenon and the requirements and value of the subject. Inasmuch as they are formed in concrete social conditions, the influence of the requirements of the subject on his perception through the elaboration of definite perceptive orientations is one of the forms of the social conditionality of sensual reflection.

Further, the author shows that on the whole the adequacy of sensual reflection is determined by three basic conditions: 1) the adequacy of current sensor information; 2) the adequacy of the set of perceptive categories in possession of the subject; 3) the adequacy of the activity of reflection expressed in the perceptive orientations and expectations which ensure the inclusion of the

necessary categories in the process of the perception of the corresponding objects. The violation of any one of these conditions gives rise to illusions.

The perceptive categories used by the subject for the identification of sensually perceived objects are formed under a definite influence of socio-cultural factors on man. This is why the categorisation of sensations and perceptions can be regarded as one of the forms of the social conditionality of sensual reflection.

The use of the wealth of material provided by research enabled the author to reveal the epistemological status of the principal, including the

little studied, phenomena of sensual reflection.

He concludes his work by dwelling briefly on the prospects of a further expansion of the possibilities of sensual reflection. He singles out among them the use and perfection of special devices (measuring instruments, amplifiers, converters and analysers), and the creation of models of biological analysers.

The book is well-reasoned and clear and is distinguished by the firm stance taken by the author on all questions, including controversial ones.

I. Aleshin, A. Asarov,
E. Kukushkina

E. A. ЛУКАШЕВА. *Право, Мораль, Личность*. М., изд-во «Наука», 1986, 264 с.

E. A. LUKASHEVA, *Law, Morality, and the Individual*, Moscow, Nauka Publishers, 1986, 264 pp.

The author examines the main aspects of the subject on the basis of the latest achievements of law, ethics, social psychology, philosophy, ethnography and other related sciences. The work poses and substantiates new ideas, premises, hypotheses and approaches to analysing law and morality. The author's judgements about the role and place of these phenomena in the social structure, the correlation between the spheres of their regulating and ideological influence, common and specific features, and the subordination of the categories they use, merit attention. The author reveals and thoroughly defines the profound development processes at work in the law and morality and their economic, social, class and other roots. One of the initial premises of the book is the

indissoluble connection between social standards and social relations.

The author regards standards as a universal feature of social being. Hence, her conclusion that objective standards are formed in real life as stable social connections; these standards are more or less adequately realised and expressed in systems of rules and regulations. This is why there are two systems of standards—objective and subjective. The latter should be maximally approximated to objective standards and adequately reflect them.

The correlation of the objective and the subjective in social standards should be interpreted, in our view, in the following way: the objective consists of the economic and socio-political conditionality of standards, whereas their formation and development processes are presented in the form of subjective activity.

The author presents an interesting argument for the inclusion of standards in culture, for they are a result of cultural creative work and at the same time a means of the organisation of man's cultural activity. In this

context the historical process of the emergence of standards (in the form of monostandards), their differentiation and development can be traced. Society's socio-cultural progress was also the progress of its standard forms, and it was inevitably accompanied by an expansion of the freedom of the individual.

The demarcation of the spheres of the action of law and morality is rather difficult but very important. For there is no sphere where only one type of social standards would exist. Both law and morality, the author notes, "do not have specific objectively or spatially isolated spheres of social relations; they act in one and the same sphere of social connections. Hence, the community of and the close interaction between the standards of law and morality". And this is quite correct. Only it is a pity that the author hasn't been more precise in posing the problem and defining the range of relations regulated predominantly by law and subject, above all, to moral influence.

In the questions of the legal and moral systems the author proceeds from the fact that they are complex institutions uniting such elements as social relations, social consciousness and standards. The latter are inherent in political, legal, moral and aesthetic consciousness, for human activity and behaviour are impossible beyond the regulating role of consciousness. Standard is a fusion of social relations and consciousness, it penetrates them, functioning as a social regulator.

The book thoroughly discusses the problem of the freedom of will as a major link in the individual's interaction with social relations in which he is involved, and man's responsibility for his decisions and actions. Standard is characterised not only as a measure of freedom, but also as a

measure of responsibility. At the same time it is difficult to agree with the view that all conscious actions and acts of will, including breaches of the law and immoral actions, are performed as a result of free decision. If this were the case, then the assertions about the objective need to cognise the freedom of will and the determined character of human behaviour remain unfounded. The author may fairly be criticised for the exaggerated emphasis she places on the role of law as a formal determinant of freedom, neutral with respect to the inner motivation of human behaviour. This thesis, that could well be applied to the law of an exploiter society, becomes invalid as far as socialist law is concerned, for which the inner motives of behaviour have no little significance.

The correlation of law and morality is examined in the book at the level of their main categories, methods of guaranteeing, and value characteristics. The author comes to the conclusion that law and morality should not be "ranked", and there should be no talk of the priority of one form of regulation over the other. Morality is invariably connected with all stages of the formation and social action of the law. In socialist society the interaction of law and morality is much stronger, and moral progress, whose main criterion is the humanisation of social relations, exerts a profound influence on all legal matters.

Giving an axiological characteristic of the law of the entire people, the author sees its moral value, firstly, in the degree of the realisation of ethical ideas and principles in the essence of law and the process of its realisation; and secondly, in the effectiveness of the influence of law on improving the moral and psychological climate of society.

"The transfer of legal rights and responsibilities to the personal sphere and their adoption is a major form of the socialisation of the individual," the author of the book declares. Revealing the mechanism of such transfer, she dwells on the requirements, interests, aims, motives and value orientations of people. The main principle of the relations between the socialist state and the individual is interpreted as a system of their mutual responsibility, and particularly, the responsibility of the state for a correct reflection of social and personal interests in the decisions adopted, and as the social responsibility of the individual. The idea of the inevitability of the responsibility of the officials who issue illegal acts is emphasised.

Much attention is devoted to the non-antagonistic contradictions between law and morality. Their causes lie not only in survival phenomena, but also in shortcomings of work and violations of the principles of social justice. The consciousness of the individual is an arena of the struggle between the positive and the negative, and this is why the formation of the individual should not be regarded as a gradual augmentation of positive qualities free of all conflicts.

The book deals with a wide range of questions and is written at a high scientific and theoretical level. It certainly merits praise.

Academician

M. Baimakhanov,

Kazakh Academy of Sciences

Литературное наследство. т. 96. «Герцен и Запад». Отв. ред. С. А. Макашин, Л. Р. Ланский. М., изд-во «Наука», 1985, 744 с.

Literary Heritage Series, Vol. 96. Herzen and the West, ed. by S. A. Makashin and L. R. Lansky, Moscow, Nauka Publishers, 1985, 744 pp.

The 96th volume of the Herzen-Ogarev series of "Literary Heritage"—the seventh (vols. 39-40, 41-42—1941; vols. 61, 62, 63, 64—1953-1958), is one of the most informative. The preceding volumes were based on materials from Soviet archives, as well as two very valuable archive collections called the "Prague" and the "Sofia" collections. They were presented to our country after the last war by the governments of Czechoslovakia and

Bulgaria. The volume under review contains materials from another three Herzen collections abroad: in Amsterdam, Geneva and Paris. These materials have been found by associates of "Literary Heritage" and Soviet archives: the Manuscript Department of the State Lenin Library, the Manuscript and Rare Book Department of the State Saltykov-Shchedrin Library, the Central Archives of the October Revolution and Socialist Construction, and the Central State Archives of Literature and the Arts, as well as foreign scholars specialising in studying Herzen and his works.

The volume contains not only hitherto unpublished materials but also works of a general character. The book opens with A. Volodin's article "Herzen and the West. Ideological Work of the Russian Thinker and the Socio-Political Experience of Western Europe". It thoroughly analyses the complex

dynamics of Herzen's world outlook in its fundamental aspects, above all, in the comprehension of the tragic experience of the European revolutions of 1848. Noting Herzen's errors—he was an idealist in his interpretation of history—the author draws attention to the correct aspects of his comprehension of the sociopolitical essence of Western Europe in the mid-19th century. He writes that Herzen's qualification of the capitalist system as a civilisation of the minority was really quite modern, as was his definition of the mode of life of bourgeois society as Philistine, as dangerous for the proletariat which could fall victim to the spirit of Philistinism.

The article vividly describes Herzen's hatred for revolutionary demagogues, adventurers and political extremists. Herzen maintained that the future social upheaval should not so much destroy the old, as create new forms of social life. The author cites Herzen's call for the preservation of the cultural values of the past.

The author examines the various aspects of Herzen's world outlook in their interconnection and at the same time the specific features of each of them. He justifiably singles out the problem of a "peaceful path of revolution" as a special one, and correlates Herzen's ideas with the statements of Marx and Engels to the effect that it was desirable to abolish the exploiter system and the private ownership of the means of production by peaceful means. It is another matter that a crucial problem of revolutionary theory, that of a peaceful road to socialism, was applied by Herzen to a concrete period of Russian history and was thereby closely connected with the liberals' hopes for the reforms of the Emperor Alexander I.

The article describes Herzen's contacts with radical figures of the West and the fruitful character of these contacts for both sides. As fruitful, indeed, as the arguments of Chernyshevsky and his Western colleagues on the further development of Russia and the West were.

The volume contains Herzen's correspondence with foreign democrats, each section of which is preceded by a review article: one by Monica Partridge (Nottingham)—"Herzen and England"; another by Z. Smirnova—"Herzen and Germany"; a third by M. Kovalskaya—"Herzen and Italy"; and one by L. Lansky—"Herzen and France". Most significant, both in volume and content, is Herzen's correspondence with Karl Vogt (36 letters by Vogt and two by Herzen) and with Pierre J. Proudhon (seven letters by Herzen and one by Proudhon).

Regrettably, there is no chapter on "Herzen and Poland". Although, by way of compensation, there is an article by E. Rudnitskaya—"Herzen, Ogarev, Bakunin, and the Polish Uprising of 1863". It describes, among other things, how the leaders of Russian émigrés proposed to organise revolutionary seats not only in Poland, but also in Central Russia, Finland, and the Baltic provinces (that was why Herzen persistently tried to restrain Polish revolutionaries; he rightly believed that only a genuinely popular uprising against tsarism could be victorious).

The new materials received from the Swedish Royal Library broaden and define our ideas about Herzen's, Ogarev's and Bakunin's contacts with Swedish and Finnish democrats, and about their ideological orientations.

An article by S. Zhitomirskaya and N. Pirumova—"Ogarev, Bakunin and N. Herzen—A. Herzen's Daughter—in 'Nechayev's Affair'

(1870)" throws new light on Natalia Herzen's participation in the revolutionary movement. It turns out that she was a liaison link between secret addresses, fulfilling secretarial and messenger duties; she helped publish the newspaper *Kolokol* (Bell) resumed after Herzen's death in the spring of 1870. Natalia Herzen's diaries of 1870 published for the first time reveal the noble traits of her character and insight. Ogarev and Bakunin, who were yearning for revolutionary action in Russia were so charmed by the energetic and vociferous Nechayev that they were unable at first to discern his "Jesuit" nature: the conscious use of the most immoral and inhuman means allegedly for the sake of reaching lofty aims (blackmail, theft of documents from comrades, murder of a "doubtful" person). Nechayev's actions were later condemned by representatives of the progressive world public, Ogarev and Bakunin broke off relations with him; but Natalia Herzen was the first person to become suspicious of Nechayev's ideas and actions and then resolutely rejected and denounced them.

A detailed article by S. Zhitomirskaya entitled "The Fate of Herzen's and Ogarev's Archives" traces the history of the archive documents of the two families to the present. The article serves as a guide showing in what directions a search for valuable materials should be conducted.

The last chapter of the volume—"Information and Chronicle"—contains an article by V. Smirnova—"Some Sources of Herzen's Information on K. Marx and F. Engels

(1850-1851)". The article reveals the sources of Herzen's knowledge about Marxism in the dramatic period following the 1848 revolution (pamphlets and articles by the German political figures: Sebastian Seiler, a member of the Union of Communists; the petty-bourgeois socialist Moses Hess; and the democrat Ludwig Simon). These authors, despite their imprecise and sometimes confused views, cited and reviewed Marx's and Engels' works. Smirnova proved that Herzen had read these authors' works and thus could find the views of the classics of Marxism that were close to his (above all, their merciless criticism of petty-bourgeois political radicalism in France and Germany). Later, Marx's and Engels' works would influence Herzen's attitude to the European proletariat and the formation of his philosophical concept of history, although that influence should not be exaggerated.

The volume contains well-substantiated commentaries.

Mention should also be made of the high quality of printing and the abundance of valuable illustrations (about 150).

The 96th volume of "Literary Heritage" adds not only new documents and facts, but also new interpretations to our ideas about Herzen and his circle. The activities of Herzen and his friends now look still more significant and complex than we imagined. And the main thing is that they—both practically and theoretically—seem incredibly topical and modern.

B. Egorov

Д. Л. СПИВАК. *Лингвистика измененных состояний сознания*. Л., изд-во «Наука», 1986, 92 с.

D. L. SPIVAK, *The Linguistics of Changed States of Consciousness*, Leningrad, Nauka Publishers, 1986, 92 pp.

The Foreword to Spivak's book is by Academician G. Stepanov and Professor R. Piotrovsky. In it they emphasize the significance of the linguistics of the changed states of consciousness and its place in the context of the development of humanitarian knowledge at the end of the 20th century. In his introduction to the book, Corresponding Member of the USSR Academy of Medical Sciences V. Medvedev stresses its significance for applied physiology, especially in the matter of making judgements about transformations of consciousness on the basis of peculiar features of speech. This shows that Spivak's work has a broad character and can also be applied to psychology and linguistics.

The success of any of the humanities is ultimately determined by the possibility of the practical use of its results for obtaining a more profound knowledge of man. The book under review shows how, on the one hand, linguistic data can be used in treating disturbances of consciousness, and on the other, how much a study can benefit linguistics itself. The outstanding Soviet psychologist A. Luria once said that for a linguistic (and psychological) hypothesis to become a fact it must pass clinical tests. Indeed, pathology renders observable many phenomena and processes normally passing automatically, in a hidden form.

The material used by Spivak in his book is largely new for linguists. If

investigations on the material of aphasias, psychopathology, and defectology have become quite commonplace, a linguistic analysis of speech in cases of changed conditions of consciousness is quite absent, even in special psycholinguistic publications. Meanwhile, as the author rightly notes, the study of changed conditions of consciousness has recently become a priority trend in research on thinking.

The choice of an integral methodological foundation is very important for the work undertaken by Spivak. It is the premise about normal psychic activity as a continuum of conditions replacing one another, depending on the impacts of the surrounding medium. Proceeding from this premise, a changed condition of consciousness can be regarded as a method of adaptation to extreme external conditions. If one is to consider "linguistic thinking" or "linguistic consciousness" part of thinking (consciousness), then the premise about the drawing of "linguistic thinking" into the medium of a changed consciousness would seem quite justifiable and sound.

The author claims to have created a new borderline trend, for which a subject-matter of its own is singled out and a specific method of investigation is elaborated. These ideas seem well substantiated: indeed, the laws of speech which can be observed in the course of the adaptation of consciousness to the unusual conditions of existence form a special subject for scientific description and should be studied within a special subject sphere.

Spivak's investigations have been conducted with the help of a system of methods which comprised a linguistic test. That test was constructed in a way that provides it with an

opportunity to obtain different products of speech. In turn, these products, processed, classified and thoroughly analysed, enable the researcher to arrive at significant conclusions. For instance, those about the existence and interaction of the multilayer structures of a language and the interaction of languages of a different type in bilingualism. It should be noted that the latter circumstance directly depends on the type of bilingualism and the level of knowledge of the second (non-native) language. Although the posing of the problem and the conclusions made by comparing Russian and Georgian material are quite interesting, this experiment can hardly be considered fully reliable. Obviously, continued investigations on the materials of bilingualism are bound to produce important data on the profound laws and inner mechanisms of the interaction of language systems in bilingualism.

The book's premises about the structure of the ability to learn a language are quite interesting and important practically. Although the concept of the ability is used without a definition, it becomes clear from the context that the author regards this ability as a system constructed and functioning "layer after layer". This premise corresponds to the view expressed in Soviet psycholinguistics, according to which the ability to learn a language as a hierarchically organised multilevel functional sys-

tem (see, for example: *Psycholinguistic Problems of Semantics*, Moscow, 1983). The functioning of that system and the interaction of its levels can be ascertained with the help of an analysis of the material of pathology, particularly in changed conditions of consciousness. The author's arguments about the social conditionality of the adaptation of consciousness are interesting and useful from the sociolinguistic standpoint.

Spivak's book poses important questions, and, to a certain extent, answers them: for one, how the functioning of different "levels" of linguistic ability is ensured, and how the tongue works when the mechanism disintegrates. It can evidently be assumed that the disintegration of the system begins at the higher "levels", however, violations of the functioning of these levels do not exclude the possibility of the functioning of the lower ones. An analysis of the functional specific features of the "remnants" of the system in changed conditions of consciousness could become a promising trend of research. Of no less importance may be an analysis of the operational structure of the speech activities characteristic of the conditions investigated. Undoubtedly, this book, small in volume, but rich in content, will prove very useful for a broad range of scientists.

A. Shakhnarovich

Ю. А. ПЕТРОВ. *Методологические проблемы теоретического познания*. М., Изд-во Московского университета, 1986, 174 с.

Yu. A. PETROV, *Methodological Problems of Theoretical Knowledge*, Moscow, Moscow University Press, 1986, 174 pp.

There is an abundance of literature on the problems of theoretical knowledge. Yet, the author of the monograph under review has chosen an original approach to tackling the methodological problems of abstract theories forming a specific field of scientific knowledge. It should be noted that in dealing with methodological problems, Yu. Petrov applies a thorough analysis of many aspects of the phenomena he investigates, using, for one, epistemological, logical, semiotic and metatheoretical approaches in their unity, the former playing the predominant role. This, in our view, is quite justified by the specific nature of the questions tackled by the author. For example, the problem of the correlation of theories in the process of their development has long been posed, particularly the correlation of logic, mathematics and natural science. The book shows that some scientists consider these problems in a one-sided manner, for example, only through a logical or semiotic approach. Such a variety of approaches is perfectly permissible. However, the author maintains, one should not abandon an epistemological approach when solving methodological problems, nor disregard its leading role. It is precisely this shortcoming that distinguishes theoretical knowledge in the Western methodology of science, including, for example, the problem of the correlation of theories.

The author believes that without

an epistemological analysis one cannot apply a correct logical, semiotic or any other type of analysis of scientific knowledge. Without a preliminary epistemological analysis of theories it is impossible to establish the logical relations of contradiction between them, the relationship of the particular to the general, etc., or answer the question as to the possibility of the very existence of logical relations. And without that it is not possible to pose correctly the question of the nature of these relations. For they may not exist at all. We view as useful the idea that an epistemological analysis should serve as the point of departure in investigating methodological problems.

Using the method of preliminary epistemological analysis, the author tackles the problems posed in the book, the most essential being those of the foundations, substantiation and correlation of abstract sciences. Let's try to characterise some of these solutions.

In answering the very first question as to what theoretical knowledge is the author uses an epistemological approach. It is a known fact that scientists and scholars choose the most diverse grounds for dividing sciences into theoretical and empirical. For instance, the foundation of the direct observability of an object studied by one or another science is well known. In the author's view, other things are essential for methodological problems, namely, what epistemological simplifications, approximations and idealisations were used to depict the object as something important for solving the task set. Particularly, it is essential for solving the said problems to have abstract theories reflect the real state of affairs, directly formulating laws applied not to empirical, but to theoretical (abstract) objects. It is only by dividing sciences into ab-

stract theoretical and empirical that we can discover the methodological specificity of each of them, concerning the methods of the construction and substantiation of theories, the formulation of concepts, the evaluation of the truth of judgements, etc.

The author finds a rather important specific feature of abstractions used in theoretical knowledge, which is usually overlooked. It is that in contrast to abstractions of empirical sciences, those of theoretical sciences not only single out an object, but also present it only within the framework of its specific features which are given in its definition. The latter is of great epistemological significance, for it serves the purpose of singling out the essence of the objects under investigation in their "pure" form and makes it possible to use that essence without hindrance and in isolation from everything unnecessary for solving the task set. All this creates conditions for a precise formulation of scientific laws (Chapter I) and for the mathematicalisation of sciences.

Chapter II formulates the most general epistemological foundations of abstract sciences: the principle of accepting epistemological prerequisites; the principle of the relativity of semantic truth, etc. These principles are specific manifestations of the principles of the general theory of knowledge in abstract sciences. On their basis the author criticises the concept which negates the applicability of the notion of truth in abstract sciences, including mathematics. He also demonstrates the essential differences between epistemological problems of abstract theories and similar problems of empirical theories, which is especially important for a methodological approach to the truth of existential judgements and a definition of the role of practice as a criterion of the truth of

abstract theories. Moreover, the author shows the necessity of a metatheoretical study of abstract sciences in solving the problem of their epistemological and semiotic substantiation—something which is not necessary for empirical sciences. In general, the disclosure of the interconnection of the epistemology and methodology of abstract sciences is a comparatively new and topical problem, which is thoroughly dealt with in the book under review.

Chapter III discusses the foundations (their own, logical and epistemological) of abstract sciences which are essential for their construction and substantiation. It shows not only their specificity, but, what is more important, the interconnection of all foundations, the leading role being played by epistemological foundations; the significance of this interconnection for solving the methodological problems of abstract theories of various semiotic types.

Chapter IV offers the reader a rather original solution of the problem of the interconnection of abstract sciences in the process of their development and the problem of the continuity of these sciences. To show the specific character of the solution offered, the author at first gives the reader an idea of the existing concepts of the interconnection of the theories based on the principles of "continuity", "correspondence" and "permanence". However, in the author's view, the main task is not to show just the fact of a manifestation of these principles in the interconnection of theories in their development process, but to formulate "the specific principles of the interconnection of theories, which would make it possible to provide an answer to the question as to what conditions the new theory should comply with regarding the old one, and how the fulfilment of these

conditions could be effectively checked". To do this it is necessary: 1) to reveal the aspect of the development of theory; 2) to establish the interconnection of theories in this aspect; 3) to ascertain the laws governing that interconnection. In particular, the author examines the interconnections of abstract theories in such aspects as the applied semiotic broadening of theory, the deductive, the explicative, and others. For each of them the specificity of the interconnection of theory and the principles to which these interconnections are subordinated is ascertained.

Examining the problem of substantiating abstract theories in Chapter V, the author presents his main concept of the essential dependence of substantiating theories on their semiotic specificity. An epistemological analysis is necessary for ascertaining the latter. In turn, this specificity conditions the acceptability of some or other methods of substantiation. Of great importance for abstract theories is the so-called metatheoretical substantiation (that is, one made with the help of the methods of metatheory), which is examined in sufficient detail in conformity with purely formal and formal-essential theories. It is also important that the book shows the significance of the principles of philosophy for establishing the criteria of the semiotic substantiation of abstract theories. In other words, to answer the question as to whether a definite theory satisfies, or does not satisfy, some criterion of semiotic substantiation is

a philosophical problem, which the methodology of science is unable to solve. Here, a preliminary epistemological investigation is necessary.

The Sixth and concluding chapter discusses the interesting question of the selection of an essential aspect in comparing abstract theories. As an example, a comparison between logic and mathematics is chosen. This is a pertinent problem, for quite frequently a comparison between theories is made on the basis of a rather subjective choice of its substantiation, without taking into account the essence of the theories of one or another semiotic types and the essence of the task for which this comparison is made. The author shows that when theories as a whole are compared, it is impossible to disregard the epistemological aspect, for theories of all semiotic types have to reflect reality. This is true even of purely formal theories which do not directly reflect reality. The author rightly explains the failings of logicians and formalists in solving the problem of the correlation of mathematics and logic precisely by their ignoring an epistemological analysis and their comparing on an epistemological basis.

Yu. Petrov's book gives the reader interested in the philosophical problems of scientific knowledge an idea of the interconnection of epistemological knowledge and also of that between epistemology and the methodology of science on the example of abstract sciences.

I. Verstin,
V. Fedotov



BIBLIOGRAPHY

NEW BOOKS ON PHILOSOPHY

From the Editors: Below is a list of major works on philosophy published during the 1983-1987 period. The list has been compiled by L. Polyakov, associate of the Institute of Philosophy of the USSR Academy of Sciences.

L. M. Arkhangelsky, *Marxist Ethics, The Subject-Matter, Structure, and Main Trends*, Moscow, Mysl Publishers, 1985, 239 pp.

The book analyses ethics as a special discipline in the system of Marxist philosophy. The task of ethics, according to the author, is to study the social essence of morality, to identify its structure and correlate it with practice. The author discusses aspects of psychological and sociological problems within ethical theory and also the levels of standard and applied ethics. Such an approach makes it possible to interpret moral practice as the interrelation between society and the individual.

E. M. Babosov, *K. Marx's Theory of Man and Real Socialism*, Minsk, Nauka i tekhnika Publishers, 1983, 110 pp.

The author writes that Marx showed that the world of man was a historical and social reality. By changing it man changes himself and overcomes alienation. Developing Marxism further, Lenin posed the problem of man in a socio-class context and gave examples of a socio-typical analysis of the individual.

A. S. Bogomolov, T. I. Oizerman, *The Foundations of the Theory of His-*

torico-Philosophical Process, Moscow, Nauka Publishers, 1983, 286 pp.

This monograph examines the methodological principles of historico-philosophical science. The basic principle among them is that of comprehending philosophy as a general theoretical world outlook placed between myth and science in the course of its development. The Marxist historico-philosophical concept is based, as noted in the book, on the interpretation of philosophy as a developing science. The historico-philosophical process is a process transforming philosophy into a science, and its development into a scientific philosophical world outlook.

G. A. Brutyan, *Argumentation*, Erevan, The Armenian Academy of Sciences Press, 1984, 105 pp.

The book examines the nature of argumentation and its forms, as well as its philosophical, logical and rhetorical aspects. In the author's view, argumentation is a unity of proof and conviction. It is based on logical correctness, while rhetoric is not simply a form, but a specific method of thinking oriented to the audience. A synthesis of these two aspects enriches philosophical ar-

gumentation as such, and makes it more persuasive.

N. Z. Chavchavadze, *Culture and Values*, Tbilisi, Metsniereba Publishers, 1984, 171 pp.

The book examines the interconnection of the philosophy of culture and Marxist axiology. The author notes that Marx's premise about the dual character of labour makes it possible to single out objective and subjective aspects of culture, and show that the structure of culture is oriented to the world of values which are divided into the value-means and value-aims, and the culture itself is man's attitude to nature and society based on values. He shows further that the historical character of culture includes the aspect of interruption and continuity that the genuine criterion of its development is freedom. The education of a harmoniously developed man is only possible in a harmonious culture.

P. N. Fedoseyev, *Philosophy and Scientific Knowledge*, Moscow, Nauka Publishers, 1983, 464 pp.

This monograph examines the interaction of philosophy with world outlook, natural scientific and social knowledge. It shows how world outlook evolved from mythology and religion, through various forms of philosophy, to a genuinely scientific and humanistic stand. The dialectico-materialist world outlook, the author maintains, is the foundation and methodological basis of natural and social sciences and plays a major role in the process of perfecting socialism, exerting a tangible influence on the economic, socio-political and cultural spheres of Soviet society.

I. T. Frolov, *On the Meaning of Life, on the Death and Immortality of Man*, Moscow, Znaniye Publishers, 1985, 62 pp.

The author notes that neither religion nor idealistic philosophy can give convincing answers to the fundamental questions of human life. In his view, answers could be given by Marxism, which united science with materialist philosophy and became real humanism. However, one should not believe that the "eternal" questions of man's life have already been solved by Marxism. Marxist humanism, being a class phenomenon, is open to human values common to all, and particularly to the experience of ethical-philosophical ideas and deliberations about the meaning of life and the life and death of man, which has been accumulated in the Russian cultural tradition (A. Radishchev, F. Dostoyevsky, L. Tolstoy, N. Fedorov).

I. T. Frolov, *The Prospects of Man. Comprehensive Approach to the Problem, Discussions, Generalisations*, Moscow, Politizdat Publishers, 1983, 350 pp.

The author shows that the examination of the present position of man and his prospects should view him in various global processes, such as the scientific and technological revolution, the threat of ecological catastrophe, the growth of the population, and the struggle for the survival of humanity in the nuclear age. An adequate comprehension of the situation of man, the author says, is impossible without analysing his relations with science (especially biology), the arts and morality. The determination of his prospects is inseparable from the allround progress of humanity embracing both the sphere of material life and the sphere of science, the arts and morality.

B. T. Grigoryan, *Man. His Place and Calling in the Modern World*, Moscow, Mysl Publishers, 1986, 224 pp.

The author examines the moral and social responsibility of man and his role in solving the principal task of our times—the establishment of peace and universal security. The concept of man used in the book presupposes not only the image of man as a generic being, but also such subjects of history as social classes, political parties, peoples and humanity. The problem of man is analysed in the context of an argument as to which of the two social systems creates more favourable opportunities for the development of man's inner potential.

L. F. Ilyichev, *Historical Materialism. Problems of Methodology*, Moscow, Nauka Publishers, 1983, 255 pp.

The monograph discusses a range of problems connected with determining the role and place of historical materialism in the system of Marxist-Leninist social sciences, as well as the methodological problems of historical materialism. The key category of the latter, the author emphasises, is the "socio-economic structure", which should be broadly interpreted not only as a theoretico-conceptual model, but, above all, as a social organism.

Z. M. Kakabadze, *The Problem of Human Life*, Tbilisi, Metsniereba Publishers, 1985, 309 pp.

The book is a posthumous publication of the three most noteworthy works by this well-known Soviet philosopher. The first—"The Problem of 'Existential Crisis' and the Transcendental Philosophy of Edmund Husserl"—examines the phenomenological theory of Husserl as an attempt to overcome the European "existential crisis" caused by the domination of the naturalistic-positivist world outlook. The work "Man as a Philosophical Problem" maintains that freedom is the fundamental characteristic of human life.

In the concluding essay, "The Determination of Man's Being", the notion is advanced that the specific determination of human life comprises the influence on it of a more perfect, and ultimately absolute ideal of being.

B. M. Kedrov, *On the Method of Exposition of Dialectics. Three Great Conceptions*, Moscow, Nauka Publishers, 1983, 478 pp.

The book is devoted to an analysis of the dialectic method of moving from the abstract to the concrete in its application to the exposition of dialectics as such. The first conception of such an exposition belongs to Karl Marx, who realised it not in any specific philosophical work, but in his works on political economy. The second conception belongs to Frederick Engels, who set himself the task of revising, on a materialist basis, Hegel's *Philosophy of Nature*, in an attempt to create an integral theory of the dialectics of nature and society. Lenin also thought of writing a special philosophical work on dialectics. Individual ideas of his plan were realised in his works of the 1914-1921 period.

L. N. Kogan, *The Aim and Meaning of Man's Life*, Moscow, Mysl Publishers, 1984, 252 pp.

The monograph attempts to construct a socio-cultural theory of personality understood as an individual expression of the social qualities of man, and the individual form of the being of social relations and the measure of man's social essence. The purport of man's life, the author writes, is a subjective formation, embodying the dialectics of the social and the individual.

N. I. Lapin, *The Young Marx*, Moscow, Politizdat Publishers, 3rd edition, enlarged in 1986, 479 pp.

The book studies the ideological and political evolution of the young

Marx and the formation of his integral scientific world outlook. A landmark in that evolution was his transition from idealism and revolutionary democratism to materialism and scientific communism. Marxism is described in the interconnection and unity of its philosophical, economic and political components. This interconnection can be traced in the formation of the world outlook of Marx himself, which makes it possible to oppose "young" Marx to "mature" Marx and to completely identify them.

P. P. Lyamtsev, *The Moulding of Man as an Individual. The Socio-Philosophical Aspect*, Leningrad University Press, 1984, 119 pp.

The author writes that the general sociological category of "moulding" reflects the process of the development of the individual in a historical and formative context, and also with regard to a concrete generation. Socialisation as a category of social psychology describes only the social factors of the moulding of the individual. The pedagogical category of "education" reflects the purposeful influence of society on the individual. The advancement of humanity along the road of communist civilisation depends on the successful solution to the task of the moulding of a harmoniously developed individual.

V. A. Malakhov, *Culture and Human Integrity*, Kiev, Naukova Dumka Publishers, 1984, 119 pp.

The monograph examines culture in many aspects, singling out the axiological aspect, which makes it possible to dwell on the "man and culture" problem. The activity of man in the sphere of culture is embodied, in the author's view, in a hierarchy of values, the highest of which is man himself. His integrity is a necessary specific feature and ideal (aim) of historical development.

M. K. Mamardashvili, *The Classical and Non-Classical Ideals of Rationality*, Tbilisi, Metsniereba Publishers, 1984, 81 pp.

To distinguish between two types or ideals of rationality, the author notes, is inevitable in comparing the classical "ontology of intellect" (typical of European philosophy and scientific tradition which had exhausted themselves by the turn of the century) with its non-classical versions which emerged in philosophical practice in the 20th century. The main problem for the non-classical ideal of rationality is the inclusion of conscious and vital phenomena in a scientific picture of the world. Consciousness itself, in the author's view, is radically revised in connection with the fact that it is impossible to observe it. The multidimensional character of the phenomenon of consciousness can be described with the help of the concepts "system", "condition", and "systems effect".

Marxist-Leninist Concept of the Global Problems of Our Epoch, Moscow, Nauka Publishers, 1985, 446 pp.

The book examines the specific features of the socio-economic development of the modern world, and the prospects facing man in the conditions of the aggravation of global problems. The task of the book is to outline the Marxist-Leninist concept of global problems on the threshold of the 3rd millennium.

The Marxist-Leninist Theory of Historical Process. Historical Process: Integrity, Unity and Multiformality, Formative Stages, Moscow, Nauka Publishers, 1983, 535 pp.

The book notes that the division of the historical process is based on the singling out of socio-economic formations which are a historical type of concrete society. Formations

are singled out according to the typology of the social modes of production. The authors show that the emerging communist civilisation does away with the private ownership of the means of production, eliminates alienation and all kinds of exploitation of man, and becomes identical with world civilisation.

The Marxist-Leninist Theory of Historical Process. Historical Process: Dialectics of the Modern Epoch, Moscow, Nauka Publishers, 1987, 448 pp.

The work examines such subjects as the dialectics of the modern scientific and technical, and social progress, the social consequences of the scientific and technological revolution under socialism and capitalism, the course of the CPSU aimed at accelerating the socio-economic development of the USSR as a factor of the strengthening of peace and socialism, the global problems, and humanism.

Modern Bourgeois Philosophy of Man. Critical Analysis, Kiev, Naukova Dumka Publishers, 1985, 302 pp.

An analysis of the non-Marxist philosophy of man is based on the methodological foundation of the Marxist concept of man as a social being determined by the development level of the productive forces and social relations. The work examines the interpretation of the problem of man in the context of socio-futurological theories, existentialism, neoconservatism, philosophical anthropology and "Marxology".

A. G. Moskalenko, V. F. Serzhanov, *The Individual as an Object of Philosophical Knowledge. The Philosophical Theory of the Individual and Its Psychological and Biological Foundations*, Novosibirsk, Nauka Publishers, 1984, 319 pp.

The authors show that the pivotal problem of the philosophical theory

of the individual proceeding from ontological, axiological and axiological-praxiological prerequisites is the psychophysical problem, transformed at the present stage into the problem of the correlation between personality and the organism. The principal method of this theory is an introspective-phenomenological description of the individual's inner life in its invariant structures and their physiological interpretation.

N. V. Motroshilova, *Hegel's Way to "The Science of Logic". The Formation of the Systems Principles and Historical Method*, Moscow, Nauka Publishers, 1984, 351 pp.

The monograph studies the development of Hegel's thought from his complete rejection of everything taking a systems form in philosophy and up to a combination of the systems principles and historical method in *The Science of Logic*. The author notes that the Jena period and the time of the creation of *Phenomenology of Mind* in which Hegel ultimately turned to the systems principle, were important stages on that path. The synthesis of systems principles and historical method achieved in *The Science of Logic*, was transferred by Hegel to the spheres of the philosophy of nature and mind.

I. S. Narsky, *Alienation and Labour. Reviewing Works by Karl Marx*, Moscow, Mysl Publishers, 1983, 143 pp.

As shown by the author, the category of "alienation" first began to take shape in Rousseau's and Helvétius' works. Later it was further elaborated by Fichte and Schelling, and fuller still by Hegel. Marx elaborated a qualitatively new approach to the problem. He examined economic alienation as the basis of all types of alienation in bourgeois society. Marx's interpretation opposes the concepts of the "eternity" of aliena-

tion (Th. Adorno and H. Marcuse), the identification of alienation with nihilism (M. Heidegger), and the religious interpretations of alienation (P. Tillich and J.-Y. Calvez).

Philosophy and Culture. The 18th World Congress of Philosophy: Problems, Discussions, Opinions, Moscow, Nauka Publishers, 1987, 335 pp.

The three sections of the collection deal, accordingly, with culture as a factor of socio-historical dynamics; analysis of the latest trends of non-Marxist culturology; culturological aspects of modern Western philosophy. All these sections regard culture in its humanistic mission, and in its interaction with political processes and the scientific and technological revolution. The collection also contains material on the Marxist concept of culture, its influence on the Western theories of cultural progress, and its various interpretations by Western philosophers.

Principles of Materialist Dialectics as the Theory of Knowledge, Moscow, Nauka Publishers, 1984, 304 pp.

The book analyses the principles of unity (identity) of dialectics, logic and the theory of knowledge; monism and systems approach and historical method. In their sum total they constitute the structure of materialist dialectics as a science expressing in a general theoretical form universal development laws. The authors note that there is a contradiction between dialectical and metaphysical methods in modern intellectual culture as a whole and scientific thinking, in particular. This is why it is important to transform dialectics into the conscious logic of scientists' thinking.

The Problems of Peace and Social Progress in Modern Philosophy, Moscow, Politizdat Publishers, 1983, 320 pp.

This comprehensive historico-

theoretical work analyses the structure and character of the modern world from the point of view of integration tendencies, as well as the future prospects of mankind in the context of global problems. It also examines the interaction between modern science and humanism, which should form a single complex ensuring a stable equilibrium in the world. The work dwells on the views of such representatives of world socio-philosophical thought as A. Toynbee, K. Jaspers, K. Popper, Mahatma Gandhi, W. W. Rostow, J. Galbraith, Z. Brzezinski, P. Teilhard de Chardin, B. Russell, and others, on the problem of peace and social progress.

Problems of the Philosophy of Culture. An Attempt at Historico-Materialist Analysis, Moscow, Mysl Publishers, 1984, 325 pp.

The book studies culture as a theoretical problem of social knowledge and a problem of French and German philosophy of the 18th and 19th centuries. The authors note that man's creative activity is accumulated in culture, and that culture is in the process of continuous development, which does not coincide with the development of economic systems.

G. Kh. Shakhnazarov, *Whither Mankind? Critical Essays of Non-Marxist Concepts of the Future*, Moscow, Mysl Publishers, 1985, 192 pp.

The author shows that the liberal-democratic (A. Huxley), right-wing socialist (G. Orwell) and syndicalist (A. Burgess) approaches to of totalitarianism do not take into consideration the principal difference between socialism and capitalism. C. Julien and S. Nearing are more precise in their criticism of capitalism, but in their ideas, too, the alternative to democracy and totalitarianism does not find any solution. A special

trend of modern non-Marxist futurology, the author writes, is formed by various apologetic concepts, according to which the future is represented as some modified capitalism. A new version of the classical religious dogma is presented by J. Schell's Utopia, in which the world saved from nuclear destruction is based on the principles of respect for man, Earth, God and outer space.

V. K. Shanovsky, *The Dialectics of the Essential Strength of Man. A Comprehensive Approach*, Kiev, Vishcha shkola Publishers, 1985, 171 pp.

The book shows that human nature is a dialectical unity of the social and the biological, the generic and the individual, the subjective and the objective. It is noted that this nature is determined by man's social essence which, in turn, is revealed within the framework of such features as abilities, requirements, interests, purpose, and finally human activity realising the essential potential and motive forces of man. The types of activities form the structure of culture.

V. S. Shvyrev, *Scientific Knowledge as an Activity*, Moscow, Politizdat Publishers, 1984, 231 pp.

The author writes that an analysis of scientific knowledge is made at four levels. The first investigates the sum total of procedures for the processing of empirical knowledge about an object; the second—individual concepts of particular sciences; the third—general methodological problems of complexes of scientific disciplines; and the fourth—the highest—the general methodology of science which presents the integral structure of scientific cognitive activity, and its basic types and mechanisms. Of special significance is an approach to science based on the concept of

activity, which makes it possible to overcome differences between methodologism, epistemologism and ontologism.

Social Consciousness and Its Forms, Moscow, Politizdat Publishers, 1986, 367 pp.

This monograph, written by a group of authors, examines such forms of social consciousness as political legal consciousness, morality, art, religion, science and philosophy. In creating an integral picture of the functioning and development of social consciousness, the book maintains, one should not detach consciousness from social being, and social consciousness from individual consciousness, and interpret the connection of consciousness with reality as the rationalisation of the experience of ordinary consciousness. In the authors' view, an adequate methodological approach to social consciousness would be its comprehension as a major and indispensable component of the historical process, a necessary condition of social progress.

Yu. S. Stepanov, *In the Three-Dimensional Space of Language. Semiotic Problems of Linguistics, Philosophy and Art*, Moscow, Nauka Publishers, 1985, 332 pp.

The monograph is devoted to a semiotic study of language in its historical dynamics presented in the form of a change of the three basic "paradigms". Accordingly, it singles out: the semantic paradigm within whose framework the "philosophy of language" is reduced to the "philosophy of noun"; the syntactic paradigm in which the "philosophy of language" is constructed as the "philosophy of predicate"; the pragmatic paradigm which modifies the "philosophy of language" into the "philosophy of egocentric words".

The study is based on an analysis of the West European historico-philosophical process (from Herac- litus to R. Carnap, B. Russell and J. Hintikka), as well as on the mater- ial of Russian and West European literature of the 19th-20th centuries (F. Dostoyevsky, M. Gorky, H. Ibsen, V. Khlebnikov, R. von Musil, and M. Proust).

I. V. Vatin, *Human Subjectivity*. Rostov-on-Don, Rostov University Press, 1984, 197 pp.

The aim of the monograph is to establish how human subjectivity be- comes possible, if the development of society is an objective process. The author shows that social being is human practice, that it does not exist outside the framework of social con- sciousness. Human subjectivity in- cludes the characteristic of human contacts: it gives rise to and reveals various types of subjectivity, and it is a form of introduction to alien subjectivity.

* * *

CONTRIBUTORS TO THIS ISSUE

- P. FEDOSEYEV**, Academician, Vice-President of the USSR Academy of Sciences, Chairman of the Social Sciences Section of the Presidium of the USSR AS. Chairman of the Editorial Council of this journal. Author of many works on the dialectics of contemporary social development, the interaction of the productive forces and relations of production, the role of the masses and the individual in history, on problems of humanism, including the monographs *Communism and Philosophy; Marxism in the 20th Century; Marx, Engels, Lenin and the Present Epoch*.
- A. AGANBEGYAN**, Academician, Academic Secretary of the Department of Economics of the USSR AS, Chairman of the Commission for Studying the Productive Forces and Natural Resources of the Presidium of the USSR AS. Author of many works on management and the STR, including the monographs *Management of Socialist Enterprises; Scientific and Technical Progress and the Acceleration of Socio-Economic Development of the Country*.
- I. FROLOV**, Corr. Mem., USSR AS, President of the USSR Society of Philosophers, Chairman of the Scientific Council on the Comprehensive Problem "Philosophical and Social Problems of Science and Technology". Author of many books including *Genetics and Dialectics; Prospects for Man; Life and Cognition*.
- T. OIZERMAN**, Academician. His main works are devoted to the history of philosophy, the theory of historico-philosophical process, a critique of contemporary bourgeois philosophy and ideology, and include *The Shaping of the Philosophy of Marxism; Problems of Historico-Philosophical Science; Dialectical Materialism and the History of Philosophy* (trilogy).
- V. MSHVENIERADZE**, Corr. Mem., USSR AS, Deputy Director of the Institute of Philosophy, USSR AS. Author of the monographs *Bourgeois Political Consciousness. The Philosophical Aspect; The Philosophy of Neopositivism; Political Reality and Political Consciousness*.
- N. LAPIN**, D. Sc. (Philos.), State Prize Winner in the field of science and technology, Director of the Institute of Philosophy, USSR AS. Author of works on history, philosophy, sociology, including the monographs *The Young Marx; Theory and Practice of Social Planning* (in co-authorship), *Social Planning* (in co-authorship).
- E. VELIKHOV**, Academician, Vice-President of the USSR AS, Academic Secretary of the Department of Informatics, Computer Technology and Automatisa-

tion, Chairman of the Section of the Physico-Technical and Mathematical Sciences of the Presidium of the USSR AS, Chairman of the Committee of Soviet Scientists for Peace and Against Nuclear Threat and of a number of scientific councils. Author of works on plasma physics and on questions of the social importance of science.

V. ZINCHENKO, D. Sc. (Psychol.), Corr. Mem., USSR Academy of Pedagogical Sciences, head of the Ergonomics Chair at the Moscow Institute of Radio-Technology, Electronics and Automation. Specialist in psychological problems of ergonomics and automation. Author of many works in the field, including *Perception and Action; Formation of Visual Image; Foundations of Ergonomics* (in co-authorship).

V. LEKTORSKY, D. Sc. (Philos.), sector head of the Institute of Philosophy, USSR AS. Author of the books *Problems of the Subject and the Object in Classic and Contemporary Bourgeois Philosophy; The Subject, Object and Cognition* and of other works.

L. ABALKIN, Corr. Mem., USSR AS, Director of the Institute of Economics, USSR AS. Specialist in studying general questions of political economy and problems of improving the economic mechanism. Author of a number of works, including *Political Economy and Economic Policy; The Economic Mechanism of Developed Socialist Society; The End Economic Results (Essence, Indices and Ways of Improvement)*.

Z. UDALTSOVA (1918-1987), Corr. Mem., USSR AS. Author of works on the history of the Middle Ages, Byzantine studies, Slavonic studies and Late Antiquity, including the monographs *Italy and Byzantium in the 6th Century; Fifty Years of Soviet Byzantine Studies; The Ideological and Political Struggle in Early Byzantium*.

V. YARTSEVA, Corr. Mem., USSR AS, Chairman of the Scientific Council "The Theory of Soviet Linguistics", Editor-in-Chief of the journal *Proceedings of the USSR Academy of Sciences, the Literature and Language Series*. Author of many works in the field of linguistics, including the monographs *The Grammatical Foundations for Describing Languages; A History of the English Language of the 9th-15th Centuries; Contrastive Linguistics*.

V. SOGRIN, D. Sc. (Hist.), head of the Sector of Foreign Historiography of the Institute of World History, USSR AS; Editor-in-Chief of the "Social Sciences Today" Editorial Board. Author of the monographs *Sources of Contemporary Bourgeois Ideology in the USA; Ideological Trends in the 18th-Century American Revolution; The Founding Fathers. Historical Profiles*.

V. KANTOR, Cand. Sc. (Philos.), department deputy head of the journal *Voprosy filosofii*. Specialist in problems of 19th-century Russian culture. Author of works in this subject, including the monographs *Russian Aesthetics of the 19th Century and the Social Struggle; Dostoyevsky's "The Brothers Karamazov"*, author of the preface and commentary in the book *Russian Aesthetics and Criticism of the 1840s-1850s* and of a number of articles.

D. TUMARKIN, D. Sc. (Hist.), head of a problem group at the Institute of Ethnography, USSR AS. Specialist in the history and ethnography of the peoples of Oceania and in general ethnography. Author of the books *Colonial Invasion of the Land of Eternal Spring; The Hawaiian People and American Colonialists. 1820-1865*; and other works in the field.

S. BLAGOVOLIN, D. Sc. (Econ.), sector head at the Institute of the World Economy and International Relations, USSR AS. Specialist in the field of military-economic and military-political problems. Author of a number

of works, including chapters of the collective monographs *The Arms Race: Causes, Tendencies, Ways of Stopping It; Military-Industrial Complexes of the Imperialist Countries; The US Economic Cycle in the 1970s-Early 1980s*.

A. BUZUYEV, Cand. Sc. (Econ.), senior lecturer of the Political Economy Chair at the Moscow Financial Institute. Expert in questions of international economic relations. Author of many works, including the monographs *International Monopolies: New Aspects of the Struggle for Markets; Transnationals and Militarism*.

M. STEPANYANTS, D. Sc. (Philos.), Head of the Sector of Oriental Philosophy at the Institute of Philosophy, USSR AS. Author of many works, including the monographs *Philosophy and Sociology in Pakistan; Moslem Conceptions in Philosophy and Politics; The Philosophic Aspects of Sufism*.

A. LIVSHITS, Cand. Sc. (Econ.), senior lecturer of the Political Economy Chair at the Moscow Machine-Tool Institute. Specialises in contemporary non-Marxist economic theories. Author of many works on the subject, including the books *Mirages of the Capitalist Regulation; Monetarism: a Concept of Economic Policy; Supply-Side Economics: Theory and Practice*.

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