SOCIAL SCIENCES

- Socialism and International Economic Cooperation
- Culture and Morals
- Some Problems of Research into Ethics
- Mythological Theories of the 20th Century
- The Agrarian Evolution and Class-Formation Processes in India
- Mathematico-Economic Models
- Philosophy of Apostasy

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USSR ACADEMY OF SCIENCES

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Vol. 4,
No. 3(13),
1973

SOCIAL SCIENCES

Published in English, French, Spanish, Bengali and Japanese

Philosophy • History • Economics
Politics • Law • Sociology
Philology • Psychology
Ethnography • Archaeology

A quarterly journal of the Department of the Social Sciences, USSR Academy of Sciences, founded in 1970.

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The journal is published in Bengali under the title Samaj Bijnan *by Bingsha Shatabdi Publishers, Calcutta, India, and in Japanese under the title* Shakai Kagaku *by Naraeiwa Shoji Co., Ltd., Nara, Japan.*

For subscriptions apply to bookshops dealing with
V/O "Mezhdunarodnaya Kniga", Moscow G-200, USSR
(For the list of distributors see p. 255)

"Social Sciences" Editorial Office, **33/12 Arbat, Moscow 121002, USSR**

To the Reader

The world today is the scene of the break-up of the old, customary forms of life. This is seen in the sweeping social changes taking place on our planet, in the ever quickening pace of the scientific and technological revolution.

Characteristic of the present development of social thought is the striving to understand these processes, to elucidate what they spell for humanity as a whole and for the individual. Most of the articles in the present issue reflect this tendency.

ECONOMICS

The course towards expanding international economic cooperation, actively pursued by the CPSU and the Soviet Government, corresponds, as *Academician N. Inozemtsev* underlines in his article, to the interests of the socialist countries and the revolutionary forces of the world, to the interests of world peace and the security of nations.

The expansion of mutually advantageous economic ties by the USSR and other countries of the socialist community with states of a different social system can become an effective means of consolidating the present positive tendencies in international relations and will make for the transition from the cold war to peaceful coexistence and cooperation that has begun acquiring an irreversible character.

PHILOSOPHY

The relationship between morals, culture and science is regarded in present-day social thinking as a very important and topical problem especially since the regularities of this relationship are predicated in many respects on the revolutionary, mobile character of present-day reality, writes *Academician P. Fedoseyev* in his article which opens the selection of materials in this issue treating of ethics and morals.

HISTORY

The successive change of socio-economic formations is a law of the single worldwide historical process discovered by the founders of Marxism. *Academician N. Druzhinin* devotes his article to the specific

features of the genesis of capitalism in Russia compared with the countries of Western Europe and the USA.

PHILOLOGY, SOCIOLOGY, PSYCHOLOGY

Professor E. Meletinsky's article on these subjects discusses the various ideological forms stemming from the primary syncretism of mythological consciousness, the fruitfulness of studying this process and examining their interrelation at various historical stages. The author urges to limit the current panmythological trend so that neither literature, nor human psychology, nor political ideology are dissolved in the concept of myth.

QUESTIONS OF MANAGEMENT

Optimal planning calls for the mathematical modelling of economic processes and the objects participating in these processes. In his article *V. Likhtenstein,* a young scientist, examines some regularities of economico-mathematical models.

DEVELOPING COUNTRIES

The influence of various economic and social factors on the process of class formation in the countryside is examined by *Professor V. Rastyannikov* on the example of India.

IDEOLOGY

The false assessments of present-day reality, the socio-economic myths and reactionary utopias advanced in the interests of the imperialist bourgeoisie cannot be understood without a profound analysis of the current reformist and revisionist concepts. The article by *Professor Kh. Momdjan* critically analyses the ideas of contemporary Right-wing reformism specifically in relation to the works of Roger Garaudy.

The Book Reviews and Bibliography sections are more widely represented in this issue than before. We hope that the increased volume of information material meets the interests of both our foreign colleagues specialising in the social sciences and of the journal's readers who follow the latest developments in Soviet social thinking.

The Editors

Nikolai INOZEMTSEV,
Academician

Socialism and International Economic Cooperation

In April 1973 a plenary meeting of the Central Committee of the Communist Party of the Soviet Union discussed a report by Leonid Brezhnev, General Secretary of the CC CPSU, "The International Activity of the CC CPSU in Implementing the Decisions of the 24th Congress of the Party". Besides foreign policy issues the report and the discussion that followed gave much attention to questions related to the economic integration of the socialist countries and the expansion of the Soviet Union's foreign economic contacts. The Plenary Meeting approved the work being done to promote relations based on the principles of peaceful coexistence with states of a different social system, considering this to be an important condition to furthering and consolidating the positive tendencies in world politics. "The activisation of the USSR's mutually advantageous foreign economic relations with these states, the utilisation of new possibilities on this path will further the consolidation of peace and meets the interests of our people,"[1] states the Plenary Meeting decision.

The course set to expand international economic cooperation, with the Soviet Union taking a more and more active part in it, is dictated by both its political and economic interests. This course fully corresponds to the interests of the other socialist countries and of all revolutionary forces, to the interests of peace and the security of nations. This course organically follows from the basic principles of the Leninist foreign policy, from the basic programme tenets of the Marxist-Leninist theory.

I.

The founders of Marxism-Leninism when investigating the main factors in the development of the productive forces, the objective laws of the replacement of one socio-economic formation by another, more advanced one, paid serious attention to such categories as the international division of labour, the world market, the world economy and world economic relations. In the specialisation of social labour, in its division — both within one or another industry and country and in the relations between countries — Marx and Lenin perceived an objectively existing historical tendency. This tendency reflects the profound internal requirements of the development of the productive forces, their progress; at the same time it is a product of such development.

[1] *Pravda*, April 21, 1973.

Industry, Marx noted, "by means of machinery, chemical processes and other methods... is continually causing changes not only in the technical basis of production, but also in the functions of the labourer, and in the social combinations of the labour-process. At the same time, it thereby also revolutionises the division of labour within society".[2] In his analysis of the anatomy of capitalism Marx showed the close link—direct and inverse—between the development of world capitalist production, which rests on value, and the development of world trade, of the world capitalist market. "The limits of the development of the market," Lenin wrote developing Marx's thought, "...are set by the limits of the specialisation of social labour. But this specialisation, by its very nature, is as infinite as technical developments."[3]

The transition from the capitalism of free competition to monopoly capitalism led to a sharp expansion of foreign economic relations, to intensification of the internationalisation of economic life. Noting that over the centuries throughout the world there was to be observed such basic tendencies as the growth of exchange and the growth of large-scale production, Lenin stressed that at the turn of the century "exchange so internationalised economic relations and capital, and large-scale production assumed such proportions that monopoly began to replace free competition".[4]

This greatly increased the interdependence of industrial activity in every country with the outside sphere, brought with it the rapid growth of commodity exchange between countries. At the same time it engendered such specific phenomena, inherent in imperialism, as the formation (in every country and beyond its confines) of a closely intertwined powerful finance capital, the increased export of capital, the establishment of international monopolies and the expansion of their activity, the stepping up of colonial policy, the division and redivision of spheres of influence by monopoly alliances and all kinds of coalitions of states. All this fully corroborated the Marxist thesis that the character, the main concrete manifestations of the international division of labour depend not only on the development of the productive forces but also on the mode of production, on the social relations that take shape in the process of this production.

A number of important quantitative and qualitative changes in the internationalisation of the economic life of capitalist countries took place after the Second World War—to a considerable degree under the impact of the scientific and technological revolution. Contributing factors were the transition of the main branches of industry to mass and large-scale production and connected with this broad industrial cooperation and international specialisation; the creation of new capital-intensive and science-intensive industries, the enlistment by different countries, on a much bigger scale than before, of foreign scientific and technological experience, material and manpower resources; the formation, as a result of the efforts of a number of countries, of large industrial complexes, etc.

[2] K. Marx, *Capital*, Vol. I, Moscow, 1965, pp. 486-487.
[3] V. I. Lenin, *Collected Works*, Moscow, Vol. 1, p. 100
[4] Ibid., Vol. 22, p. 104.

It is characteristic that the value of world capitalist trade increased by four times in the 20 years between 1951-1970 as against only 1.7 times in the preceding 40 years. The growth of international trade for the said 20 years exceeded the growth of industrial production of the capitalist countries approximately by one and a half times. Also the export of capital rapidly increased: total foreign investments (private and state) increased from $50,000 million in 1945 up to more than $300,000 million in 1972.

A feature of modern imperialism is the widespread processes of economic integration. These processes are developing in private monopoly forms (such as the closest cooperation of a number of US and Canadian, US and West European monopolies) and in state monopoly forms (the most striking example of which is the European Economic Community). The economic integration of capitalist countries reflects a higher stage, compared with all previous ones, in the development of state-monopoly tendencies: the coalescence of monopolies and the state outgrows national bounds and evolves into activity of definite regional groups made up of a number of countries.

The foreign economic sphere of the world capitalist economy will continue to expand also in future. Long-range calculations made by the Institute of World Economy and International Relations, USSR Academy of Sciences, give grounds to assume that the average annual growth rate of the physical volume of international capitalist trade may exceed the growth rate of the gross national product of the capitalist world approximately by 1.6 times, and the export of private capital by 1.8 times (by 1990). As regards the conjectural growth of receipts and payments under international licence agreements these may increase, by 1980, approximately by three times and by 1990, 8-10 times as compared with 1970.

Any forecasting is, naturally, conditional, but what is important is the tendency it shows. Of course, account should be taken of another, opposite, tendency which is endemic in capitalism, namely, the inevitable intensification in the future of factors hampering economic cooperation (aggravation of currency and other upheavals, the bitterness of the trade war, etc.).

II.

The momentous changes caused by the transformation of the Soviet Union into a powerful socialist state, by the expansion of the positions of the world socialist system have radically altered the political picture of our planet. They have brought far-reaching changes in the entire system of international relations—for the first time in its history mankind has received the possibility of setting as a realistic goal the prevention of new world wars. They have led to major changes in the world economy, in the system of the international division of labour.

Whereas in the past the capitalist economy and the capitalist market held complete sway, today this sway has been replaced by the parallel existence, the competition and struggle of two world economies, two world markets—the capitalist and the socialist. And the correlation of forces between them is steadily changing in favour of socialism: its share in world industrial production increased from 10 per cent in 1937 to approximately 20 per cent in 1950, and nearly to 39 per cent in 1972. In volume of industrial output the Soviet Union has surpassed such leading countries of Western Europe as the FRG, Britain, and France, taken together, and has reached more than 75 per cent of the US level.

The two world markets, the two world economies are in certain reciprocal contact, joined by the aggregate of economic ties and forming (together with the developing countries) the system of the contemporary world economy. But each one of them is developing according to its own laws, characteristic of its particular mode of production.

Under socialism the objective tendency towards removing the various barriers, the isolation, hampering social development towards the internationalisation of economic relations, acquires a new impulse. What is more, the character of the practical actions this tendency takes undermines the foundations of world economic relations based on the exploitation of countries and nations by other countries and nations. The economic cooperation of the socialist states fully meets the interests of each one of them—big and small, helps to overcome the differences in the levels of economic development, serves to strengthen the world socialist community as a whole.

The deepening international division of labour within the framework of the socialist community may be said to be the economic base of the principles of proletarian and socialist internationalism by which the Soviet Union and the other socialist states guide themselves in their international policy and in their relations with each other.

This base is steadily growing stronger. The foreign trade turnover of the CMEA countries totalled upwards of 66,000 million rubles in 1972, that of the Soviet Union 26,000 million rubles, the socialist countries accounting for about two-thirds of this turnover. The latter receive from the USSR much of the important raw materials and equipment they need. The Soviet Union for its part imports from the CMEA countries machinery, equipment and other products.

This mutual economic cooperation contributed in no small measure to the fact that between 1966 and 1970 the average annual growth rates of the national income of the CMEA countries were 1.7 times higher than those of the developed capitalist countries.

A logical outcome of this expanding economic cooperation is the process of their economic integration. The Comprehensive Programme for the Further Extension and Improvement of Cooperation and the Development of Socialist Economic Integration of the CMEA Member-Countries, adopted by the 25th CMEA session in 1971, is successfully being implemented.

An important feature of socialist integration, which distinguishes it

radically from capitalist integration, is that it covers the spheres of production, science and technology, in the first place on the basis of cooperation in planning and the coordination of both five-year and long-term economic plans. This makes it possible to concentrate joint efforts on the accelerated development of key industries and projects, to ensure the comprehensive solution of the coordinated problems. The Comprehensive Programme provides for the joint exploitation of natural resources, the building of big chemical plants, paper and pulp mills, and nuclear power stations, for cooperation in the production of electronic computers, programme-controlled machine tools, cars and many other items.

Cooperation in the sphere of planning and the development of material production are closely combined with the balanced development of commodity-money relations, with the expanding cooperation of the CMEA countries in trade, currency-financial and credit relations, with the promotion of direct contacts between the corresponding agencies and organisations of the integrating countries.

Of course, the development of socialist integration, like any new, large-scale and complex process, has its difficulties and problems that need to be solved. The April Plenary Meeting of the CC CPSU focused attention on this. However, the experience of economic cooperation accumulated to date and the tasks envisaged by the Comprehensive Programme speak of the immense possibilities for joint economic activity by the socialist countries, of the broad vistas opened up in this sphere by the system of planned economy.

The strengthening of the socialist community's positions in the world economy is accompanied by expanding cooperation with many of the developing countries of Asia, Africa and Latin America. By the beginning of 1973 the Soviet Union had built in these countries 412 projects of economic, social and cultural importance. These include a major power complex (the Aswan hydropower project), big metallurgical plants (Bhilai in India and in other countries), and gas mains (Iran).

Soviet trade with the developing countries showed an average annual increase of 14.3 per cent between 1961 and 1970. The Soviet Union supplies these countries with a large number of machines and equipment and receives from them (under usual trade operations and in repayment of credits) many consumer goods, food-stuffs and raw materials.

The growing economic cooperation of the developing countries with the Soviet Union and other socialist states is making it possible to put an end to the system of dependence which took shape at the time of undivided imperialist domination, to achieve economic independence.

III.

The division of the world into two different state systems, the emergence and development of the world socialist economy of necessity raised the question of the character of its relations with the

capitalist economy. The leaders of history's first socialist state from the outset favoured the broadest economic contacts with the capitalist world. "In the present historical epoch," read the statement, edited by V. I. Lenin, of the Soviet delegation to the Genoa Conference (April 1922) "which makes possible the parallel existence of the old system and the new socialist system coming into being, economic cooperation between states representing these two systems of property, is imperatively necessary...."[5]

In his works of the immediate post-revolutionary years Lenin repeatedly returned to this question, examined its various aspects—trade relations, the possibility of granting concessions to capitalist countries, the enlistment of their technical assistance.

That was the position of the Soviet Union. The heads of capitalist states took a different stand, however. As a result, many years were needed before the cooperation so strongly favoured by the USSR actually got under way. That this cooperation was mutually advantageous was borne out by the experience of the late 1920s and the early 1930s: the foreign equipment imported by the Soviet Union facilitated accomplishment of the tasks of the first Five-Year Plans and the export of this equipment on a large scale by the capitalist countries concerned enabled them to alleviate for the working people the severe consequences of the world economic crisis of 1929-1933. Our cooperation with the anti-fascist coalition in the Second World War greatly contributed to the defeat of the common enemy, although it is common knowledge that the brunt of the war was borne by the Soviet people and the Soviet Armed Forces.

The cold war years however greatly set back the Soviet Union's economic relations with most of the capitalist countries. But as the economic and technico-scientific potential of the Soviet Union and other socialist states grew, as their home market expanded and their export possibilities multiplied, so did the capitalist countries' interest increase in adjusting and promoting economic relations with us. Another objective factor that prompted this interest has been the exacerbation of inter-imperialist contradictions in recent years, particularly between the three main "power centres" of modern capitalism: the USA, Western Europe and Japan.

Undoubtedly a very important factor in furthering the socialist states' cooperation with capitalist countries has been the relaxation of international tension, the major positive changes achieved in recent years in the Soviet Union's relations with France, Italy and a number of other countries, the fundamental improvement in the relations with the FRG as a result of the signing of a system of treaties guaranteeing the inviolability of European frontiers, and, finally, the normalisation of relations between the Soviet Union—the most powerful socialist state—and the United States of America—the leading country of modern capitalism. The successful realisation of the Peace Programme adopted by the 24th Congress of the CPSU is favourably affecting also the sphere of international economic relations.

[5] *Pravda*, May 16, 1973.

The USSR's trade with developed capitalist countries increased from 2,200 million rubles in 1962 to 5,900 million in 1972. In 1972 Soviet trade with the FRG totalled 827 million rubles, with Japan—816 million, with Finland—602 million, and as regards Britain, France and the USA it topped 500 million rubles with each.

Of particular interest is the wide scale of international economic cooperation with the participation of the Soviet Union. It ranges from long-term trade agreements, agreements on industrial cooperation and credit agreements, cooperation in the fields of science and technology, in exploration of outer space, in medicine, joint participation in building various projects on the territory of third countries. A new form of foreign economic relations that is gaining wide currency is so called compensation transactions.

The Soviet Union, in the general opinion of its foreign contractors, is a reliable and promising partner. It is therefore not surprising that more and more major industrial and agricultural firms, banks and scientific centres in capitalist countries are interested in establishing business contacts with the respective Soviet organisations.

At the same time one should not overlook the fact that there are active opponents of such contacts and not so much in business circles as among the most reactionary-minded political and military figures. This is not surprising: the supporters of an aggressive course are only too well aware that the promotion of mutually advantageous economic relations on a wide basis may prove to be an effective means of countering the most regressive tendencies in international relations known in their aggregate as the cold war.

IV.

What benefit does the Soviet Union derive from its foreign economic relations in general and with capitalist countries in particular?

First, the practical realisation of the economic advantages that follow from the specialisation of production and industrial cooperation with individual countries or on the scale of several countries—whether it is a matter of the import of equipment and goods needed by the USSR or of its own specialised industries producing for export. In the present age, that of the swiftly developing scientific and technological revolution, the instruments and means of production, materials and technological processes are being changed so rapidly that no country, no matter how big and powerful, can develop the production of all types of goods with equal success and the same economic effect.

Secondly, the possibility of exploiting new rich natural resources of the Soviet Union enlisting for this purpose means, equipment and technical experience from abroad, repaying credits received with part of the products manufactured at newly-built enterprises. This makes it possible to accelerate fulfilment of Soviet long-term plans, to begin the economic development of a number of new regions in the North,

Siberia, the Far East and other parts of the country, and steeply to increase the production capacities of a number of industries.

Thirdly, the rational use for export of part of the newly-developed natural resources and new industrial products can ensure the steady inflow of foreign currency which can be used for accomplishing more rapidly and fully the main economic task set by the 24th Congress of the CPSU, that of steadily raising the living standard of the Soviet people.

And, of course, as already noted, the expansion of foreign economic contacts will most favourably affect the international political climate, will be conducive to achieving international security to which the CC CPSU and the Soviet Government have always attached paramount importance.

Thus, from all points of view—whether from the national economic aspect, the development and enhancement of the effectiveness of the Soviet economy, or the foreign political aspect, bearing in mind consolidation of the fraternal unity of the socialist states, consolidation of the position of the developing countries and the further promotion of relations with capitalist countries on peaceful coexistence principles—the broadening of foreign economic contacts fully meets the interests of the Soviet people, the interests of world peace.

The Soviet Union, as underscored in the Peace Programme adopted by the 24th Congress, is prepared to expand mutually advantageous cooperation in all spheres with states which for their part seek such cooperation. The USSR is prepared to participate together with other interested states in the conservation of the environment, development of power and other natural resources, development of transport and communications, prevention and eradication of diseases, exploration and development of outer space and the world ocean.

Noting the positive changes on the international scene, the promotion of judicious, peaceful cooperation between socialist and capitalist states, a cooperation based on mutual benefit and security, L. I. Brezhnev said on July 11,1973: "What we need now is to consolidate the improvement achieved in our relations, to take effective measures to expand and deepen mutually advantageous cooperation on the principles of peaceful coexistence. Of course, we have first of all to fully implement in practice the agreements and treaties which have already come into force. This, in effect, constitutes the prerequisites, the basis for further advance."[6]

The rapid expansion of foreign economic contacts raises many new tasks before the Soviet economy such as increasing the output of export goods in various industries and improving their quality, improving the planning of foreign economic contacts and their better "dovetailing" with national economic plans, more closely combining production and trade functions. "The increased role of economic, scientific and technical contacts with other countries," stated Leonid Brezhnev in the Report of the CC CPSU to the 24th Congress, "will, of course, require certain measures designed to improve the administration of all foreign economic activity and eliminate any short-sighted approach in this important field."[7]

Undoubtedly, the decisions of the Plenary Meeting of the CC CPSU (April 1973), Leonid Brezhnev's subsequen visits to the FRG, the USA and France, and the new important agreements concluded in the course of these visits will make for the effective fulfilment of the Congress decisions regarding foreign economic contacts.

[6] *Pravda*, July 12, 1973.

[7] *24th Congress of the CPSU, 1971*, Moscow, 1971, p. 74

Pyotr FEDOSEYEV
Academician

Culture and Morals

In present-day social thinking, the relationship between culture and morals is regarded as an exceedingly important and topical problem. It is searchingly debated by philosophers, sociologists, naturalists, artists, civic leaders and the ideologists of mass political, national, youth and religious movements.

What is the explanation for this heightened interest in the problem which only recently was if not on the fringe then, at any rate, far from the central subjects of theoretical discussion?

In the final analysis this is due to the grandiose historical processes of the 20th century that are fundamentally changing mankind. Far-reaching revolutionary changes are taking place in the forms of social being. Socialism, which has triumphed in the USSR and then in a number of other countries, has become a model for a qualitatively new social organisation, in which the eternal aspiration of working people for social equality, peace, happiness and progress has become a reality. The socialist and national-liberation revolutions draw millions of people in all continents into a historic movement, awakening them to conscious activity as the makers of history. This colossal break up of the old ways of life, faiths, customs and stereotypes is taking place against the background of and in close relationship with the scientific and technological revolution that, on the one hand, gives man immeasurably more power over nature and, on the other, by virtue of this seriously raises the question of preserving our planet for future generations, protecting the environment and preventing man-made forces, that may threaten mankind's very existence, from getting out of control.

The striving to understand the character of these processes and what they hold out for mankind as a whole and for individuals is what motivates the present interest in the relationship between ethics and culture.

The modern epoch strikingly bears out Marx's dictum that a genuine revolution cannot affect only one aspect of people's lives, that it is necessarily integral and all-embracing. The interrelation and interdependence of various phenomena that is far from obvious in society's evolution is always laid bare in the course of revolutionary changes. This relation and interdependence reveals to theoretical thinking the entire complexity and dialectical multiformity of problems that would ordinarily be regarded as commonplace. One of these is the problem of the relationship between culture and morals, which brings to the fore the inadequacy of its settlement, the distinctive and

sometimes diametrically opposite significance in various social conditions. The revolutionary changes enforced in the interests of social equality and free national development today serve as the basis for a steadily closer integration between cultural achievements and lofty moral standards. On the other hand, attempts to preserve and perpetuate the outworn forms of social life founded on the exploitation and suppression of so-called lower classes and nations result in the use of the latest scientific and technological achievements for anti-humane, immoral and criminal purposes, to the detriment of the majority of mankind.

Against the background of the deep-going crisis of bourgeois society's culture and morals one can clearly see the internal unity and interdependence of cultural and moral progress under socialism. This unity and interdependence becomes an historical reality only with the abolition of the system of private property relations and class antagonisms, only in the process of a socialist and communist reorganisation of all spheres of man's activity. In outlining the tasks of the Soviet youth Lenin linked up the promotion of public education and culture with the inculcation of communist morality and a conscious attitude to labour for the common weal.

Noting this organic link between cultural, moral and socio-political development under socialism, Leonid Brezhnev said: "During the years of Soviet power there has been an immeasurable enrichment of the people's spiritual life and rise of their cultural level and political consciousness. The entire course of our history, following the October Revolution, has shown the lofty moral and political qualities that have been shaped in Soviet people, and the immortal deeds the Soviet citizen, the free, conscious toiler, patriot and internationalist is capable of accomplishing. This is one of the most invaluable achievements of socialism."[1]

* * *

The contraposing of morals and culture, so widespread in present-day bourgeois philosophy, reflects the situation under state-monopoly capitalism with its technocratic and bureaucratic organisation of the economy and social life. In this situation man's attitude to the world and other people and the very method of his inclusion in social life differ substantially from the classical model of culture with its guideline towards the practical and spiritual independence of the individual consciously making history.

The philosophers of the Enlightenment believed that far from being inconsonant with the basic attributes of the personality — intelligence, freedom and aspiration for happiness — social life and the culture developing in its bosom were the indispensable prerequisites for the realisation of these attributes: man was intelligent, free and

[1] "The Fiftieth Anniversary of the Union of Soviet Socialist Republics", *New Times*, Moscow, January 1, 1973, p. 21.

happy only in society, only when he enjoyed the achievements of civilisation. As the Enlighteners saw it, inasmuch as morals were founded on man's nature, on his real interests, it did not permit man to do what was at variance with his inner requirements. From this angle there could be no question of an ineradicable contradiction between morals and culture.

This attitude to the relationship between morals, culture and the individual was linked with the theory that in his social behaviour man independently chose his aims and achieved them on the basis of a rational analysis of reality. In other words, the Enlighteners saw man as an internally integral, intelligent being. They regarded ethics as a practical science whose purpose was to substantiate definite moral views that helped man to solve the ethical problems encountered by him.

In present-day bourgeois philosophy the former faith in the might of man's intelligence as being capable of rationally changing the conditions of social life has been superseded by a "sober" and rather pessimistic view that man is helpless in the face of the reality that is turning him into a mere appendage of the intricate machinery of power and administration, into an alienated object of external manipulation, into a functionally programmed element of the bureaucratic system.

According to this view, modern civilisation (with its accent on scientific and technological progress and the allegedly resulting standardisation of the whole of spiritual life) stringently regulates man's behaviour and consciousness not only in the sphere of his social, mandatory relations, but also in the sphere of his intimate, emotional experiences and moods. This interpretation turns man into a being devoid of individuality, and society into a "crowd", a "mass", into a mechanical association of individuals, who hardly differ from each other, as any other standardised product, and who rest content with a set of ready-made ideological stereotypes and models of behaviour and consciousness.

The mass production of these models and their dissemination through the channels of information and communication form the principal distinctive feature of present-day civilisation, its so to say cultural "mission". On the "mass" level, on the surface of industrial civilisation, the culture of modern society (meaning, of course, bourgeois culture) is thus a featureless culture, deprived of all claim to any uniqueness of the models of spiritual products created and consumed by it. This understanding of culture is a radical negation of the entire progressive culture of the past, whose main orientation was the development of the human individuality.

An abstract contraposing of culture and morals obscures their class character, the existence in bourgeois society's culture and morals of two opposing class cultures and two opposing sets of class morals. Marxism regards the antagonism between class interests as the foundation of the contradictions in the ideological superstructure of bourgeois society. Engels convincingly proved that in capitalist society alongside bourgeois morals there are proletarian morals that represent

the interests of the future. A similar situation exists in culture. Lenin analysed this situation and his basic conclusion was that "there are two national cultures in every national culture."[2]

Developing this conclusion, Lenin wrote: "The *elements* of democratic and socialist culture are present, if only in rudimentary form, in *every* national culture, since in *every* nation there are toiling and exploited masses, whose conditions of life inevitably give rise to the democratic and socialist ideology."[3]

The aggravation of the class antagonism in modern bourgeois society has widened this split in culture and morals. The unfounded condemnation of modern culture by bourgeois ideologists screens the existence and deepening of this split. This negative approach to culture and civilisation is most strikingly evident in the works of Jacques Ellul and Lewis Mumford.

Ellul draws a picture of modern society characterised by a horrifying lack of humanity and a destructive influence on man. He warns people of the "threat the technological world poses to man's personal and spiritual life."[4]

Mumford has created an impressive image of a "megamachine"—a uniform and highly organised social system within which society functions as a machine and people play the role of cogs. The contemporary and, to a larger extent, future "technological society" is presented by Mumford as just such a machine.

These assessments of the cultural situation in present-day bourgeois society record some actual consequences of scientific and technological progress under capitalism. But in all such cases attempts are made to confine the study of culture to a description of the given situation. In the long run, the impossibility or inability to look beyond that situation from the standpoint of more developed, higher forms of social and cultural life leads to conclusions that are very far removed from reality. For that reason even in cases where philosophical thought criticises the given situation it sees the way out either in idealising outworn cultures of the past or in a quest for purely spiritual and frequently mystical means of salvation lying outside the realm of reality.

This approach ignores or gives a negative portrayal of the new, developing forms of social organisation founded on socialist principles. Moreover, criticism of the contradictions of civilisation in bourgeois society is transferred mechanically to socialist society, while the fundamental distinction between the attitude of man to scientific and technological progress under capitalism and under socialism is deliberately or unwittingly slurred over. Society's totally new qualitative state, where science not only becomes a direct productive force but is consciously placed in the service of man and used for the solution of basic social problems in the interests of the individual's harmonious development, is thus overlooked.

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[2] V. I. Lenin, *Collected Works*, Moscow, Vol. 20, p. 32.

[3] Ibid., p. 24.

[4] Jacques Ellul, *The Technological Society*, New York, 1965, p. XXX.

As a result of this disregard of the qualitatively different social conditions under which culture develops the cultural and historical situation in present-day bourgeois society becomes the object of moralising, abstract philosophical criticism appealing to eternal human values and to a culture lying in the depths of the human soul and defying rational understanding. The solution to the problem is seen not in a radical remaking of the existing situation and the removal of the causes giving rise to that situation but in an operation on the mind that would release man from the grip of utilitarian technological schemes and from the domination of depersonalised forces. In the final analysis, the only recognised way out of the situation proves to be not an advance to new forms of social organisation but the rejection of scientific and technological progress, of everything linked with the existence and development of science. Thus science and not capitalist reality with its inherent contradictions and antagonisms becomes the main target of this criticism. This line of "criticising science" and scientific consciousness, which has its origin in the clerical and reactionary romantic schools of the 18th-19th century, underlies the irrationalistic conceptions of culture in modern bourgeois philosophy. This sort of anti-intellectualism reduces the problem of culture to a pessimistic criticism of civilisation, to which all the ailments of the capitalist system are attributed.

By and large, some bourgeois scholars go so far as to set culture off against civilisation. They see civilisation as a mechanical association of people, and interpret culture as an area of organic fellowship, as an intimately spiritual attitude of people to one another and to their environment. From this angle culture is something that is inalienable from man, something that has always been intrinsic to him and embraces the world of his inmost experiences and emotions, his innermost "senses". This contraposing of civilisation and culture thereby conceals the incompatibility of the human essence with social reality, the conflict between the individual and society.

Modern bourgeois philosophy asserts that man becomes a moral being, only by "liberating" himself from the social links imposed upon him by society. The rupture between the social sphere of being, where man loses his own essence, and the sphere of individuality, the only sphere where he can acquire that essence is reflected notably in the theories that demarcate and contrapose two forms of morals: "true" morals that enable the individual to retain his human essence, and morals as part of culture that, they allege, irreversibly depersonalise man. This rupture between the social and individual spheres of human existence is also reflected in theories maintaining that morality doesn't depend on culture.

For example, in the view of the proponents of intuitive ethics (G. E. Moore, Ch. D. Broad, A. A. Ewing, B. Blanshard and E. W. Hall) moral conviction is the exclusively personal, "intimate" property of the individual. Moral values are absolute, self-contained and exist regardless of the structure of the external world, history and the destiny of different societies.

An extremely contradictory and inconsistent solution to the problem of morals and culture is offered by the school of logical positivism and linguistic analysis (Ch. L. Stevenson, A. J. Ayer, R. M. Hare, P. H. Nowell-Smith and others). On the one hand, this school recognises that the moral convictions of people are shaped by the social environment and culture and that in society they fulfil definite functions. On the other hand, it contends that the moral convictions of each separate individual are quite arbitrary: the individual is free to choose his set of morals. Here we see a tendency to demarcate two kinds of morals (morals as part of culture, as a social phenomenon, and morals as the personal affair of the individual). This demarcation is to be found in the works of H. L. A. Hart, C. H. Whiteley and A. Edel.

This is becoming the central idea in the irrationalistic ethics of Existentialism, which proceeds from the assumption that "true" morals presuppose the negation by the individual of the moral values sanctioned by society, that it signifies the pursuit of one's own intentions. From the standpoint of Existentialism morals are the self-expression of the absolutely free individual, of a special "existential" essence of man free of social and historical conventions. On the other hand, the social determination of human activity is only "external" in the life of man, and here the individual is a "thing", an object of manipulation, losing his freedom and individuality. According to the philosophy of Existentialism, "true" morals are achieved "outside culture", outside the links and relations that culture imposes on man. This approach opens up the possibility for a dual understanding of the relationship between morals and culture. On the one hand, morals are interpreted as something quite relativist, as being fully independent of social culture on the principle of "to each his own morals" (J.-P. Sartre). On the other hand, it is argued that morals rest on certain self-evident values or postulates that have always been intrinsic to man and have nothing at all to do with social culture (K. Jaspers).

The actual mechanism of human activity in society, of the activity on whose basis culture evolves, is thus beyond the bounds of existentialist ethics. The "true" ethics of the Existentialists does not give man social, practical bearings by which he can consciously choose his moral actions, appraisals and standards, or at least distinguish between good and evil. The Existentialists do not contrapose any specific morals to the morals that form part of the culture of bourgeois society.

This abstract setting off of a socially determined culture against a "true human", extra-social spirituality is typical also of the recipes given for society's reorganisation in the theories of Eric Fromm and Charles A. Reich, who suggest "humanising" the modern "technological" or "industrial" society with the aid of extra-class morals and a "new consciousness".

While justifiably criticising the trend of this society towards turning man into a thoughtless and unfeeling robot, Fromm reduces matters to the dissemination of the idea of activity and responsibility, of the idea of "humanising technological society". He categorically rejects the need for, and the expediency of, revolutionary methods of

struggle. Similarly, Reich contends "that only tactics which reach people *at the level of consciousness* are effective".[5] He believes that in modern history the economics has ceased to play the role of a transformative factor and that non-material interests become dominant.[6] Moreover, Reich maintains that the growth of the productive forces inevitably leads not to the advancement of culture and morals but to their destruction.

But this view ignores the fact that society's cultural and moral make-up depends not only on the development of the productive forces but also on whether this development is controlled or consciously directed by the people. If, as Marx noted, culture develops spontaneously, if it is not directed consciously, it leaves behind it a desert.[7]

Marxism links the blossoming of culture, of spiritual life, the consolidation of lofty moral principles, not only with a high development level of the productive forces but also with a definite social organisation, namely, socialism and communism.

In the West there are conceptions that regard morals as part of culture, see the link between ethics and social life and are to some extent oriented towards the study of socio-historical reality. But by and large it may be said that their interpretation of morals and culture is predominantly relativist.

The following pattern is the most typical in this respect. Various local communities coexist in the boundless field of history or modern social reality. By community is meant equally society as a social system, an individual limited group, a local ethnical community, and so on. Each of these communities has its own closed culture that is oriented on itself. By culture is meant a definite system of beliefs, generally accepted behaviour, standards and models of that behaviour, morals and certain social institutions.

The underlying idea of this conception is that in order to understand and explain the culture of a local community (particularly, its set of moral views), there is neither the possibility nor the need for discussing it from the standpoint of some general historical perspective. If these communities are at all interconnected, this connection is only accidental. To understand a given local culture it is enough to study it independently of any historical premises. The student of such a local, alien culture should not proceed from notions about the laws of historical development, of the general course of civilisation, of history, and so on, which can only prevent him from understanding that culture. He must give a purely empirical description of what he sees. The moral code and culture of a given local community may be explained on the basis of how that moral code and culture serve local, group aims. From this standpoint there is no sense in giving a comparative assessment of which moral code is better, more developed, more progressive and so forth.

[5] Ch. A. Reich, *The Greening of America*, New York, 1970, p. 319.
[6] See ibid., p. 309.
[7] See K. Marx and F. Engels, *Works*, Vol. 32, p. 45 (in Russian).

For us this attitude is basically inacceptable. The relativist interpretation of culture is alien to Marxism, for in accordance with the principles of historism and monism it assumes that despite their diversity all cultures have a common foundation, that there is a continuity between them and that in their development they have a common orientation. For Marxism culture is not a closed system of specific values but a developing sum of material and spiritual achievements within whose context a definite mode of man's socio-practical activity is pursued in each epoch. Morals are thus not something unrelated to culture. They are an inseverable part of culture.

In present-day bourgeois thought we thus see a contradictory striving to interpret culture either pragmatically, as a purely instrumental means of adapting man to existing reality, as a strictly regulated and rationally organised sphere of his actions or, on the contrary, as an area of man's "existentialist freedom" that is not bound by social relations, by external regulation. Properly speaking, this constant wavering between the extremes of scientistic and irrational thought forms the main contradiction of the modern bourgeois science of culture. The contradictory and mutually eliminating conceptions of culture mirror man's actual alienation in capitalist society, the obvious discrepancy between the objective, socially determined conditions of his life and his existence as a subject of history, as an active and conscious personality. Hence it follows that a real solution of the problem of culture and, with it, a theoretically true understanding of the obtaining cultural situation presuppose going beyond not only the bounds of bourgeois consciousness but also the bounds of the limited cultural-historical practice to which bourgeois thought constantly appeals.

Some theorists and ideologists link such a solution with the attempts at implementing Christian humanism, Christian ethics. Christian theologists contend that morals are the soul of culture and that the principles of Christianity form the foundation of morals.

Christian ethics, especially as it is expounded by K. Barth, R. Niebuhr, P. Tillich, R. Bultmann and other proponents of neo-Protestantism, criticises the capitalist conditions of human existence and bourgeois morals. But its pivotal ideas — that God's moral will is absolutely free, that there can be no true morals in society and that all human morals are artificial — lead to the conclusion that it is both impossible and unnecessary to remake social reality, to achieve social progress. In neo-Protestant ethics, as in existentialist ethics, a dividing line runs between "true" moral values and culture with the result that the latter is said to be amoral, to be devoid of moral virtues. Although the proponents of neo-Protestant ethics criticise the amoral aspects of bourgeois culture quite vehemently, the significance of this criticism is nullified by their strong condemnation of any programme for social reorganisation and their utter rejection of revolutionary transformations.

Views kindred to neo-Protestantism on the relationship between ethics and culture were expounded by Albert Schweitzer, one of the most eminent humanists of the 20th century. In his principal work,

Kulturphilosophie, he levels biting criticism at bourgeois culture, noting such features of its decline as the polarisation into mass and elitist cultures, the gradual growth and virtual legalisation of amoralism, and the justification of anti-humane aims and means. Atomic and hydrogen bombs and other modern weapons, he writes, are the most characteristic manifesation of the crisis of bourgeois civilisation. He argues that culture has to be given back its moral content, for morals are the highest criterion of culture. Morals are the condition for the existence and progress of culture, for stripped of morals culture is only a mechanical skeleton, or what is called civilisation. Every life, Schweitzer declares, is sacred, and it must be held in reverence regardless of whether it is the life of a human being or an animal. Man is responsible for nature, man is responsible for his fellow man, and all people, all mankind, are responsible for the world.

One cannot fail to appreciate the profundity of Schweitzer's criticism of bourgeois civilisation, the humanist fervour of his views, his anxiety over the future of mankind and the whole of our planet, his aspiration to avert the threat of mankind's destruction in a thermonuclear holocaust. At the same time, one cannot fail to see that Schweitzer's ethics suffers from the same vice as the ethics of Christianity as a whole: it is abstract and incapable of pinpointing the social forces that can put an end to the amoralism of bourgeois culture not only in theory but also in practice.

Effective, scientifically substantiated ways of really surmounting the rupture between morals and culture have been indicated by Marxism. These ways have been adopted in socialist society, which, in this sense, represents a qualitative leap towards the solution of the problem of linking up morals and culture.

* * *

The fundamental specificity of the Marxist approach to the relationship between culture and morals is that this relationship is regarded not in the abstract but in definite conditions. In the history of social thought Marxism has offered the most consistent, genuinely *scientific criticism* of bourgeois civilisation. It breaks free of the limitations of the non-critical positivism of bourgeois sociophilosophical thought with its idealisation of the capitalist system of relations and bourgeois culture, and of the moralising, unscientific criticism of these relations appealing to the requirements and interests of an abstract, non-historical subject. The substance of Marxism's scientific-historical criticism of bourgeois civilisation is that it regards the latter, on the one hand, as an indispensable and natural phase in the formation and development of all human culture and, on the other, as an historically limited and transient stage of that development. From this point of view Marxism is opposed to the attempts to identify bourgeois civilisation with the whole of human culture, to portray it as the only possible form of the existence of world culture, and to the relativist interpretation of the development of culture as a mere totality of closed local cultures devoid of continuity.

While they regard capitalism as an historically indispensable phase of social development, the classics of Marxism have shown that under capitalism the overall content of culture is given a contradictory, alienated and distorted expression, and culture itself becomes an instrument by which the majority is ruled by a minority. In other words, they have separated the real values in capitalism's contribution to the development of culture from the socially limited forms in which these values are created and function in bourgeois society. The Marxist assessment of the bourgeoisie's historic contribution to the development of material and spiritual production, to the promotion of human culture, is well known. Marx wrote of the "great civilising impact of capital", which "surmounts national narrowness and national prejudices, the deification of nature, the traditional, complacent and relatively insular satisfaction of existing requirements and the reproduction of the old way of life".[8] In characterising the role played by bourgeois civilisation in the development of the material conditions of social life, Lenin said: "Capitalist culture has *created* large-scale production, factories, railways, the postal service, telephones, etc."[9]

However, this striving of capital to universalise the productive forces and culture on a worldwide scale, to clear the road for their development, manifests itself solely as a tendency, whose realisation encounters insuperable obstacles raised by capital's very nature. Capitalism alienates labour and culture, turning them into universal means of man's physical and spiritual enslavement. "Since capital is the opposite of the worker, the advancement of civilisation only enhances the *objective rule* of capital over labour."[10]

We thus get a paradoxical situation in which the development of culture under capitalism, the development of man's social and productive (material and spiritual) forces is promoted in a form contravening the very essence of culture and reveals itself as a process of the formation of forces that are alien and hostile to man, namely, of the forces of oppression and destruction of the individual. Here the development of culture is largely anti-humane and this, properly speaking, is what aggravates the problem of culture and morals.

This contradiction was very accurately analysed by Marx more than a century ago. "The victories of art," he said, "seem bought by the loss of character. At the same pace that mankind masters nature, man seems to become enslaved to other men or to his own infamy. Even the pure light of science seems unable to shine but on the dark background of ignorance. All our invention and progress seem to result in endowing material forces with intellectual life, and in stultifying human life into a material force."[11]

While developing science, technology, education and even art in a socially alienated form, capitalism gives this development a character that negates and suppresses in man the qualities of an active, morally

[8] K. Marx and F. Engels, *Works*, Vol. 46, Part 1, p. 387 (in Russian).
[9] V. I. Lenin, *Collected Works*, Vol. 25, pp. 420-421.
[10] K. Marx and F. Engels, *Works*, Vol. 46, Part 1, p. 261 (in Russian)
[11] K. Marx and F. Engels, *Selected Works*, Moscow, 1969, Vol. 1, p. 500.

responsible and spiritually rich being, who in the act of free historical creativity determines not only the means but also the aims of his activity. In other words, capitalism denies to man recognition of his importance and role as a purposeful subject of history and makes it virtually impossible for man to control the products of civilisation created by him. As a moral being man finds himself excluded from the process of real historical creativity. Capitalism sunders science and morals, counterposing them as incompatible fragments of culture that had drifted far apart. This incompatibility of "scientific" and "moral" viewpoints, this contradictory nature of the value and object approach to man's environment expresses the social fragmentation of human culture and of bourgeois society itself.

Marxism sees the solution of this problem by no means in sacrificing one of these viewpoints for another, but in the practical, revolutionary eradication of the situation giving rise to this contradiction, in recreating a truly integral culture through society's social reorganisation. In this philosophical-historical conception the accent is placed on the solution of basic social problems, the abolition of all forms of social and national inequality and oppression, on the subordination of the productive forces to social control, on the removal of wars and of the causes of aggression.

These lofty aims can be fully attained by the communist organisation of society, of which socialism is the first phase. Under socialism cooperation and mutual assistance are established between all social groups and all nations, and discrimination is eliminated from the relations between them.

The victory of the socialist revolution brings to an end society's prehistory, which is painful and agonising to working people, and marks the beginning of mankind's true history. Whereas in the past the huge human effort and the vast material means were parasitically consumed by the exploiting classes or squandered in clashes between countries and in the struggle between hostile classes, which is the motive force of history, with the victory of socialism all the sources of social development can be used by mankind to harness nature and all its wealth to secure a steady rise of the living and cultural standards.

This spells an epochal change of the very form of society's social and cultural progress. Characterising social advance under private property relations, Marx wrote: "The very moment civilisation begins, production begins to be founded on the antagonism of orders, estates, classes, and finally on the antagonism of accumulated labour and actual labour. No antagonism, no progress. This is the law that civilisation has followed up to our days. Till now the productive forces have been developed by virtue of this system of class antagonisms."[12]

Socialism ushers in a qualitatively new form of historical development, in which the broad masses, united by common interests and

[12] K. Marx, *The Poverty of Philosophy*, Moscow, 1955, p. 68.

common ultimate goals, take an active and conscious part in social labour.

The growth of the class consciousness of the working people and their revolutionary struggle for socialism with the working class at their head are, as Marx had shown, the decisive condition for mankind's liberation from a situation where its overall development takes place through the exploitation and the physical and spiritual degradation of a huge number of people. Marx wrote that "although at first the development of the capacities of the *human* species takes place at the cost of the majority of human individuals and even classes, in the end it breaks through this contradiction and coincides with the development of the individual".[13]

In characterising the future, communist society, Marx and Engels defined it as an association in which the free development of each would be the condition of the free development of all.

The attainment of this goal presupposes concern for creating the conditions not only for economic, scientific and technological progress but also for moral advancement.

Communism, Marxism teaches, is a social organisation in which all the achievements of science and technology are subordinate to man's welfare and in which cultural-historical practice is determined by the aims that have both a scientific and a moral foundation. In other words, under communism the dismemberment, fragmentation and alienation of culture are surmounted and its true human value is brought to light. It is under communism that it becomes obvious that culture is not merely the production of "things" with purely utilitarian aims and not merely the production of "consciousness" in abstract forms. Culture signifies, above all, the harmonious development of man himself in all the wealth of his social links with the world and other people, in all the integrity and universality of his active existence.

The Marxist conclusion that there is an organic unity between morals and culture under communism rests on its understanding of culture and morals as historically shaped, socially conditioned forms of human activity. This approach makes it possible to surmount, on the one hand, Christian philosophy's abstract and "absolute" interpretation of culture and ethics, and, on the other, relativism, which claims that no objective criteria exist for comparing and assessing cultural-moral systems. The historical view of culture and morals enables Marxism, first, to solve scientifically the question of the relationship between the relative and the universally significant in culture and morals; second, to establish objective criteria of their progress; and, third, to show the substance of the relationship and interfusion of culture and ethics.

A relativist understanding of moral and cultural values is frequently attributed to Marxism on the grounds that it has adopted a class approach to its assessment of their content. The critics of Marxism contend that a class interpretation inevitably leads to the conclusion that the morals of any social subject are only relative. Since Marxism

[13] K. Marx, *Capital*, Moscow, 1968, Vol. 4, Part 2, p. 118

they argue, links morals with class and party interests, it denies the existence of an objective criterion for comparing various sets of morals in the modern world.

Indeed, by recognising and studying the social, class nature of moral and cultural values, Marxism acknowledges that they can be explained by the historical approach. It would, however, be a gross error to see in this approach a variety of relativism and subjectivism in the interpretation of morals and culture. Marxists solve the question of the nature of cultural and moral values, guided by materialist dialectics. Their point of departure is that being to a certain extent and in a certain sense an integral, complete system that differs from other philosophical systems, the philosophy of any ascending class has two aspects. First, it has a specific content, which springs from the special condition of the given class and expresses its special interests. Second, the basic rules of human association comprising a kind of nucleus of human culture and morals, of human values, are mirrored or developed in a certain part of its philosophy, its ideology. In this are manifested the relative independence and historical continuity of morals.

In any culture and set of morals we see their class content which determines them and the reflection, in a different degree, of a general historical and national element. When Marxists champion the class approach to ethics and culture, when they speak of the superiority of communist culture and morals over any other, they have in mind, above all, the fact that mankind's loftiest humanist ideals are most comprehensively and adequately embodied in the value system of the working class, that the morals and culture of that class inherit, continue and develop all that is finest in mankind's culture and ethics.

It would be useful to recall an historical fact that has a bearing on our subject. The German Society for Ethical Culture was founded in Berlin in 1893 with the aim of achieving a state in which justice, truth, humanity and mutual respect would be predominant. This aim was interpreted by the society's founders as a striving to "ethicise" the political and economic struggle between the classes. Franz Mehring showed that this society's policy statement was theoretically untenable and noted that in the last analysis the development of the economic struggle between the classes was mirrored in society's moral views, that each class had its own set of morals and that, therefore, there could be no highest ethics conciliating the opposing ethical views of the different classes.

The critics of Marxism regarded this statement by Mehring as confirmation that ethical relativism was intrinsic to Marxism. Actually, Mehring explained to his opponents, he had expressed the simple idea that since each class had its own morals it was waging the class struggle in accordance with the requirements of these morals and that the oppressed classes could not be guided by the moral prescriptions of the oppressing classes. In this context there neither exist nor can be "higher" morals standing above social contradictions and serving as a means of conciliating the opposing classes and as a moral standard for mankind as a whole. While insisting on a concrete historical approach to morals, Marxism does not recognise the existence of single moral recipes or moral formulas suitable for all epochs and conditions and giving the key to the solution of all socio-political and spiritual problems.

Among the many theories put forward in opposition to Marxism, was system of views known as "ethical socialism" which had become fairly widespread. This system was one of the forms in which opportunism was manifested in the working-class movement. Eduard Bernstein set socialism as an ethical postulate against the objective historical necessity springing from the law-governed development of capitalism. The ideas of "ethical socialism", propounded by the Marburg school of neo-Kantians, was also enlarged upon by Max Adler, who represented neo-Kantianism in the Social-Democratic movement. The proponents of "ethical socialism" in effect rejected socialism as a real social system, regarding it as an abstract ethical desire and an unattainable dream. Instead of demanding society's reorganisation by revolution they spoke in general terms of lasting ethical values and of man's moral self-improvement.

The present-day adversaries of Marxism use the theories of "ethical socialism" to reinforce their argument that no irreconcilable contradiction exists between the interests of the working class and monopoly capitalist rule. Accordingly, the champions of "ethical socialism" propound the ideas of "social pedagogics" as the means of harmonising the life of modern society on the basis of socialist ideals, which are allegedly common in equal measure to all classes. They claim that mankind is evolving morally in the direction of socialism and that, therefore, no social revolution is required. In this context socialism is regarded solely as an extremely attractive but practically unattainable moral ideal.

Of course, in their present interpretation the principles of "ethical socialism" have undergone certain modifications. In the substantiation of this conception neo-Kantianism is yielding its prominence more and more frequently to philosophical constructions of an anthropological type and also to attempts at a speculative interpretation of various propositions in Marx's early works. However, the social significance of "ethical socialism" has remained unaltered: it distorts the propositions of scientific socialism and helps to divert the masses from the actual struggle for the overthrow of monopoly capitalist rule.

Characteristically, the calls for "ethicising" or "humanising" the class struggle had always been addressed to the oppressed classes despite the fact that the most brutal and bloody forms of struggle had been, as they still are, imposed by the exploiting classes.

The working class gets the possibility of exercising the determining influence on the character and forms of the class struggle only after it wins political power. However, the deposed exploiting classes do not shrink from the most barbarous methods of struggle. In Russia, after the Great October Socialist Revolution they acted together with the foreign interventionists to start a long and bitter war that took a toll of millions of lives. The grim years of the Second World War and postwar history abound with examples of the brutality of the reactio-

nary forces against the champions of progress and freedom.

While rejecting the idealistic conceptions of "ethical socialism", Marxism, needless to say, fully recognises the immense significance of the moral factors of the anti-imperialist struggle that inspire the millions of people fighting for the triumph and implementation of the ideals of scientific socialism. Lenin spoke of the moral preponderance of the revolutionary classes, of their moral strength and of the moral and political prestige of the working class as of potent factors of the liberation struggle. This is borne out by the entire practice of the world liberation revolutionary movement, by the entire theoretical and practical work of the fighters for social progress. At the same time, the Marxists always bear in mind that ideals are of real significance only when they express the actual interests of the class whom the conditions of life compel to act in a definite direction.

* * *

The Marxists hold that a new and in a certain sense general set of morals grows out of the requirements of the new, socialist society, in which social antagonisms have disappeared and other social distinctions are being gradually erased. These morals are general also in the sense that they take shape in a society that is not rent by class contradictions and in which the basic interests of all its members coincide. This community of interests of all the members of society is the solid foundation for the emergence and consolidation of the new, communist morals.

Elements of these new morals are most fully represented in the morals of the working class, for the conditions in which it lives, works and fights compel it to unite and identify the interests of the individual worker with the interests of his class comrades, and the interests of its class with the basic interests of all working people. The working class sees itself as the vanguard of the struggle of all mankind, for its own emancipation as a class can only be achieved if the entire system of exploitation is destroyed. The aims of the working-class struggle constitute the highest social aims, the loftiest ideals of all working people. They invest the working-class struggle with a lofty moral content and give proletarian morals a stature that raises it above all other moral positions in history.

The question that is frequently asked is whether it would be correct to assert that some class has the monopoly right to the development of mankind's highest moral and cultural achievements? And what, generally speaking, is the criterion of what systems of human values are highest and most common for mankind?

For Marxist philosophy one of the fundamental propositions is that there are common moral and cultural values. The process of labour cannot be effected and, consequently, no society can exist outside definite forms and modes of human association. Labour is what mainly distinguishes man from the animal kingdom and creates specifically human, social forms of association. The objective logic of

production and the objective conditions of social life gave rise to, in a certain sense, the simplest, elementary but most important standards of humanity, standards of morals.

These elementary rules of social life, repeated and recorded over the centuries, were, Lenin pointed out, one of the key elements of social communication when states were non-existent and society, discipline and labour routine were guided by force of habit and tradition without a special apparatus of compulsion.

Morals spring from society's development and belong to the sphere of social life. We shall, therefore, not concern ourselves with the herd instincts of animals, which some scholars present as the embryos of morals.

Morals are a sphere of human relations and they comprise standards, requirements and principles which had been worked out by society, distinguish man from animals and raise him above the animal world. This, as Marxism sees it, is the fundamental, general content of morality, namely, the standards, principles and values in human relations that most fully and profoundly express man's specific essence as a creative, active being. This also answers the question of the objective criteria of morality and culture: given all other conditions, the highest cultural and moral values are those that most fully help to promote society's advancement and the harmonious development of the individual.

But the content of these moral standards, which are sometimes called "simple laws of morality and justice", depends on the level of society's historical development and on the social environment in which they are shaped. Although these "simple laws" are a subordinate element in both cases, the "ethics" of the relations between the slave-owner and the slave differ from the "ethics" of the relations between the feudal lord and the serf, between the capitalist and the worker. The really general in the "simple laws of morality and justice" is most fully and consistently expressed in the revolutionary practice of working people, in their critical attitude to the ruling exploiting system, in the demands for social justice, for the implementation of the rights and freedom of the individual. By and large, the development of society has been accompanied by progress in the sphere of morals.

The working class is the first class in history that by virtue of its objective condition is interested in the abolition of all forms of exploitation of man by man. Its own liberation presupposes the liberation of society as a whole, and its class interests coincide with the basic interests of all working people.

The class consciousness of workers is, needless to say, not an inborn quality. It is moulded and strengthened in the course of the struggle against the exploiting classes. That is why the statements of Herbert Marcuse and the sociologists of his school to the effect that the working class of the industrial capitalist countries has lost its revolutionary potential and is integrating with the capitalist system are untenable. In different countries the class struggle of the workers unfolds unevenly, but it will inevitably mount even in countries where

it has not yet achieved broad revolutionary scope. The class struggle will disappear only with the final victory of the working class, for then society will be socially homogeneous.

We thus see that the class element is not eternal. The aim of the working class is not to take the place of the former exploiting classes and subordinate the other strata of the population but to abolish all social inequality, all division of society into classes. It is the only class capable of putting an end to society's division into antagonistic classes, to exploitation, to wars, and so on. That is precisely why the proletariat has the historic mission of leading mankind to a classless society, and why its ideology, philosophy, morals and culture most adequately express general human values. That is what the Marxists mean when they say that the interests of the working class are the criterion of morality. This morality serves to destroy exploiting society and unite all other working people round the working class that is building a new society.

In other words, it is a question of the dialectics of the historical process, according to which the road to the realisation of mankind's finest moral ideals lies through the consolidation of the morals of the advanced class, which embodies and implements them in the course of its liberation struggle. In a general form Lenin expressed the Marxist criterion as follows: "Morality serves the purpose of helping human society rise to a higher level and rid itself of the exploitation of labour."[14]

In this connection it would be appropriate to recall Lenin's words to the effect that the interests of the working class are higher than those of any individual stratum of workers, and that the interests of social development are, as a whole, higher than those of the working class.[15] The aim of the class approach propounded by the Marxists and of the class criteria of morality and culture is not to perpetuate the working class but to help it carry out its historic mission of building a classless society.

Marxism underscores the significance of the general criteria of morality in the relations between people, nations, and states; it only rejects the attitude to it that obscures its class character, that appeals to general human morals as a wonder-working means of solving all social problems.

The Communists reject the class morality of the exploiters. They oppose to the perverted, egoistical views of the old world communist morality as the most just and noble code expressing the interests and ideals of all working people. The simple laws of morality and justice, which have been distorted or shamelessly trampled upon under exploiting rule, are turned by communism into inviolable vital rules of relations between individuals and between nations. Communist morality embraces the fundamental general moral standards that had been evolved by the masses in the course of millennia in their struggle against social oppression and moral vices. In the course of the

[14] V. I. Lenin, *Collected Works*, Vol. 31, p. 294.

[15] See ibid., Vol. 4, p. 236.

building of socialism and communism morals are enriched with new principles and a new content. Such are the tenets of the CPSU Programme with respect to man's moral development.

Marxism adopts a revolutionary, effective approach to the problems of social development, including the problems of moral progress. The task that the Marxists have set themselves is not simply to proclaim moral principles but, above all, to translate these principles into life and create the conditions making this possible. To use Marx's words, the task is "to vindicate the simple laws of morals and justice, which ought to govern the relations of private individuals, as the rules paramount of the intercourse of nations".[16]

Take, for instance, such a question as the struggle for peace, the struggle to rule out war and violence from the relations between nations. The demand for universal peace is unquestionably of common significance. It is supported by people belonging to the most diverse social strata and holding different political views. But the Marxists do not confine themselves to underscoring the actual universal significance of the struggle for peace. While actively contributing to this struggle, they stress that in bourgeois society there are forces that are objectively the sources of war, that the attainment of peace is inseparable from the struggle against these forces, that the complete and final consolidation of peace in the world presupposes the eradication of the class sources of war. Unless these aspects are elucidated, the protest against war assumes an abstract, moralising character and does not affect the actual sources of violence in the modern world.

Similarly, the preaching of equality, fraternity and freedom cannot be successful without removing the social antagonisms in society. Socialism's historical mission as a definite stage of social development is precisely to deliver society from social conflicts and ensure the free cooperation and actual equality of people in all areas of social life.

This does not mean that Marxism considers it useless to advocate just moral principles when the real conditions for implementing them are as yet non-existent. On the contrary, the more actively these principles are advocated, the broader and more effective will become the movement for creating such conditions. To this it should be added that even where the social environment favours the consolidation of humane principles the ideological influence of all forms of progressive spiritual culture on society does not diminish and the significance of the conscious and purposeful education of the masses in the spirit of progressive moral ideals does not lessen.

Socialism leads to the establishment of communist morals as general human morals. But this does not take place automatically, without contradictions and difficulties. The proprietary, individualistic morals and habits that had taken root in the course of centuries remain entrenched in people's minds and behaviour for a long time. The working class, Marx said, wants a revolution not only because it can achieve deliverance from exploitation in no other way but also be-

[16] K. Marx and F. Engels, *Selected Works*, Vol. II, p. 18.

cause it is only in the course of revolutionary changes that it can cleanse itself from the filth of the old society and secure the triumph of the communist consciousness. At the 24th Congress of the CPSU Leonid Brezhnev said in his report: "...the new make-up of the Soviet man, his communist morals and outlook are consolidated in constant and uncompromising struggle with survivals of the past. Communist morals cannot triumph without a determined struggle against their antitheses such as money-grubbing, bribe-taking, parasitism, slander, anonymous letters, drunkenness and the like. The struggle with what we call survivals of the past in the minds and actions of people is a matter that requires constant attention by the Party and all the conscious, advanced forces of our society." [17]

The development of real socialism bears out the truth that the consciousness of people, including their moral views, changes with a change in social life. But the speed and success of this change depend on the level of moral education.

Progress towards communism steadily enhances the role of moral principles in the life of society, expands the sphere of operation of the moral factor and correspondingly reduces the importance of administrative regulation of the relations between people. The Communist Party supports and encourages all forms of conscious self-discipline by citizens that lead to the consolidation and development of the basic rules of communist community life.

In socialist society the principles of the moral code are, at the same time, the moral principles of education, literature and art and all forms of information. These moral principles determine the attitude of people to labour and to material culture as common property. The organic fusion of culture and morals thus takes place.

The more than half-century development of socialism, on the one hand, and the crisis of the culture of present-day bourgeois society, on the other, convincingly demonstrate the correctness of the Marxist understanding of culture and morals as being socio-historically predicated phenomena, as well as the necessity of the transition to a new and higher type of socio-economic organisation and to a new historical type of culture. The inner link between culture and morals, which on the basis of mankind's moral progress makes it possible to assess cultural progress, is revealed bare in the process of the formation of this new historical type of culture, socialist culture. Moral progress becomes a key indicator of the harmonious development of the individual, which, in its turn, is the principal criterion of cultural progress. For that reason cultural progress may be, to a large extent, gauged by how culture facilitates the harmonious (including moral) development of the individual as the proponent, consumer and creator of culture.

A state of society where the highest value — human life — is threatened cannot fit into this criterion. This threat is constantly engendered by the system of brutal exploitation of man by man, by the cult of violence over the individual, by destructive wars.

[17] *24th Congress of the CPSU, 1971*, Moscow, 1971, pp. 101-102.

In studying the impact of imperialist aggression, in particular, against Vietnam, on the morals of the people many sociologists have noted the link between war and the cult of violence.

The Communists are frequently accused of doctrinairism and fanaticism, the argument being that they have made a fetish of their final goal and are prepared to use every means to attain it. It is hardly worth pointing out that the leaders of the revolutionary working-class movement have time and again denounced all forms of Machiavellianism and attempts to use dishonest means allegedly for the sake of revolutionary aims. The fundamental specificity of the Marxist stand on this issue is that in historical movements and social actions the aims and the means are necessarily inter-connected; the character of the aims gives shape to definite means and, conversely, the real aims of a political party may be gauged by the means it uses to achieve these aims. Marx wrote that the aim for which iniquitous means are required is not a just aim.[18] It most frequently happens that a pragmatically oriented and essentially short-sighted policy guided by mercenary interests has recourse to amoral means and methods.

For years the Communists have been accused of propounding now the morals of nihilism, now the morals of primitive asceticism. Views of this kind on morals are today often preached in the name of communism by various political groups and their ideologists. Particularly great zeal in this respect is displayed by the Maoists, who completely distort the Marxist-Leninist teaching on culture and morals. The "cultural revolution" was in effect directed against progressive culture, against communist ideology and morals.

As taught by Marx and Lenin, communism is the highest phase of the development of civilisation and morals, and the advance towards that phase coincides with the global preservation, consolidation and development of all the finest achievements of mankind.

The theory and practice of socialist construction has nothing in common with the vapid, vulgar scheme attributed to Marxism by its overt and covert ill-wishers, who reduce the Marxist theory of social development to the level of "economic" materialism. They assert that communism represents the realisation of a purely economic programme that does not take the requirements of mankind's spiritual development into account, distort the actual content of the building of socialism and communism in the Soviet Union and other socialist countries, and deliberately ignore the immense work that is being accomplished by the Communist parties to raise the cultural level of broad masses of people, to foster social consciousness and lofty moral ideals.

In organising and guiding the spiritual life of socialist society the Communist Party of the Soviet Union recognises that without a higher level of culture, education, social consciousness and spiritual maturity it is impossible to build communism, in the same way that communism cannot be built without the corresponding material and technical basis. Marxism-Leninism rejects crude, "barrack" communism not only be-

[18] See K. Marx and F. Engels, *Works*, Vol. 1, p. 65 (in Russian).

cause the latter perpetuates society's economic poverty, but also because it idealises spiritual poverty and ignores the need for raising the cultural level of the people, of bringing the achievements of world culture within their reach. The criticism of the anti-humanism and amoralism of present-day bourgeois civilisation is frequently used by "Left" revisionism in order to negate mankind's cultural achievements, the genuine spiritual values linked with the capitalist stage of history. This cultural nihilism is fundamentally at variance with the attitude of revolutionary Marxism, for which the surmounting of the contradictory form of relations between culture and morals under capitalism signifies not a reverse movement and not the perpetuation of cultural backwardness but a transition to a qualitatively higher level of the development of world civilisation, a level where all the positive achievements of mankind's spiritual progress are preserved.

At the 24th Congress of the CPSU it was stressed that in the education of the people the moulding of a Marxist-Leninist world outlook, of lofty ideological and political qualities and the standards of communist morals remains the central task of the ideological work of the Party organisations.

The development of the culture of Soviet society is an historical example of the creation of the objective conditions for surmounting the contradictory form of cultural and moral progress and for the emergence of a qualitatively new state of world civilisation characterised by the abolition of society's economic, social, political, ethical and cultural disunity.

In this connection Leonid Brezhnev said: "Common, internationalist features are becoming ever more pronounced in the varied national forms of Soviet socialist culture. The national is increasingly enriched by the achievements of other fraternal nations. This process is progressive and is in the spirit of socialism and in the interest of all the nations of our country, laying the groundwork for a new, communist culture that is free of any national barriers and equally serves all men of labour." [19]

The surmounting of class contradictions and of social and ethnical barriers, the internationalisation of culture and the removal of all forms of alienating cultural values from man are objective characteristics of the formation of a communist culture and, at the same time, a real guarantee of its moral and humanistic significance.

In other words, the formation and development of an international culture as a fusion of the spiritual values created by all peoples, the transformation of the masses from consumers of the low-grade spiritual stereotypes of bourgeois culture, from objects of spiritual manipulation into direct makers of society's cultural wealth, the harmonious development of man, the acquisition by culture of a profound moral and humanitarian meaning and the surmounting of the contradiction between cultural and moral progress—all this constitutes the key objective law of socialism and spell a turning point in mankind's spiritual development.

[19] "The Fiftieth Anniversary of the Union of Soviet Socialist Republics", p. 10.

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Some Problems of Research in Ethics

This article does not set itself the aim of providing a review of writings on Marxist ethics over some period or other, or of presenting a general characteristic of achievements and shortcomings in Marxist research into ethics. It is rather intended to consider the question of how certain methodological requirements presented by Marxism to the study of social phenomena are being realised in Soviet works on ethics. In particular, we are referring to two such demands, an underestimation of which can, and sometimes does, lead to grave shortcomings in the development of Marxist ethics: 1) the concretely historical (class) approach to moral phenomena that are studied by ethics, and 2) the link between ethical theory and the practice of communist construction, the "human problems" of our times.

The demand that a concretely historical approach be applied to the study of moral phenomena—ideas, values, norms of behaviour, moral relationships and the like—presupposes, first and foremost, a rejection of all and any attempts to regard man's nature as something given for all time, as immutable. Such views are manifested in a variety of ways in present-day bourgeois literature on ethics, ranging from searches after a substantiation of ethics in "virtues" or "vices" genetically inherited by man from his animal forebears, to the reduction of moral judgements and notions to the demands and appraisals given once and for all time and in keeping with man's reason, sentiments, will and so on. Here man's essence is taken (as was the case in pre-Marxist philosophy) as a certain "abstract inherent in each single individual"—an abstract of certain physical and mental (intellectual, emotional, etc.) properties regarded outside of the historical framework. We would not like to dwell in detail on the variants of this approach to man, for Marxist criticism long ago revealed its groundlessness; we shall only point out that this kind of approach is revealed, for instance, in attempts made by some naturalists to deduce morality from the various features of behaviour created by organic evolution, natural selection. In such attempts, the class approach is either absent or played down: human nature is regarded as the source of morality. That nature is depicted by the adherents of this approach either as evil (cruel or aggressive, etc.) or good (prone to altruism, mutual aid and so on). Correspondingly, the view of man and his future is either pessimistic or optimistic. Curiously enough, this approach to morality reveals obvious features of social positions and sympathies. One can find both "bourgeois" morality and, if so wished, even "communist" morality (and politics)

in our forebears' way of life, the choice depending on what the observer would wish to transfer from human society into nature, into the evolution of the organic world.

* * *

The Marxist, or scientific understanding of man's nature takes as its point of departure, not his organism and physical properties, not the natural preconditions of his labour, mentality and language, not the general features distinguishing *homo sapiens* from other species, but what comprises the real essence of man: the "sum-total of all social relations". This means that, despite the genetic link between man and the animal world, and the general features distinguishing man from his animal forebears, references to that link and those distinctive features cannot help us to understand people of a definite historical epoch—peoples and classes, their inter-relations and trends, the content and forms of their activities, their views and actions, and their social and private morality. While certain genetically inherited features can have a certain significance in shaping the individual's morals (although such features undergo considerable transformation in social life), the direction of that shaping and the content of moral ideas, concepts, habits and the like are determined as a whole by the "sum-total of all social relations". Hence the need for a concretely historical approach to the study of morality, as of all other social phenomena.

An understanding of the link between morality and the interests of certain classes, an understanding of the struggle between moral ideas, principles, appraisals, etc., as a manifestation of the struggle of classes for their fundamental interests—this is the core of this approach as applied to the morality of class society. The class approach determines the main thing in an analysis of all social relations in class society. It embodies the critical and revolutionary spirit of Marxism-Leninism.

Yet, the question of the class approach to morality has not revealed the utmost clarity. During the discussion held some years ago on the contents of the collection *Urgent Problems of Marxist Ethics*, Tbilisi, 1967, some speakers (as well as some authors of articles in the collection) showed a tendency to consider morals (and ethics) outside the class framework and to see in morality something corresponding to "human nature" in general. Judging from individual writings, the stand that claims that, in a class society, a morality common to all mankind exists side by side with class morality, and that there exists a "dialectical interaction" between class morality and that of mankind as a whole does not permit a clear reply to the question of what is to be considered in the history of morality as pertaining to mankind as a whole.

Thus, what is there in morality that can be considered pertaining to all humanity? Is it that which is suited to all people or won general recognition? As for suitability, the history of moral codes and

doctrines, as well as ethic concepts, witnessed many attempts to formulate a morality that is suitable to all. Each and every class has appealed to the universality of moral laws or commandments. However, the significance of these "universal" moral laws and other appeals to mankind's universal values and interests has always been determined by an historically given social (class) content. "The French bourgeois of 1789, too, declared the emancipation of the bourgeoisie to be the emancipation of the whole human race; ... the proposition—though for the time being, with respect to feudalism, an abstract historical truth—soon became a mere sentimentalism, and disappeared from view altogether in the fire of the revolutionary struggle."[1]

Marx and Engels strongly criticised those who had lost sight of the "class framework" of various political and moral demands in a class society, contraposed "universal" consciousness to class consciousness, and in general confused and erased all and any historical distinctions in "universal" laws.[2] It will suffice to recall the polemic that Marx and Engels waged against the so called "genuine socialists", with their appeal to "man", or Lenin's polemic against the Mensheviks, who so eagerly appealed to "man", to universal conscience, and the like, and ignored the class approach to an appraisal of social phenomena and historical personages.

When the creators of the Marxist theory of society spoke of actual people, they did not take the latter out of the concrete social conditions and class relations. Most frequently the reference was to individuals or even entire social strata that either stood head and shoulders above their class limitations and were distinguished by greater independence, initiative and character, or else gave expression to a will for struggle against reaction and so on. In this sence Engels considered the Norwegian petty bourgeois more of a "man" than the German philistine who had run to seed, and saw the workers' most human features in their protest against capitalism.

It was from the standpoint of the revolutionary class that the founders of the Marxist-Leninist doctrine unmasked and subjected to scathing criticism any flouting of the demand for a human approach on the part of those who had doomed others to subhuman conditions of existence and brutally suppressed any protest against oppression and exploitation. However, in their criticism, they did not spare those revolutionaries whose unscrupulous choice of methods brought demoralisation into the ranks of the working class and lowered its ability to wage the struggle.

As for the "universal" acknowledgement of certain moral demands, one should bear in mind here, first and foremost, the level of social differentiation in a definite period of social development (in a class-antagonistic society). The weaker that differentiation, and the less developed the oppressed class as an independence force, the more "universal" becomes the recognition of the dominant principles

[1] K. Marx and F. Engels, *Selected Works*, Moscow, 1970, Vol. 3, p. 444.
[2] K. Marx and F. Engels, *Works*, Vol. 12, p. 713 (in Russian).

of ideology and morals. On the other hand, a revolutionary class comes out against the reactionaries, representing all society, and this "'universality' corresponds to... the illusion of the *common* interests (in the beginning this illusion is true)."[3] This universality is an historically justified illusion, etc. (as distinct from the reactionaries' hypocritical appeals to the common interests). In other words, demands of a general democratic nature that unite masses of people against the reactionaries are made under the banner of "universal" demands advanced by revolutionary movements. Such demands (including those that express an orientation towards definite moral values) can be called neither universal nor socialist, although they do, of course, express mankind's progress. Thus, during the Second World War, the Resistance in France, Italy and other European countries, a movement which involved people of differing political, religious and moral views—was united in the struggle against fascism under the banner of national democratic values. Political and moral values that unite oppressed peoples in the struggle to win and consolidate independence are also national and democratic. However, these values, which are common to democratic movement, cannot be torn out of the class context just in the same way as a literal meaning cannot be attached to assertions about the universal nature of the values contained in Islam or Christianity, "Asian values", "the values of Western civilisation" and so on.

Today certain democratic demands of a general nature have acquired a more extensive and more real *universal* significance than ever before. We are referring to the struggle for peace, which has involved people of different political and moral views, people who are aware that, in the nuclear age, the struggle for peace is a struggle for the preservation of the very conditions of the existence of human society, the preservation of man *as a species*. This new content of the struggle for peace determines its ideological and moral irreconcilability with any apologia for war—an apologia which is based on pseudo-scientific, racial and psychological theories of the war improving the human race physically and morally and which claims that a striving towards aggression is ingrained in human "nature", and the like. However, while emphasising the actual and universal significance of the struggle for peace, we cannot lose sight of the existence of social forces which, because of their *objective* position, cannot but want aggressive wars and are unable to refrain from provoking wars, even if the latter threaten the existence of those very forces. Marxists proceed from the proposition that the achievement of peace calls for a struggle against imperialism on the part of all progressive mankind, and that the complete and final establishment of world peace hinges on the eradication of the social (class) sources of war.

Some colleagues, who have failed to understand the essence and social function of morality as a definite form of social consciousness, a specific ideological means of defending class interests, are prone to discern the "universal" in morality by analogy with science. Certain

[3] K. Marx and F. Engels, *The German Ideology*, Moscow, 1968, pp. 62-63.

moral demands are identified with eternal truths in the realm of science; the development of morality is compared with the development of cognition through relative truth towards absolute truth, the content of truth being of universal significance and independent of classes. Morality and science are compared as two forms of social consciousness standing side by side, with disregard for the distinctions in their social function, their different attitudes to class interests and the like. Reference is made to the appropriate pages in Engels's *Anti-Dühring*. However, references to Engels can hardly justify such an identification, because when Engels spoke of eternal truths and sovereign (absolute) thinking in the sphere of morality, he had in view not morality as practical moral consciousness, with its rules, norms and ideas of good and evil, but the theory of morality. True, some passages in this work by Engels speak of morality and moral theory in one and the same meaning. However, this cannot be accepted by the reader outside the frame of reference to the overall system of Engels's views. Engels examined questions of morality in the context of sciences bearing upon the history of society, and pointed out that, in this group of sciences, matters stood worse in respect of eternal truths than they did in the sciences studying non-living and organic nature. But this is a special question.

One cannot consider as correct any emphasis on the educational function of morality as a function common to science and morality. That "educational" function is inferred, for instance, from morality being an object of cognition. However, it may be claimed, by the same reasoning, that religion has an educational function! It is unscientific to identify reflection with cognition, which is one of its elements. It is also said that moral truths are richer than the scientific, since they combine the descriptive function with that of normative appraisal.

Furthermore, it is claimed that the dialectic of the absolute and the relative, the abstract and the concrete, manifests itself more strongly in moral judgements (as distinct from those of science). This leads to the prejudice regarding the "elusiveness" of moral truths. Further, it is asserted that the cognitive and the appreciative are discrete in theoretical (scientific) consciousness, while they are organically blended in moral consciousness, and so on and so forth. The worthy intention of revealing the actual link between knowledge and morality leads up to an exaggeration of the educational role of morality.

In the masses' moral consciousness which branded certain social systems as unjust, Marx and Engels saw a symptom of the impending replacement of outmoded systems by new ones, a growth of the consciousness of the oppressed class, and a *correct appraisal* of a given social system from the positions of that class.[4] That appraisal

[4] To quote from Marx: "Recognition of the products of labour as one's own products and an appraisal of the separation of labour from the conditions of its existence as unjust and violent, testifies to an immense consciousness, which is a product of the mode of production based on capital, and is a funeral bell foretelling the downfall of that mode of production, in just the same way as the appearance in a slave of the

could appear not as a result of scientific cognition but as the outcome of the masses' own experience, in which one can see spontaneous empirical cognition. The importance of that appraisal is tremendous: it possesses the value of truth for it expresses that which is correct in the world historic sense. However, such cognition does not, of course, contain any scientific proof of the regularity of social development and of the need for a replacement of social systems, a scientific appraisal of the alignment of class forces, and of the possibilities of a revolutionary class. As Engels put it: "This appeal to morality... does not help us an inch further."[5]

The morality of the ruling exploiter classes—at least when the conditions have matured for the old society to yield place to the new—operates as a force spearheaded against anything that can lead up to a negation of the system in question, its foundations and everything it holds sacred. In the language of that morality, *negation* means *rejection*.[6] In contrast with the development of life and a negation of its outmoded forms, this morality elevates "moral probity". It demands that man should do the "right" things, relieves him of the need to give thought to the correctness of the "right" things and permits neither hesitation nor doubt on that score. History has seen many examples of moral persecution of scientists who have stood up for the truth and for human development and enlightenment. Moral ideas and doctrines that have led society and human cognition forward have, in the main, appeared within the framework of social and philosophical doctrines imbued with the spirit of free thought and enlightenment. Irrespective of the form they have been expressed in (theoretical treatises, publicist pamphlets or fiction) or of the place moral questions play in them, such innovative social and philosophical doctrines could and did exert (under definite historical conditions) an important moral influence on people's minds and hearts and on the development of cognition and practice.

Society's moral progress owed much to these philosophical and social doctrines, which, of course, developed in certain historical conditions and expressed the ideas of struggle for the accomplishment of definite social tasks. New morals appeared and personal relations between people changed under the influence of such ideas and on the basis of new social experience. The decline of the old morality (often a very complex and difficult process) was accompanied by emergence of a new morality, which preserved features of the old habits and traditions. As a specific form of social (class) consciousness, morality is marked by many general norms and precepts that have great stability, and, as an object of cognition, can be considered within the framework of certain general categories of theoretical (philosophical)

consciousness that he *cannot remain the property of a third person*, and with the appearance in him of the realisation of his individuality, slavery is already dragging out only a miserable existence and can no longer serve as a basis for production" (K. Marx and F. Engels, *Works*, Vol. 46, Part I, pp. 451-452, in Russian).

[5] F. Engels, *Anti-Dühring*, Moscow, 1969, p. 180.

[6] K. Marx and F. Engels, *Works*, Vol. 4, p. 297.

thought. However eternal certain ideas may seem, for instance, those of justice or good, duty and conscience, virtue and vice, the content of these notions has changed considerably from nation to nation, and from class to class. These ideas cannot be torn out of the context of historically determined views on man and his "nature", his role and purpose in the surrounding world.

Society's moral progress cannot be understood without a concretely historical consideration of moral views and ideas, morals and manners, and the relations between people. An analysis of that progress is a very difficult task, a key to which could, in our opinion, be provided by the well-known proposition: "Morality serves the purpose of helping human society rise to a higher level and rid itself of the exploitation of labour".[7] Expressed by Lenin with reference to communist morality, this proposition also contains something characteristic of each stage of moral progress, something intimately linked, throughout the entire existence of class society, with the struggle of society's progressive forces for freedom, greater opportunities for man's creative forces to develop, for man's enlightenment and development, for man's greater dignity and the humanisation of the relations between man and man. But it is only the morality of fighters for communism that gives this humanistic content its profound meaning and clear prospect: it is a morality that serves the cause of struggle for the final abolition of classes and class exploitation, and for the establishment of genuinely human relations among men and nations. Until these tasks are accomplished, communist morality with its humanist content operates as class morality and will long remain within the class framework. "A really human morality which stands above class antagonisms and above any recollection of them becomes possible only at a stage of society which has not only overcome class antagonisms but has even forgotten them in practical life."[8] In other words, it will become possible when society turns into a single association of all mankind.

The existence of the socialist system has brought out in strong relief the radical differences between the morality of those who are building a new society and that of the old society of private property. The morality of the old society, especially of the bourgeoisie, is a form of the alienation of man's spiritual activities; it regulates the relations between men, subordinating such relations—including the most intimate—to the principle of private property and profit. Marx quoted many examples of the capitalists discarding all concern for people when it came to profits, this whether it was a matter of exploiting the labour of workers in their own country, or the enslavement of other peoples. In one of his articles Marx pointed out that when the Emperor of China banned the import of opium into his country, he was showing concern for the health of his subjects, and was thereby defending the *principle of morality* against the British colonialists, who were prepared to make *profits* by vitiating a whole

[7] V. I. Lenin, *Collected Works*, Moscow, Vol. 31, p. 294.

[8] F. Engels, *Anti-Dühring*, Moscow, 1969, p. 115.

people. The history of world literature provides many instances of clashes between the principle of morality and the "principle" of profit (as well as of class privileges, family "honour" and the like). In such chashes, humanist and democratic morality often retreated in the face of traditions, customs, and codes of official morality, which were hostile to it, while those imbued with that morality fell victim to their free thinking and the new concepts of morality (a good example is provided by Schiller's celebrated drama *Intrigue and Love).*

The morality of the working class—socialist and communist morality—has high appreciation for all and any manifestations, in society and its history, of moral sentiments, views and relations that express mankind's victory over savagery, and the freedom-loving aspirations of people living in a given period of history. In the early days of its history, mankind created the image of Prometheus, that noble Titan and fighter for human happiness. The Promethean idea has always been alive in mankind, finding embodiment in generations of courageous fighters for liberty and happiness. The working class is an heir to that struggle, its traditions and its morality, which is always oriented towards the future (the word "Prometheus" literally means "directed forward in thought"). With the appearance and development of the socialist movement, and in the course of socialist construction, it has become possible to reveal the specific nature of moral relations as being free from the rule of fetishes (gods, masters and things) and from man's subordination to that rule—relations based on solidarity among men, trust in man, respect for his abilities and dignity, concern for his well-being and development, and ruthless criticism of everything that oppresses and humiliates man. It is common knowledge that, in the first and as yet immature associations of socialist workers, Marx discerned an actual embodiment of man's fraternity, that is to say, a precursor of mankind's future morality.

Writings and discussions on ethics have, in recent years, devoted a good deal of attention to the rules of mankind's social behaviour, which date back many centuries. These rules have come to be called norms of morality specific to all mankind. This is true in the sense that any human community stands in need of such rules, first and foremost of rules precluding any excesses in the relations between individuals (such as murder or physical violence, gangsterism, seizure of other people's property and the like) and demanding the preservation of social norms and good-neighbourly relations in daily life. Among these, for instance, are such demands presented to association among men as truthfulness and honesty, keeping one's word, the accepted rules of decorum (politeness, courtesy, gratitude, etc.) which do not always possess moral significance in the proper sense of the term. All these long accepted rules have historically operated usually only within the framework of a definite community (clan, tribe, social group or class), but even here many distinctions have been preserved by various peoples in the concrete content and sphere of the application of such rules—distinctions which bear the imprint of class, social group, profession, and family, tribal or national traditions. Such rules have, in large measure, lost their significance outside of a given

community. Thus, what was forbidden within the tribe was permissible towards strangers; what was suited to the masters did not extend towards slaves; a correct observance of the rules of behaviour within one's "own" circle went hand-in-hand with disregard of those rules outside that circle, and so on. And although the proclamation of juridical equality in the course of bourgeois revolutions (an equality which, as is common knowledge, was incomplete and hedged in with numerous exceptions and reservations), and the development of democratic consciousness were a marked step forward in the recognition and spread of the basic rules of social behaviour, historical experience nevertheless shows that class society cannot be the venue of normal social life, and that, under the domination of relations of private ownership and of individualist, racial and nationalist traditions, the most elementary rules of community life are constantly being infringed and distorted, so that their observance has to be enforced. The struggle for their recognition and implementation, both in relations between individuals and in those between nations, is bound up with the growth and consolidation of the forces of socialism and democracy in present-day society. The complexity of this struggle on the world scene is shown by the activities of the United Nations, whose Charter has formulated the fundamental moral principles of the peaceful coexistence of nations. The fact that these principles have now received international recognition and that there now exist, in society, forces capable of waging a struggle for their realisation (first and foremost, the countries of the socialist community) is of historic significance.

Socialism, which has abolished relations of private ownership, has created the most important conditions for the introduction of the elementary rules of community life in society and for the establishment of genuinely human relations among men in their day-to-day life. "...Man ... emerges from mere animal conditions of existence into really human ones."[9] Herein lies the tremendous advantage of socialism over the old society. The new society has educated a new type of man, with a new world outlook and a new morality. However, with all the considerable advances made in the education of a new type of citizen and in the refashioning of the old mores, private ownership mentality, and petty-bourgeois morals, false notions of values and the like can continue to exist for a long time and, in certain conditions, come to life again. The possibility of the old vileness coming to life in the new society was written about by Marx and Engels, who linked that possibility with backwardness in the development of the productive forces, and with material poverty. The CPSU, which is guiding the creation of the material and technical basis of a communist society in the USSR (that on the foundation of vast progress of the productive forces made by the Soviet people) emphasises the inherent link between that task and the growth of culture, education, social consciousness and man's allround development. It directs the activities of people and organisations in building a new society in such a way that

[9] F. Engels, *Anti-Dühring*, Moscow, 1969, p. 336.

such activities will also help mould a new type of citizen, oust old mores and survivals and establish the communist world outlook and morality. In its resolutions, the CPSU's 24th Congress emphasised that "the moulding in the working people of the Marxist-Leninist world outlook, lofty ideological and political qualities and norms of communist morals remains the central task of the ideological work of the Party organisations." [10]

It is the duty of all Marxists working on problems of ethics to help in the accomplishment of that task.

* * *

It is common knowledge that considerable attention is devoted by present-day science to problems which are not expected to find direct application in practice. Such problems are posed and solved, not even for practical aims that may arise in the future, but only because of the possibility of their solution. The advance and specialisation of knowledge have led to individual fields that previously existed within the framework of a particular science now emerging as independent disciplines accessible only to a definite number of the "initiated" working in that particular field.

Ethics does not appear to be an exception. In the writings of Western bourgeois philosophers, ethics seems to have ceased from being a branch of philosophy that was previously regarded as practical philosophy, a guide in life, a kind of "spiritual medicine". It is becoming a de-ideologised "meta-ethics", or an object for narrowly specialised research—cybernetic, semiotic, axiological, deontological, etc.—designed, in particular, to formalise the logical links underlying the formation of moral norms. This type of research designed to find the possibility of scientific guidance of men's moral development (even with the use of computers, etc.) is also being conducted by Marxists.[11]

It would be mistaken to reject such searches *a priori*. What is important is that they should be conducted on the basis of the demands presented by the Marxist world outlook and Marxist methodology, and should not turn into a creation of all kinds of logical constructions as numerous as their authors. It is to be regretted that the striving to create such constructions sometimes relegate into the background the far more important tasks of studying the actual experience gained in the moulding of a new type of man, the establishment of communist morality and the spread of proper views on questions of morality and the education of future builders of communism.

Of late considerable attention has been devoted, in writings on ethics, to an elaboration of the structure of moral consciousness, regarded from the angle of form, and irrespective of its concretely

[10] *24th Congress of the CPSU, 1971*, Moscow, 1971, p. 228.

[11] We might cite, as an example of such research, the book by Franz Loeser, *Deontik. Planung und Leitung der moralischen Entwicklung*, Berlin, 1966.

historical content, i.e., to an abstraction of moral consciousness. We do not deny the possibility and usefulness of such abstractions as moral consciousness, for they have a certain significance both in cognition and in practice. Referring to abstraction in respect of *production in general* (irrespective of its historical forms), Marx pointed out that this was rational, "inasmuch as it really singles out the general, registers it, and, therefore, rids us of the need for repetition".[12] However, abstractions of this kind can provide nothing more: with the aid of the concept of production in general "not a single really historical stage of production can be understood". The general features characteristic of any kind of production and old economic relations are, according to Marx, reducible "to few very simple definitions, which turn into diffuse and trite tautology".[13]

This evidently also holds for a characteristic of moral consciousness as such, the links between its elements, and their sequence, even if these links and sequence are supported with instances from history. More and more attempts are being made to draw up a formal scheme of moral consciousness, but these can provide only a certain standardisation of terminology (necessary in any field of knowledge).

Abstractions are necessary in any branch of science. However, there exist different kinds of abstractions. There are such of which Marx said that while they are at first the preliminary stage of cognition, they later "become dull platitudes".[14] There are others which express the essence of things, their deep-rooted internal relations, and allow us to approach to an understanding of concrete historical reality. Abstractions of this kind are of great theoretical and cognitive value, but their ascertainment often presents considerable difficulty, since they call for the logic in the development of a real object to be revealed.[15]

In recent years Marxist literature has devoted considerable attention to the application of logic to the sphere of ethics. However, it is not always possible to understand what kind of logic is being referred to. A. Ivin was right when he pointed out in his book *The Foundations of the Logic of Appraisals* that by logic are understood the most varied and heterogeneous doctrines that are often incompatible with one another, these including various versions of what is known as "the logic of content", which are contraposed to formal logic and have no clear-cut content. That is regrettably the case. When these versions of the "logic of content" are applied, for instance, to moral consciousness in general, it is impossible for them to possess a clear-cut content. They do not replace *formal logic* as the theory of formal inference, which is absolutely essential in any science (including ethics, in which the logic of appraisals which is now being successfully developed is of particular significance), but confuse the essence of

[12] K. Marx and F. Engels, *Works*, Vol. 12, p. 711 (in Russian).

[13] Ibid., p. 712.

[14] Ibid., Vol. 46, Part II, p. 366 (in Russian).

[15] See L. Sève, *Marxisme et théorie de la personnalité*, Paris, 1969, p. 332.

the matter, especially where the term "logic" is employed, now in the meaning of formal (or symbolical) logic, now in the meaning of the theory of knowledge and of dialectics.

Maria Makai, the author of a book published in Hungary under the title of *The Dialectics of Moral Consciousness* (a work that deserves serious attention and study) is right when she says that only a single logico-epistemological interpretation of moral consciousness can provide the basis for a fruitful analysis of configurations of moral consciousness from the viewpoint of formal logic: the former (logico-epistemological, dialectical logic) studies these configurations in their historical emergence and development, their real contradictions and unity, and in the interaction between the elements of their content and form; the latter (formal logic) studies such configurations in respect of their given, actual and formal aspect.

In this book, Maria Makai proceeds from the task, once set by Engels, the task of the need and usefulness of investigation into the forms of thought and logical categories. After Aristotle this task was systematically tackled only by Hegel. Using considerable historical material, and following Hegel's scheme (which, however, she does not copy), M. Makai shows the major stages in the development of the configurations (or structures) of moral consciousness. After describing its early stages, which were not yet expressed logically (when the simple external motive or imperative was based on the authority of the community or age-old custom), the author considers such forms as direct judgement and the judgement of reflection, from which there further develops a conditional causal judgement—the first universal logical form of directed activity and purposeful volition. Then the author goes over to developed cognitive-regulative configurations of moral consciousness: judgements of values and norms, in an attempt to show the development of the logical forms of moral consciousness and its conceptual apparatus in connection with historical development, to reveal the correlation between the cognitive moment and that of appraisal, between content and form and so on. In her analysis of the dichotomy between "is" and "ought", which stems from Hume and Kant, the author tries to depict man's transition, both as a socio-historical and as an individual subject, from the direct acquisition of reality to an appraisal and a definition of the norms of his activities. Analysing this dichotomy in respect of moral consciousness, the author does not for a moment lose sight of the ideological nature of that consciousness, its links with the interests of definite classes, its role as a mystifier of reality in certain conditions, and so on. Makai writes that the primacy of the content and particular moments (the reference is to class features) of moral concepts is also manifested in the fact that they "break through" the common formal features of "moral communication", and that at a point where those belonging to opposed classes appear to speak one and the same language they actually do not speak the same language: "there is no abstractly common form; the relation to the common form (its fulfilment or breach, its narrow or broad interpretation, its development or rejection, etc.) was determined, from the beginning, by the particular

aspect that takes its effect in the form."[16] All this is, in our opinion, very true.

Does not the problem of the link between theory and practice in the field of ethics boil down to the establishment of the general correlation between the cognitive aspect and that of normative appraisal, between "is" and "ought"? The author of the book has restricted her work to this aspect of the link. This restriction of the tasks set in this investigation cannot be objected to, for that is within the author's province, but the problem of the link between research into ethics, and practice is, in fact, more complex and many-sided. As we have already pointed out, it is very important for socialist society to have in view the study of the experience gained in moulding the new type of citizen during the construction of a new society, his communist education, the elimination of petty-bourgeois mores, the ascertainment of the conditions in which these mores (and the corresponding psychology) may reappear, and how they can be eliminated. The study of our society's experience in moulding that new type of citizen—this being mankind's moral experience—also presupposes the application of the most up-to-date methods of empirical and logico-mathematical research, and the use of data from a number of sciences studying man (social anthropology, psychology, linguistics, etc.); that study, however, should be firmly grounded in the general methodology of Marxism-Leninism and its most important demands, which have been enumerated in this article.

While emphasising the tremendous significance of ideological work in educating the masses and in shaping communist morality the CPSU at the same time has pointed out that the "moral and political qualities of Soviet people are being shaped by the entire socialist character of our life, the entire course of matters in society"[17]; it demands that Party cadres should devote attention to the educative results of their activities and their decisions. All these propositions provide a vast field for the study of actual processes in the development of morality, and for the posing of and a discussion on really urgent moral problems. We are referring to the ascertainment of the role of the objective and the subjective factors in the development of moral consciousness, the blending of the demands presented by the collective and by individual's conscience, and so on.

Of course, the posing, discussing, and study of moral problems cannot take place after the advice given by one of the characters in Thomas Mann's novel *The Magic Mountain*, a man who dreamt of the future brotherhood of the peoples and wanted to begin by using science to describe and classify mankind's tribulations, discover the causes of those tribulations and then to remove those causes with the aid of the selfsame science. The study of the moral problems of our society can be fruitful when it is conducted from the positions of an active practical struggle for the future, for communism, and for the moulding of a new type of citizen, new relations and habits.

[16] M. Makai, *The Dialectics of Moral Consciousness*, Budapest, 1972, pp. 130-131.
[17] *Materials of the 24th CPSU Congress*, Moscow, 1971, p. 83 (in Russian).

In recent years the literature on ethics, which has given consideration to the "levels of knowledge in ethics", has been striving to establish the actual condition of morality. Some researchers have singled out a special department and given it the name of ethology, which regard as a kind of initial stage of ethical cognition, and as an empirical basis of all knowledge of ethical science, one that provides material for further theoretical generalisations. As they see it, ethical thought goes through three stages, as it were: from the concrete material provided by ethology (traditional descriptive ethics), research in ethics advances towards *general ethical theory*, and from there to *normative ethics*. In our opinion, the division of ethics into its theoretical and normative departments, and also into descriptive and theoretical ethics, is hardly justified. The authors of such studies have intimated the "ethology" is not just a simple description of morality, and that such a description necessarily presupposes a definite point of view in respect of social development, the ascertainment of patterns in the phenomena described, their appraisal, and the like. The same is true of the link between theoretical and "normative" ethics; the latter, unless it is grounded in theory, is no science but simply a collection or list of rules, commandments, prescriptions and so on. A developed moral consciousness consists, first and foremost, in a man's moral convictions; it is a component of his general world outlook, the most "practical" one, which essentially motivates his behaviour.

Ethics is called upon not only to organise people's moral consciousness into a "normative system", but, above all, to get them thinking in the realm of morality. In dealing with questions of behaviour, whether personal or social, and in determining his attitude to the actions of others, any member of socialist society cannot be merely a simple repository of rules, norms, commandments and so on, even if these are organised in a system. He must be capable of creative thought on the basis of the Marxist-Leninist world outlook, conscious appraisal of behaviour, and conscious solutions to moral problems set by present-day society, the construction of communism, the ideological struggle against the world of capitalism, peaceful coexistence, the scientific and technological revolution, and art and culture. These problems are numerous, and call for special consideration.

Present-day moral problems acquire a special significance in connection with the education of the young generation. The youth evince great interest for moral problems, both old and new, which call for solutions in the light of the new conditions. The young people of our country, most of whom are engaged in studies or else combine work with studies, cannot but feel an interest in the blending of science and aesthetic and moral values; vocational training and general (including moral) culture; social discipline and personal interests; the moral foundations of friendship; family concerns, and the like. Considerable significance attaches to the education of young people in the spirit of diligence, lofty spiritual interests, the elimination of the purely consumer approach to life, a striving to get something for nothing from society, parasitism, and the like. All these questions are linked with

the moulding of a new type of citizen, and his integral development as a communist personality. They cannot be solved through any single approach and, of course, cannot be eliminated merely by exhortation. They require serious study, and this is a field in which ethics is called upon to play an important part.

Ethics calls for a new approach—away from the elaboration of narrow and specialised problems and from propaganda based on a Talmudic use of "quotations" from appropriate sources, and towards a scientific understanding of the moral problems of the times. Specialised research should be subordinated to those problems. It is only on that foundation and with the aid of Marxist-Leninist methodology that the theory of ethics can be developed further, and the philosophical, historical, epistemological, sociological and other problems of ethics can be dealt with in a more profound way, and the science of Marxist ethics (and propaganda of ethics as a necessary extension of the latter) will become a more convincing and more effective means of moulding a new type of man.

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Man and the Moral Principles of Scientific Progress

THE FORMATION OF MORALITY IN THE PROCESS OF PERCEIVING TRUTH

Since ancient times, people have searched for an answer to the question "What is truth?" that would have the same vital significance as the "philosopher's stone" had for the alchemists. They felt that such an answer should reveal the meaning of life, and therefore hoped to find in it a supreme moral content that would define the individual's most general positions before men and God.

The same question—"What is truth?"—constantly stands, although on a different plane, before science, for truth is the main objective and the basic result of scientific research and discovery. How does its moral content manifest itself?

When an idea is perceived as truth by some group of people, it becomes an element uniting them, since through its assertion, personal opinion is expressed as group opinion. This happens even when a given truth is not a valid one, but actually an as yet undiscovered or unexposed delusion; and also regardless of whether it is a "conventional" truth, a "maxim of faith", or a truth advanced as such on the basis of scientific arguments. Because of this role it plays, truth can be regarded as potentially containing elements of moral principle. Essentially, this applies to all truths, including those that influence the actions and judgements of people through ideological channels and those that are far removed from ideological problems. Therefore, the struggle for the triumph of a given idea, advanced as truth and capable of becoming a group opinion, has definite moral motivations. The nature of the latter depends on what type of truth is being asserted and defended and what role in all this is played by faith and doubt.

If a "truth" is based on dogmas of faith, then fraud and deception, to the extent that they strengthen faith in the authenticity of the asserted "truth", do not destroy the foundations of this faith, but, on the contrary, support them. For science, however, it is not enough that a truth be perceived as such; it must also be *tested and confirmed through practice* and through intersecting theoretical constructs. Religion and everything that gravitates towards it persecutes and punishes doubters. Science rejects doubtful truths and through doubt strengthens itself as it finds solutions that are more correct. It is in this that the great moral power of science is manifested, the power that can free man from the fetters of ignorance, raise him up against the gods and elements, give him strength in the consciousness of his own might, and turn his thoughts not to serving gods and their deputies on earth, but to serving people.

The uncompromising nature of science distinguishes it from all other spheres of human activity, endows it in the eyes of people with the features of a generator of genuine truths and a merciless exposer of falsehood. This alone is enough to promote the spiritual unity of people around the ideals of science. The collective acknowledgement of the reality of scientific truths in itself contains the collective anticipation of their realisation and gives rise to the conviction that if something is done scientifically, that means that it is done correctly.

Not all types of scientific truth have a direct relation to morality. While the moral consequences of general scientific truths are obvious, natural science truths seem at first glance to lack them altogether. For example, what connection with the sphere of moral relations can the assertion have that two times two is four and not three? However, in life situations knowledge of the multiplication table helps in making just decisions and plays a kind of protective role with respect to honesty in mutual settlements.

Laws of nature and society may be discovered without thinking about morality. But to realise these laws in every-day practice without running into moral questions is impossible, for these questions permeate all life situations. Therefore, the incursion of science into life in any of its forms has definite moral consequences (more direct, as in the case when ideas in the sphere of the social sciences are realised, or more devious, as in the case when the constructs of natural science are realised).

MORAL ASPECTS OF KNOWLEDGE

Morality is a social phenomenon. Therefore, a man's overall moral countenance is determined by the broad spectrum of influences that various sides of his activity have on the various components of his morality. In this sense, an important role is played by the relationship between faith and knowledge.

Faith is a powerful moral factor. It is capable of engendering great moral uplift or wild fanaticism; in fact, both may exist in the same person without evoking any feelings of internal contradiction. The history of religion is rich in examples of this kind. There are many reasons for this, including the form of conviction that is engendered by faith and is characterised by a locked-in dependence of judgement on the internal thought structure. The latter may clash with reality, may contain logical contradictions and absurdities, but insofar as that structure corresponds with the idea of faith, even falsehood is perceived by believers as truth.

An entirely different form of conviction is fired by knowledge. In contrast to faith, knowledge is not locked up within itself. It is endlessly verifiable. If it fails to correspond to reality, conviction is replaced by doubt. Conviction based on blind faith sooner or later collapses, together with the morality based on it, when it collides with reality or the scientific logic of thought. Conviction based on scientific knowledge is strengthened as it comes face to face with reality and logical control, and also as knowledge is increased. It introduces into

consciousness a sense of harmonic balance between thinking and reality, which is the basis of high moral spirit and favourable soil for general moral improvement. Does it follow that in the future, knowledge will completely supplant faith in the broad sense of this word, and that the morality of the future society will be based solely on knowledge, without the need for any kind of faith?

First of all, it should be noted that there are elements of faith in the process of establishing *any knowledge*, for it is impossible (and unnecessary) always to derive knowledge from its datum level. Without believing in the reality of initial information, without having confidence in it, forward movement is impossible. At the same time, every scientific investigation contains, in one form or another, distrust in preceding knowledge. Through constructive doubt, scientists move on to the discovery of the new. In this sense, discoverers are often "heretics" in science. This is one of the characteristic motive contradictions of science. But it does not exclude faith in the validity of scientific knowledge and in the power of science; such faith is a powerful stimulus to scientific progress. Unlike religious faith, however, such faith is based on the fact that the conclusions of science are constantly confirmed by practice in life.

From this follows the fundamental difference between the moral foundations of faith in the omnipotence of God and faith in the omnipotence of science. Faith in the omnipotence of God transfers creative actions into the other world, taking God for a worker who is supposed to foresee and do everything properly in return for payment in the form of prayers and rituals. Faith in the omnipotence of science rests upon the view that only man is a creator, the effectiveness of whose activity depends not on prayers addressed to science, but on the correctness of applying its results, that is, on man himself. The God-fearing but practical believer follows the rule: "God helps those who help themselves". The enlightened person follows another rule: "While trusting in science, consciously apply it in practice".

The relationship between faith and knowledge may seem simple if the essence of science is analysed outside the aspects of its human origins and purpose. When human ties are taken into account, however, this relationship assumes a very complex character. Suffice it to say that the entire experience of the socialist revolution and constructing a socialist society has shown that it is not only the concrete knowledge of the laws of social development, but also faith in the very existence and validity of these laws discovered by Marxism-Leninism, that constitutes the powerful motive force of the masses. Such faith is inseparable from the acknowledgement of man's greatness and the role and possibilities of science; it is inseparable from the inner desire to personally test these possibilities through participation in the life of the society. In contrast to religion, which easily erases the boundary between morality and immorality, such faith, like knowledge, is the bulwark of man's uncompromising high morality.

However, since knowledge acquired by a person makes him stand out among the unknowledgeable, it contains yet another possibility—the moral impoverishment of the conceited specialist.

The feeling of superiority that a knowledgeable person feels with respect to the unknowledgeable is sometimes expressed in an egotistic demonstration of this intellectual "superiority" and a castelike break from the mass of less educated people. On the other hand, by revealing phenomena and things in their bare essence, knowledge may, for the uneducated anarchistic mind, serve as the basis for a cynical attitude to everything. Like the mad anatomist who sees in his loved one above all an anatomical object, such cynics begin to see the world grey, gaining thereby a wretchedly limited and monotonous perception of reality. Cynics who ridicule everything from "scientific positions" are not rare, especially among people who had acquired special analytical skills before accumulating worldly wisdom.

The scientific approach to the analysis of any phenomenon is inevitably rational. But rational thinking, without which the specialist is inconceivable, can develop psychologically into the bad habit of approaching everything in life from the positions of rationalism. Such a person begins to display a cynical attitude to nature, and to human and cultural values, if their use does not coincide with his notion of what is rational.

Having vastly expanded our means of communication, science has already created the conditions for bringing down an avalanche of information on people. This is good, but only to a certain extent. By forcing man's brain and nervous system to work beyond normal limits, copious information can turn into a kind of drug that does damage to man's psyche and nerves. Many people today greedily grasp at every kind of information not so much because they want to be better informed or to gain a better understanding of some question, but because it has become, like smoking or alcohol, a stimulator or tranquiliser. The growing practice of devouring great amounts of printed, oral and visual information frequently goes beyond the limits of enlightenment and into the sphere of bad habits, a kind of information mania. And awaiting mankind in the future, some say, is the possibility of a direct hook-up to the brain, whereby instructional or other information can be passed directly into the body of the brain, bypassing the organs of sight and hearing. It is not difficult to see that without judicious control, all this could "help" society tear itself apart through universal schizophrenia.

The primary means for limiting the negative influences of scientific development on the formation of society's moral foundations is a high level of culture. It can even be said that science is connected to a certain extent with morality through culture and that a high level of morality, is attained through a high level of culture—that specifically human sphere in which man is not and cannot be replaced.

MORALITY AND THE CULTURE OF ROBOTS

If science is viewed as such, in its "pure" form, abstracted from its human origins, then science and morality will turn out to be only potentials of action and in this sense will possess mutual independence. Such mutual independence can also be preserved in action, but

only in action that does not go beyond the limits of mental activity. A scientific analysis or an evaluation of one's own or another's acts can be carried out independently of each other, allowing the scientist to enjoy or torment himself in the search for truth, and the moralist to do likewise meditating on morality. But even here one can already see the outlines of that field of action on which science and morality have a chance to meet. Confirmation of this is found in the life of scientists for whom the discovery of a scientific truth served as the source of moral anxieties due to the confrontation in their consciousness between truth and dogmas of faith. Another example is the activity of ideologists and practitioners of "scientific" barbarity who are engaged in the development of scientific means of mass destruction of people. At the same time, we know of examples of an opposite character, where the search for truth has an ennobling influence on the scientist, arousing in him a repugnance to evil and to tyranny in all its manifestations.

As they leave the "brain incubator" and go into the sphere of practical activity, science and morality acquire a special role. Action turns science into a productive force, and moral elements of consciousness into moral codes that are a powerful factor in the spiritual unification of society. However, the specific character of action in each of these spheres is determined by the character of the connections with man.

Underlying the actions that realise morality are direct relations between people. Factors of morality manifest themselves only through people and have vital significance only in the latter's relations with each other. Direct relations between people can also lie at the basis of action that realises a scientific truth. But this is not a necessary condition. A properly encoded truth can also be realised in action apart from the living brain. It can be inserted into an automaton, which in some instances will successfully replace a thinking and specially-trained human being. A scientific truth itself is not necessarily a product of the human mind. It may also be the product of "thinking" machines that imitate the subconscious, intuitive mechanisms of living thought. These soulless fonts of knowledge are capable of using the "knowledge" stored in their memory devices in the search for "scientific truths", and also of borrowing stored "knowledge" and the solutions based on it from each other. Systems of cybernetic machines, mutually supplementing and servicing each other with information and mathematical solutions, are already in existence today. Moreover, robots can, on the basis of "knowledge" put into them, produce things, that is, be an active transforming force. Their visible possibilities in this regard are rather great and will obviously be widely used by man in the future, particularly for studying the Earth's mineral wealth at great depths or in the "colonisation" of planets where human life can be sustained with difficulty. Men will create for such purposes whole complexes of self-programming and self-regulating robots that will be able to simulate teams of researchers and "workers", robots that will reproduce themselves and their auxiliary equipment.

This might seem to indicate that in principle science can break away not only from man but from human society, and hence be examined all by itself. Let us follow this train of thought. People create a human society and science, and with the help of science and social labour create robots and their complexes; the robots — with the help of the science put into them and using the "social labour" of robot complexes — develop new scientific truths, new productive forces, and perhaps even create organic matter capable of evolution and ultimate transformation into thinking beings who discover scientific truths and produce ... robots.

In this line of reasoning — along which not only science-fiction writers, but many working scientists, have passed in one way or another, and which contains an endless tangle of arguments — there is one detail that has a direct relation to the problem of science and morality.

However great the possibilities of robots may be, the latter constitute *artificially organised matter which can initially emerge only as a result of the activity of the living mind and for its needs*. As for the living mind itself and its carriers — thinking human beings — it emerges from "non-living" or living, but not thinking, matter spontaneously, as a property of life and its highest manifestation.

Thus, truth manifests itself in action both directly, through relations between people, and indirectly, through the mediation of certain devices in the man-machine-man linkage. In contrast to the living mind, a machine, once it has worked out a truth, may not produce any action for man at all, or, by virtue of the possibilities for freedom of action programmed into the machine, it may come out with an action that confuses, oppresses, or disunites people, one that objectively has an anti-human meaning. However, such arbitrary action on the part of the machine will not have an immoral character, because morality defines only conscious relations between people. It is another matter if the "immoral" actions of a machine are controlled or programmed in by a man, that is, consciously directed by him. The fact that they are being carried out by a machine does not reduce the man's moral responsibility for the consequences of the action performed. Thus, there emerges the problem of the moral responsibility of people for the actions of the machines they control.

At first glance the thought is trivial. When an automobile driven by a hooligan runs over a pedestrian, it is not the car motor that answers for it but the hooligan, who is judged according to the rules of law and morality. However, in a more complex case, for example, when a cybernetic machine puts pressure on a man's psyche, the question is no longer trivial; it turns into the big and complex problem of the moral foundations of the progress of civilisation.

The practical machine reproduction of certain human features that were once thought to be unique to man as a biological creature, has enabled science to open the door to a world of man's "doubles" capable of enriching him infinitely. Drawn by the whirlwind of scientific and technological progress into the orbit of new problems, man can no longer do without these "doubles" of his, not out of a love of

being served but because his own biological possibilities are limited. Although the "double" is only a helper in complex matters, an "accessory" to the living brain, it can also compete in many spheres of human activity which are accessible, habitual and dear to people as purely human.

Having opened the door to the world of human "doubles", science has at the same time opened new trapdoors of history, trapdoors through which certain productions and professions, which only recently seemed stable and comprised the content of many people's working life, are already beginning to disappear as objectively unneeded.

At first glance there is no particular danger in this since new professions and new possibilities for creative effort emerge. However, present developments in science and technology show that, today, professions "age" much faster than before. Moreover, hopes for increasing the number of professions by narrowing specialisation and deepening it along the narrow channels are not very optimistic: the narrower the specialisation, the faster the specialty ages, the more possibilities there are to replace the narrow specialist by machines, and the more chances there are for bringing the life-span of the profession closer and closer to the time it takes to be trained in it. There emerges the spectre of a race for disappearing professions, creating the sensation of the worker always being late for the train of his era, and, under the conditions of an antagonistic society, even the problem of the "superfluous man" in the perspective of technological progress. Such a prospect is not only a theme for writers of fantasy, but is already a problem for sociological research and one that has no easy solution.

To this are added reflections on the fundamental possibility of replacing the activity of masses of people with robots.

All this naturally prompts some people to ask: Why does civilisation need such progress? For whom is it designed?

Indeed, those who are not strong in scientific philosophy, those who do not stand firmly on the soil of reality, are beginning to look with suspicion on the promises of scientists about the amazing prospects for the future; and they throw anxious glances back into the past, as if to say, "Was it not really better there than it will be ahead?" And we can already hear nihilistic murmurs: "Live for today, for you have no long-term goals".

The picture we paint is deliberately exaggerated, of course, but it is not concocted. If we take a closer look at that wave of demoralising nihilism against which the progressive forces of the world have to struggle today, will we not find lying at its source, besides social causes, something also from the negative aspects of poorly comprehended scientific progress?

FREEDOM AND THE LIMITATION OF SCIENCE

The world of true science is a world of free human thought. But however paradoxical it may be, the human purpose of science, connected as it is with the social aspects of using its results, introduces certain limitations to this freedom.

Modern science possesses a tremendous power of moral influence. The moral prestige of science today is so great that even the obscurantists are forced to allege that they, too, base themselves on science as they present their fabrications in scientific-sounding terms and pass them off as the fruit of scientific research.

However, in evaluating the moral prestige of science, one cannot ignore the amazing duality of feelings that it evokes in many people who philosophically assess the paths and consequences of its development. This manifests itself especially clearly in respect to the results of that powerful incursion of science into the microcosm in the field of physics, and now also of biology, which has enabled it to find, among other things, the keys to doors clearly marked in fiery letters: "Globally Dangerous!" Just the realisation that some such keys have already been found and others are close to being found is for many people a damaging moral factor, especially when they see adventurists and half-mad fanatics who have seized such keys creep into the historical arena. Meanwhile, the militant know-nothing Philistine has already found the formula for salvation: Get rid of the physicists, then we can live in peace.

That a scientific achievement can be used not only for the benefit of society but also to its detriment is something that men have long known. But now it has become especially clear that science can not only bring people good, but also untold misery. Never before has the scientist carried so heavy a moral responsibility for the biological, material and moral consequences of his research as he does today.

The fact that the grandiose scientific and technological revolution that has unfolded in our days has found human society in a socially non-homogeneous condition makes the inquiry into what modern science is engaged in and the nature of its likely successes in the near future not a casual one. For people this is, without exaggeration, a question of life and death. But at the same time, it is a question of life and death for science itself, for it concerns one of the vital centres controlling its development—freedom of scientific research, freedom of scientific thought. This is the primary moral prerequisite for the existence and progress of science. Are we faced with a vicious circle here?

The freedom to think about anything he likes is guaranteed to man by the laws of biology. In this sense, the problem of freedom of scientific thought does not exist for, practically speaking, no one as yet has the power to prohibit people from thinking, although indirect incursion into the thinking process is, in principle, possible. But it is one thing to think, in general, and another to conduct scientific research.

The responsibility of science for the reality of truth demands freedom of research and of exchange of opinions. In this sense, equally harmful to science are those limitations to its struggle for the reality of truth that are made (a) from the positions of the dogmas of faith, as, for example, in the notorious Scopes "monkey trial", when

with the help of the civil court an attempt was made to try Darwinism, having charged this teaching with insulting man's dignity, and (b) from positions of vulgar and dogmatised philosophy, as for example, when the Chinese theorists of the "cultural revolution" regard the whole of world culture as unneeded rubbish. The struggle against these kinds of limitation is a struggle for high morality, and the place of the scientist in this struggle largely determines his moral positions.

However, the question of free scientific thought is not restricted to freedom in the search for the truth. It is an incomparably wider and deeper question. The freedom of the scientist to search for and discuss truth is not identical in its moral content to his freedom in choosing the goal of investigation. When it comes to pointing out the main difficulty, it lies precisely in the choice of goal.

There are an unlimited number of subjects for research, but the possibilities of research are limited. You cannot work on everything. Some specific goal has to be selected.

This, then, is exactly where we find the watershed between freedom in the choice of a subject for meditation and freedom in the choice of a subject for scientific investigation. One can think about anything whatever. But research requires certain definite conditions and means. The smaller the moral and social component in the scientific truths received and the greater the role of direct "thinking" in the process of their being received, then the more there is in common between the two freedoms — the freedom to choose a subject for thinking and the freedom to choose a subject for scientific investigation. For the pure mathematician, say, the answer to the question of whether or not to work on a given theorem depends above all on him, on his own interests and abilities. But this holds true only so long as he uses only paper and books. However, when his work involves the use of a computer, then the question arises as to the advisability of allocating machine time for his particular goal. And if work on certain mathematical problems requires the joint effort of a large team of researchers and the involvement in this process of powerful productive forces to supply the machine part of the work, then the selection of the subject for research is no longer determined by the "free will" of some one scientist who had decided to tackle the given problem because it seemed to him to be challenging.

Limitation in the selection of the subject and course of scientific investigation is found to an even greater extent in the concrete sciences, where personal choice may be completely excluded and the scientist, subordinating his choice to social imperatives, may give priority to work on a theme that is of urgent importance to society and its needs. This also creates certain moral limitations in research, and demands that the scientist resolve, for himself, a number of ethical and moral problems connected with defining the objectives of his research. Some of these are more or less simple, as, for example, problems connected with the limitations on manifesting one's "I" in the field of one's personal interest. Others, however, are complex and sometimes even tragic. People who run into problems of this kind more frequently than others are medical researchers, and also physicists and biologists who work on projects that can bring individuals and society as a whole great good or just as great evil.

Dedication to the search for truth with the aim of bringing people good, while defining the moral foundations of scientific inquiry — this is what lends moral prestige to science and scientists. The latter are frequently endowed with such prestige in advance, as it were, just by virtue of their working in science, for it is assumed that they are doing so in the public interest.

In this connection, the scientist sometimes has had to cope with the difficult problem of whether he has the moral right to carry on a given piece of scientific research. An example of this were the doubts and anxieties that many Western physicists experienced in connection with their work on the development of the atom bomb during the Second World War. Knowing what their discovery could lead to if such a weapon ended up in fascist hands, some scientists refused to elaborate the corresponding physical problems, while others actively involved themselves in this elaboration, for they were on the other side of the front, in the camp of struggle against fascism. Both were moved by feelings of high moral responsibility for the destiny of mankind. Yet, although as a result of the moral position taken by scientists the bomb was created in the countries of the anti-fascist coalition, it was not at all used for the anti-fascist struggle as was contemplated. This was the cause of profound mental anguish for many atomic scientists, the great humanist Einstein, in particular, who at a crucial moment gave his prestigious support to the decision to start work on the atom bomb as being feasible from the point of view of physics. As for the scientists of the socialist countries, the use of the atom bomb by reactionary forces for the purpose of jeopardising peace made their work on creating the atom bomb a humane task, since it helped to strengthen the military might of the peaceloving socialist camp, and that meant also reducing the threat to peace and checking the forces capable of unleashing a nuclear war.

Thus, since modern scientific research is, practically speaking, impossible without defining goals, and such goal defining is impossible without certain limitations being placed by society on the scientist's freedom of action, some complex moral contradictions inevitably spring up in the field of science. The fact that men cope with these contradictions from humanistic, class, party, national and other positions inevitably makes specific scientific results — that is, the very content of science — at any given moment to a certain extent dependent on the moral components of the historical development of society.

If we were to speak of freedom of research in the name of science as such, that is, outside of its dependence on the social conditions under which it develops, then we could say that any realistic goal having scientific interest is worthy of efforts to achieve it. Moreover, any limitation in this sphere would do objective damage to the development of science, especially if the given goal was of a probing character and might lift up the curtain to a new field of knowledge. From this point of view, investigation of even such areas as atomic or

nuclear explosions, or the control of the pathogenic capacity of viruses and bacteria—is a matter without a moral component. But this component appears as soon as the question is transferred into the sphere of antagonistic social relations and concrete action that realises the scientific discovery in social activity and thereby directly affects the interests of people. This is where some serious questions arise, such as whether a given problem should or should not be worked on *now*, considering the social and moral aspects connected with the human dangers it poses under present historical conditions; or whether a given discovery should or should not be developed technologically to the point of its possible use for military purposes. In other words, in practice, freedom cannot be unlimited, for when it is aimed at doing harm to people, such freedom is immoral. And whenever freedom of knowledge is identified with freedom of violence (as occurs in bourgeois society), this is already a sign of moral degeneration. That is why social and moral responsibility for the fate of a scientific discovery has today acquired the significance of a motive force that increasingly draws scientists all over the world into active public life. This is the moral demand made of the scientist as payment for penetrating into the secrets of the Universe. Society is not indifferent to what the scientist is engaged in, for different scientific problems and solutions are not of equal value to it morally. Science is civic in character. Under present conditions, with human society divided into two opposite systems, any scientist who is not at the same time a citizen is merely a living model of a robot taught to work out a definite series of ideas, a robot that is indifferent as to who will press his start button.

Having become a productive force of society, science acquired ties with social relations, with the psychology and morals of society. And that means that the further development of science cannot take place without account being taken of these factors.

The problem of the social factors involved in the development of science and of the responsibility of scientists will become even more acute in the foreseeable future. While today the scientific achievements that pose the greatest possible threat to mankind are those related to the thermonuclear explosion, tomorrow no less a threat may be posed by discoveries having to do with genetic influences on man's nature and the bacteria and virus world surrounding him, or discoveries that will free man from many kinds of productive, including creative, activity—a subject we touched on earlier. If today science "helps" man create practical means for instantaneous self-destruction, tomorrow, having reached an even higher level, it can "help" man create practical means for gradual self-destruction. Thus, however paradoxical it may seem, the problem that stands out sharply now is that of the historical *measure, degree, limits* within which scientific and technological progress and the efforts of scientists are actually in the interest of true social progress. To accelerate social progress by maximal practical application of the achievements of science is presently an urgent task, yet it has already become necessary to hold up the practical application of science in certain spheres of human

activity. Tomorrow, this kind of necessary restriction may become even wider, not because certain achievements of science are harmful in themselves, but because at a definite stage of social development, under definite social conditions, they may lead to inhumane consequences.

The interests of mankind are inevitably leading to the establishment of forms of social regulation where the limitlessness of the scientific search will be accompanied by limitations to the realisation in practice of some scientific discoveries with the aim of preserving the moral health of society.

To some extent, society already imposes such limitations today, and the nature and form of such limitations depend on the goals that society or certain groups within it pursue in this respect. When, for example, capitalist firms buy up scientific discoveries and lock them up in safes lest their realisation results in lower profits, this is an expression of the degradation of bourgeois society. On the other hand, international treaties that prohibit the use of certain discoveries in the sphere of chemistry, physics and biology for military purposes are, on the contrary, of a progressive character. From the point of view of the interests of mankind, the realisation of scientific achievements is morally permissible only to the extent that it protects mankind from degeneration and dissociation, serves its great aims and improvement, ennobles the human individual, enhances people's sense of being the masters of their destiny, and promotes the harmonious development of society and its moral improvement. Therefore, the self-limitation of science along the lines of evolution from the general laws to the practical consequences is an inevitability of the world of man, that world beyond whose borders science is dead. It is in this that the highest moral principle of science manifests itself.

The conditions for the further progress of science are in direct dependence on the social structure of society. Indeed, one of the parties most concerned in the progress of the social structure of society on the basis of human interests—interests that find their embodiment in communist social relations—is science. The ultimate interests of science and mankind coincide. Thus, the struggle for scientific progress objectively merges with the struggle for the best social system, one that rests on the highest moral principles and proceeds from the interests of all mankind. This, in other words, is the struggle for communism.

THE INCURSION OF SCIENCE INTO SOCIAL AND BIOLOGICAL PRE-CONDITIONS OF MAN'S MORAL IMPROVEMENT

The achievements of science ennoble man spiritually. The incursion into formerly inaccessible spheres of knowledge reveals the boundlessness of the power of human genius. However, certain achievements of science connected primarily with its penetration into the secrets of human biology and the mechanisms of human

characteristics—thinking, in particular—denote the victory of man's genius, but at the same time contain elements of a Pyrrhic victory.

Man has created out of primary matter his own artificially organised world, a kind of anti-world in relation to nature. Now he has begun to create anti-man—a many-sided, soulless copy of himself. Moreover, he has begun to break down his own biological exclusiveness by opening up for his creations—the anti-world and anti-man—ways of invading the inner sanctum comprising his human uniqueness. Man has thereby confronted himself with a series of new problems, in the process of solving which he now has cause to fear himself.

Man has always had, and so far still has, the freedom, guaranteed by the laws of biology, to think about whatever he wishes. But he may lose it, because science has established the possibility, in principle, of directly intervening into the thinking process, the possibility of hooking up the thinking living brain of one person to a device through which the thoughts to another are transmitted or a thought programme is inserted. As time goes on and science makes some new discoveries, the possibility of destroying the secrecy of thinking and producing thought control machines may become a reality. This would create all the prerequisites for completely destroying the inner spiritual freedom on which the human "I" is based.

It is already clear that knowledge of the biological bases of heredity will in principle permit interference in the production of the human species and make artificial production of people possible. This means that scientific achievements used for non-humanistic purposes could not only perpetuate the inequality of people but also deepen it to the point of a biological necessity. At present, the moral problems connected with experiments in growing the human foetus outside the mother's womb and transplanting organs from one individual to another are the subject of semi-philosophical discussion. Tomorrow, they may be placed on the agenda of international scientific and political conferences.

However, the same achievements in learning to apprehend the laws of human biology and biophysics can also be realised in the opposite direction, that is, for the biological improvement of the human species. The fact is that every person is endowed with tremendous possibilities that make him by nature versatilely gifted. Discoveries of amazing new human abilities are being made one after another. Were we to meet the human beings of the not so distant future they would probably seem to be quite different from us biologically because of their ability to use those biological reserves that are latent in us but have not as yet been tapped. Adherents of an "élitist" ideology, be it a church ideology that advances a clerical élite, an aristocratic ideology based on the notion of inherited "noble blood", or a bourgeois-technocratic and racist ideology that advances an élite of "born" managers, outstanding in their know-how and talent—all of these have spared no effort to establish the natural right of a few "chosen ones" to decide at their own discretion the destiny of the masses who are allegedly dim-witted by nature. This is a kind of attempt to

legitimatise the results of an inadequate understanding of man's inner world and, citing these results, to substitute for the harmony of varied abilities in society a system where inherited "blood" or inborn talent dominates over so called "mediocrities"

Incidentally, any human "dim-wittedness" is the product above all of the social environment and life circumstances, the consequence of an imperfect organisation of social life preventing the full use of the human potential. The era of major social changes that began half a century ago with the birth of the Soviet system has already shown itself to be an era of discovering huge reserves of mental power in the broad masses. It has already given the world a multitude of talents that would never have emerged in any other social environment.

One of the central tasks of a communist society is to reveal to the fullest every individual's potential, to bring about the improvement of all people, to lift them to immeasurably higher psychological and biological levels at a faster rate than would be possible in the course of natural evolution. To help society carry out this task is one of the greatest moral obligations of science. Such biological and social improvement does not imply a universal standardisation of people. Innate characteristics distinguish and will always distinguish one person from another. If with the help of science all people were to become the same by nature, mankind would degenerate. The ideal human society is not one in which all people are exactly alike, but one in which every individual talent supplements all the others and, in conjunction with them, consciously acts for the achievement of a high goal. The creation of such a society (reference here is to a communist society) is impossible without the help of science.

Under communism, science will become such an organic part of social life that the very existence of society will be impossible without the flourishing of science and the participation in it of great masses of people, and in the distant future, perhaps even the majority of mankind. The involvement of science in the improvement of man's world will apparently proceed not only through social channels as it applies itself to man's biological system that was formed in the course of its preceding natural evolution. It is fully possible that science will not only find ways to effect a general biological improvement of man, but also to effect the spiritual improvement of people with the help of biology. Exactly how this will take place is hard to say. We will only remark, in jest, that the incursion of science into the process of forming the spiritual make-up of people will put to shame those who now deny the dependence of morality on science.

Seriously, however, the harmonious structure of the social system necessary for a high level of morality can never take shape "by itself", that is, without the conscious involvement of the forces of science in life. One of the most important components of such a structure is the content and character of society's culture.

MORALITY AND CULTURE

Any occupational labour is inevitably one-sided. Therefore, when a person's work activity is limited by a narrow specialty, he has less

opportunity to make use of all his abilities, and this tends to produce a one-sidedness of views and actions. In cases of extraordinary talent, of course, even people who are one-sided in their interests and actions can produce outstanding scientific results. But a one-sidedness of views and actions often brings a man into conflict with other people and with society, which has a detrimental effect both on the individual himself and on those around him.

The most general environment that counters one-sidedness, involves man in the diversity of life, activates his thoughts and feelings, and makes his various abilities "work" for each other is high culture. Figuratively speaking, not only Einstein but also science benefited from the fact that he played the violin. Culture, in the broad sense of the word, with its complex arsenal of information, thoughts and feelings, is the powerful action stimulator that helps to produce independent thinking individuals with deep and complex feelings, that can kindle the sparks of a person's latent talents, awaken creative thought in him, and enhance his intellectual vigour.

Culture is something more than a profession—even the most intellectual. It includes the culture of feelings, will and desires, the culture of behaviour, and physical culture. One can be a scientist, engineer, artist, or actor and still be a low-cultured person. Culture is that composite and specifically human factor that goes into the very meaning of human existence, regardless of how much it may be mechanised or automated. In ennobling (or destroying) the human personality, the various kinds of culture thereby influence social development and scientific and technological progress.

Being a constantly operating factor, culture is an especially important force whose social role grows as the material welfare of society rises and as more and more time is made available to every person for engaging in freely chosen activities. This time can be spent on improving the personality or for destroying it, for example, by loafing, drinking, etc.

Communism is a society made up of independently thinking, enterprising individuals who strive to make their contribution to the process of human culture, and they do so because of the specially developed inner need for such activity, which is morally supported by society. This requires more and better forms of individual self-expression beneficial to mankind, and the cultivating in every individual of a professionalism, a desire for varied creative contacts, and the feeling of deep inner responsibility to society for the results of his life, including his moral life.

Communism begins with the complete satisfaction of the basic material needs of society (the principle of "to each according to his need")—but not this alone. The multiplication and improvement of material values under communism on the personal plane is directed not so much towards providing more and more comforts of life as towards satisfying man's inexhaustible inner needs, his desire to know the world and to improve it. In this sense communism is not only the highest material, but also the highest spiritual construction of society, where material well-being is achieved through the inspired labour of

all people, predicated on their common high culture and the predominance of high moral ideals. The correct scientific organisation of the social structure and of the dynamics of social development is the guarantee against man's intellectual degeneration and emotional impoverishment, for it creates the conditions under which culture is capable of becoming a real antidote against such phenomena.

Science-fiction writers have concocted many stories about the technology of the future. But, with few exceptions, they have so far written little of the culture and morals of the future. Science-fiction literature often portrays morally depraved persons or people of low culture living in a society well advanced in technology but underdeveloped in the cultural sphere. Ideationally, it may be conjectured that such a gap between science and culture can occur. But only if in the course of history mankind is overpowered by the forces of obscurantism. In a scientifically organised, communist society, however, this cannot happen, inasmuch as science by its nature is humane and human, and also because in such a society it is inseparable from the general tasks of culture and high moral ideals. Genuine science does not concoct, it reveals that which corresponds to objective laws. In this lies its life-asserting power and the reason for its inevitable penetration into all, including the moral, aspects of the life of human society.

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The Problem of Free Choice

The problem of freedom of will has come in for attention from many a generation of philosophers.

Beginning with the Epicurean *clinamen*,[1] a subject dealt with in depth by Karl Marx in his doctoral thesis, many attempts have been made to find a solution to this problem, which, if not obvious on the plane of sensation, is at least backed by the existent facts of natural science and based on physical or biological concepts. On the other hand, this problem has attracted the attention of thinkers who have interpreted freedom of will in the spirit of religion. The complexity of this problem, which cannot be satisfactorily explained from the positions of mechanical determinism, has facilitated the Indeterminists' polemic with representatives of pre-Marxist materialism, including natural-science materialism, and has encouraged idealist speculations on the matter.

A certain coolness shown by Marxists to this problem stems from its posing having been marked by excessive speculativeness even in classical philosophy: its rigid logical structure, and the devices and means used in its theoretical discussion—all these bore the imprint of metaphysical reflection that was alien to the developing dialectical-materialist mode of thinking.

The reprehensible speculativeness of the old approach consisted in the fact that philosophers who, while noting the immediate existence of the phenomenon of freedom of choice, proceeded, in its theoretical interpretation, from an abstract contraposition of freedom and necessity, thereby involuntarily being caught in the logical trap of diametrically interconditioned concepts semantically shaped by one another, so that any isolated use of them was devoid of any content. But even when individual thinkers such as Spinoza and Hegel were able to establish their inner unity, the analysis still remained speculative.

Idealistic speculations on the problem of freedom of will have been exposed by Marxist philosophy, which reconsidered it from the positions of dialectical materialism. At the same time, however, the problem itself has been shifted into the background of theoretical seekings and sometimes even termed a "pseudo-problem". This unflattering reputation has eventually been thoroughly reconsidered. Moreover, the question of the nature of free volition, its sources and

[1] The Latin translation of the Greek term παρεγκλισις (inclination, turning to one side) used by Epicurus to denote a special property of atoms to deviate spontaneously from the straight movement conditioned of necessity by the force of gravity.

structure, and its individual and social definitions is acquiring ever greater theoretical significance in present-day Marxist literature.

This can be accounted for by at least two circumstances. The first is the steady increase in the role of regulative factors in the life of society; the ever greater subordination of spontaneous historical advance to the conscious principle has engendered an urgent need for philosophical interpretations that can serve as foundation stones for a personal rationalisation of any possible clashes.

The second circumstance, in our opinion, consists in the following: the development of Marxist philosophy, which is constantly striving towards an integral scientific grasp of reality, has with ever more definiteness revealed the actual properties of man's purposeful (spiritual and material) activities, the study of which has called for a certain specification of accepted category nexuses.

Interest in the question of freedom of will is also mounting in connection with the immediate practical tasks of the construction of a communist society, one that is vitally interested in giving men and women an allround education, whose moral consciousness will allow them to act, in various situations confronting them, as really responsible subjects. It is clear that concrete action in the educative process cannot be the best possible if man's inner definiteness as the subject of free choice is not ascertained.

Studies on this particular problem, conducted with means supplied by specialised sciences (chiefly of the psychological and pedagogical cycle), have provided fresh material for philosophical generalisation. However, this methodological aspect of the problem has not been sufficiently studied. Man, as the object of social impact and the subject of practice, is unavoidably brought into the system of relationships, through which his activity as an individual finds expression and which can be deciphered only by methods of philosophical analysis. The thing is that the problem of freedom of will, like any other philosophical problem, cannot be dealt with at the empirical level; the correctness of any conceptual interpretation of that problem is verified by the historical practice of people as specific agents of integral social action.

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The logical *quid pro quo* of the problem of freedom as traditionally posed consisted in its presupposing, of necessity and in its internal objective, the ascertainment of the specific nature of the object, that being achieved through a devaluation of subjectivity itself. According to this scheme of constructing the programme, the individual, wherever he came out as the subject of free will, lost his concrete social definiteness, and ceased from being an agent of the historical process; conversely, when he has been a concrete agent of some social act, that definiteness has been regarded as incompatible with the essence of his subjectivity and the freedom of its manifestation.

Thus, on the one hand, the individual has been appraised as expressing a certain sociality and deprived of any impulse towards self-determination; on the other, he has been seen as the subject of freedom, alienated from sociality, because the very phenomenon of

freedom has been recognised as possible in the sphere of that kind of reality which allegedly lends itself only to some kind of extra-social evaluation.

The idea that the specific conditionality of the individual as an object of free will consists in his sociality has been dealt with in Marxist literature with good results. However, the problem has not been thoroughly explored even there. Sociality, in the capacity of an expression of the subject's essence, has often been seen by researchers as the sum of the object qualities in the conditions of his activities, which stand opposed to the subject and determine his behaviour. Karl Marx's celebrated proposition that "... the human essence is no abstraction inherent in each single individual. In its reality it is the ensemble of the social relations"[2] has often itself been understood in the abstract by the philosophers, who have not taken into account that, as a *non-abstract*, it is realised only through individuals, so that a determinist interpretation of the phenomenon of volition demands that the product, not only of the socialisation of the thinking person but also the personalisation of a formerly impersonal sociality should be seen therein.

Sociality can and should be interpreted, not only as the external determinant of the volitient subject but also as the genuine source of his activity interiorised in the "I" in the capacity of its own content, this permitting an understanding of the subject's being determined by the environment as a fact of his self-determination.

The mechanism of self-determination no doubt expresses the essence of free will, but the philosophical revealing of that mechanism is no simple thing. Many well-known thinkers have written of the difficulty of doing so, this being confirmed by each and every new variant of a decision.

The noted Soviet psychologist S. Rubinstein once defined the essence of self-determination as follows: the subject and his conscious actions enter the course of events, and their determination. "Inasmuch as man, thanks to his possession of consciousness, can anticipate... the consequences of his actions, he determines himself in an interaction with reality... a reality that has not yet been realised determines the actions through which it is realised," the scholar emphasised. "This conversion of ordinary relationship is the central phenomenon of the consciousness. It is with this that man's freedom is directly linked."[3]

It should be noted, however, that this concept does not solve the problem, but merely reconstructs it. The attempt to regard reality as not standing externally opposed to the subject turns into the assertion of another form of that "opposition". According to Rubinstein, the subject determines itself in an interaction with a reality "given to him in a reflected ideational form (in thought, in a mental image) even before it can confront him in perception, in a material form".[4]

[2] K. Marx and F. Engels, *Selected Works*, Vol. I, Moscow, 1969, p. 14.
[3] S. Rubinstein, *Being and Consciousness*, Moscow, 1957, p. 284 (in Russian).
[4] Ibidem.

If an as yet unactualised reality determines the action by which it is effected, then how can one explain that, even when not actualised, reality operates precisely as something given with a concrete content, that is to say, possesses concrete definiteness and purposefulness, at least in an ideational form? There seems to be good reason for the major thinkers of the past, when trying to solve the problem, having introduced the category of the "pure I" as the absolute principle from which stemmed the ability of the empirical "I" to confront external necessities.

As we see it, the Marxist approach to the problem should consist not in simply rejecting the speculative construction of the "pure I" but in dialectically sublating it and then showing structure of the reality through which subjectivity is realised as an integral and practically oriented reflection of being, as a result of which the external reality confronting the subject also becomes the reality of that subject. Of course, it is practice that operates as that reality, a scientific understanding of which presupposes an ascertainment of man's ability to perceive an object, sensuousness not only in the form of contemplation but also subjectively.[5]

In his interpretation of freedom of will, S. Rubinstein pointed out that the "logical course of events in which people take part is given effect through the medium of human will, not apart from that will, through the medium of conscious actions, not apart from them".[6] That is certainly the case, but mention of the specific definiteness of social patterns does not reveal the mechanism of that definiteness. In his conscious activities, the individual, as an agent of the historical process, does not always come out as the latter's genuine subject.

The individual does not escape from a sequence of events but participates in their determination, even when he does not realise the boundaries of his subjectivity and does not discern the borderline between the result of the actions of many individuals, and his own personal efforts. However, this point is of substantial significance to the problem of freedom of will. In the process of his self-determination, the subject of necessity tries to implement in the results of joint action the impulse stemming from his "I".

This in no way means that we stand for a narrowly psychological approach to the problem of freedom of will, or that we see, in the establishment of the individual's psychological determination, the only road to the solution of that problem. S. Rubinstein was right in rejecting an excessively psychologised posing of the problem of freedom and necessity in the form of the question of freedom of will.[7] However, he was right only in part.

In the first place, many thinkers who stressed the psychological aspect of the phenomenon did not deny its social determinativeness, holding that the difficulty lay in designating the specific nature of that determinativeness as purely psychological. The attempt to define the

[5] See K. Marx and F. Engels, *Selected Works*, Vol. I, Moscow, 1969, p. 13.
[6] S. Rubinstein, op. cit., p. 284.
[7] Ibid., p. 282.

fundamental distinction of causuality in human activities from purely objective causuality was evidently of positive significance.

In the second place, when we try to comprehend the contradictory link between freedom and necessity on the socio-philosophical plane, we must take into account that the latter, too, has its psychological aspect. Of course, the social does not consist only in the psychological, but it also proves to be a form of its being, inasmuch as the latter affects, not artificially isolated individuals but socially organised collectives, groups of people.

Consequently, freedom of will is not a purely psychological act in which the individual realises his inherent potentialities. It is a form of the practical activities of a sum of socially associated individuals, which expresses a particular aspect of the historical advisability of precisely such active associativeness. On this plane, the various stages of social man's material practice are at the same time stages of his freedom.

Thus, the "I", as the starting point in the chain of man's self-determination, is not so much a psychological as a sociological formation. The reality contained in the "I" operates as a personalisation of the social environment, and to such a degree that the structure of sociality itself finds, in the reality of the "I", merely a different expression in form (namely the subjective) and an assertion of its objective essence.

Thus, the subject of free will not only cognises his essence as that of social being, but also practically actualises the latter as its own essence and as the realisation of his own reality.

Why is it that when we analyse the process of the subject's self-determination, we indicate self-consciousness as the main structural component of freedom of will? It is because the function of consciousness as the internal aspect of the subject's activities, through which the realisation of any social pattern is mediated, is obviously a double one: consciousness, immanent in the subject on the plane of content and taken as a socio-historical phenomenon, plays the part of the objective factor in respect of the subject; it is only through a self-consciousness as shaped and manifested in the process of practical activities that these functions of the consciousness coincide. This translation of consciousness from the plane of external objective reality to that of the individual's subjective structure — the interiorisation of his objective and actual strength he possesses in the capacity of a subjective (and therefore subordinated to the subject) real, is effected as an act of the practical realisation of the subject's self-consciousness — an act of his self-determination.

"In envisaging the consequences of his actions as mentally realised by himself," S. Rubinstein wrote, "man determines himself towards a reality that develops in one way or another, that depending on his actions."[8] However, is he a genuinely free subject of that process — not merely an agent but also a subject of a given relationship? To a considerable extent, that is determined in the measure in

[8] S. Rubinstein, op. cit., p. 284.

which his mental realisation of the given relationship becomes a matter of concern to his consciousness, and measure in which that "transformative" element becomes an internal focus of the subject's actions, through which a certain reality develops.

Historically, a mental realisation of that relationship is a process of eliminating the various forms of the alienated consciousness. In the first place, the subject is not always aware of that relationship, or else is aware of it, but does not interpret it appropriately, this giving rise to a persistent phenomenon of a fatalistically alienated consciousness. In the second place, the subject absolutises that relationship, interpreting it voluntaristically. Sometimes he understands it as a mediated unity of the two structures. However, it is only in the process of research based on dialectical materialism that the scientific form of awareness of the relationship is evolved, when the inclusion of the subject in the chain of events is analysed, not only on the plane of consciousness but also of self-consciousness.

The role of self-consciousness as a "transformative" element in the purposeful activities of man — a moment personifying the external determination of his behaviour — is distinctly manifested in acts of choice.

* * *

As has already been noted, a study of the contradictory nature of free will from the positions of dialectical materialism presupposes, not only a designation of the external function of the consciousness in various spheres of man's object-material activities (the activity of the subject, and that of the consciousness) but also a definition of the actual moment of practice, in which the interiorisation of that function is actually effected in the capacity of the personalistic phenomenon of freedom. Operating as the result of the impact of the surrounding social environment, the "I" at the same time actualises its qualitative transformation.

As an expression of man's unique individuality, as well as the essence of his subjectivity ("the sum of all social relations") the "I" is interlinked in polar tension, together comprising the source of man's activities, and determining his nature as the subject of social practice. At the same time, the "I" is not the mechanical sum of the assimilated social conditions, but is a result of their mental processing, in a comparison with which the unpersonalised structures of sociality operate as another kind of objectness that is not in keeping with the essence of the subject. "... The world does not satisfy man," Lenin emphasised, "and man decides to change it by his activity."[9]

The interiorisation of the products of social consciousness taken in the function of reflection is effected as a personalised specification of the general structure of man's object-oriented activities. The essence of the latter was defined by Karl Marx as follows: "The coincidence of a change in circumstances and human activity, or *self-change* [my

[9] V. I. Lenin, *Collected Works*, Moscow, Vol. 38, p. 213.

italics — *K. N.*] can be considered and be rationally understood only as revolutionary practice." [10]

The understanding of human activity as self-change comprises the core of the Marxist concept of the role of the subjective in social development. Taking an object subjectively, on the plane of man's sense activities, means correlating it with the subjective purposes. The definiteness of an aim is doubtlessly linked with the conditionality of the "I" by the external determinants of its activities, but specifically by those which function in the capacity of internal determinants. Thus, the interiorisation of the structure of practical activity and of the consciousness of activity is effected as the translation of the mechanism of the determination from the external into the internal plane, as a process of self-determination by a subject possessing a status of totality in respect of individual manifestations of activity.

The mechanism of the subject's self-determination in individual manifestations of activity is easily registered in patently alternative conditions. Choice is an act of free will, since it depends on the object whether it will be the outcome of his consciously adopted decisions. Any exclusion of the subject from the chain of the conditions of choice inevitably makes the situation of that choice purposeless.

The situation of choice is always functional in character: it is specifically human. "... The animal does not enter into '*relations*' with anything," Karl Marx and Frederick Engels wrote in *The German Ideology*, "it does not enter into any relation at all. For the animal, its relation to others does not exist as a relation." [11] The structure of man's interaction with his environment, his practical activities, is different in principle. The latter are mediated by man's consciousness and self-consciousness, by the structure of his "I". "*Where there exists a relationship, it exists for me.*" [12] [My italics — *K. N.*]

A situation of choice arises where this "relationship-for-me" can find realisation only in the process of a rational solution of a contradiction which has arisen, by means of preference given to any one of alternative trends. That preference comes from the "I", since it affects a relationship existing for me in the quality of my relationship. Whenever the "I" ceases from being a polarity of choice it ceases from being an "I" and turns, from a *causa finalis* into the blind *causa efficiendis* of a certain process, from an aim into a means, from the spirit of a substance into a substance of the spirit.

Thus, choice is the presence of freedom of will. It was evidently for this reason that, in the past, the category of choice was one of the most "hard worked" in any discussion of the question of freedom of will. Following a tradition descending from the classics of philosophy, free choice is considered a real field of the free will, its condition, and pragmatic synonym. It has long been noted, however, that, in the social aspect of the will, any level of freedom of choice does not

[10] K. Marx and F. Engels, *Feuerbach. Opposition of the Materialistic and Idealistic Outlook*, Moscow, 1966, p. 103 (in Russian).

[11] K. Marx and F. Engels, *The German Ideology*, Moscow, 1968, p. 42.

[12] Ibidem.

always ensure the phenomenon of free choice. That is because the objective alternativeness of a situation — the possibility of choice as something given to the subject from without — becomes an inner fact of free choice only on the plane of cognitive activity, this permitting the individual to find the best possible form of resolving a situation of choice in favour of one of the possible outcomes.

All this makes possible the conclusion that free choice is, in a certain sense, a choice of freedom. The realisation of free choice depends, in considerable degree, on the subject of choice, his intentionality towards the freedom of choice. Freedom of choice, as socially conditioned by an historically definite variativeness of social development, becomes a reality, being objectified in the individual or collective actions of people, thereby establishing itself in the capacity of an attribute of the subject's being, a form of his essential self-realisation.

An analysis of freedom in respect of the situation of choice can therefore be effected in two aspects of the interaction between subject and object: the objective and the subjective. In the former case, a study of the objective factors of a given situation of choice reveals, so to say, the ontological source of the phenomenon of free will. A subject which in no way strives towards alternativeness proves subordinated to the latter by the objective course of things. The subject is of necessity included in the system of contradictory relationships and finds the meaning of its activities in the resolution of clashes. The subject is, as it were, subordinated to freedom and is indissolubly connected with it, as its agent, its spontaneous vector, since, in any of its actions, it behaves selectively: such is the external definiteness of action.

In the literature on freedom of will, this aspect of the problem is treated from various angles. With the Existentialists, who have "usurped" the problem of freedom, it has risen even to the rank of a world-outlook principle. This approach, however, which registers the objective premises of the phenomenon of freedom does not reveal its subjective structure: we see a statement of volition, in which what is true is not yet distinguishable from what is not true; actual freedom is indistinguishable from arbitrariness.

The second aspect of a consideration of the phenomenon of freedom — the subjective — reveals it to us as a concrete act of subject-object interaction mediated by the self-consciousness. It is characteristic that in his notes on Hegel's *Science of Logic*, Lenin distinguished this correlatedness of freedom and subjectivity on the plane of content as a point of great significance: "NB Freedom = Subjectivity ("or") End, Consciousness, Endeavour NB." [13] The direction of choice, and consequently the real measure of its freedom, depends decisively on the measure in which the choosing subject has mastered the true content of an alternative situation.

Thus, both free choice and non-free choice correspond to the objective definiteness of the freedom of choice. In our opinion, the

[13] V. I. Lenin, *Collected Works*, Vol. 38, p. 164.

gist of the matter consists in the directions of choice not being the same (an aspect of the problem which does not always come in for attention). We are not referring to the trite fact that, within the range of possible outcomes the choosing subject has to deal with, each result may be marked by a different level of possibility. Through a probability characteristic of a process, one can discern a more profound link between the variative structure inherent in it and the trends in its development.

As an agent in the process, the individual operates as part of a certain statistical *ensemble*, since the social process, as a whole, is subordinate to patterns of a statistical order. However, in each individual instance (and in realising the course of events in one degree or another), the subject constructs a model of his behaviour, attempting to establish, within the channel of his actions, a system of single-value correspondence between the premises of an action and the projected final aim. This is achieved in greater measure, the more profoundly the subject has mastered the variative structure of the process, and the more refinedly and dialectically he grasps the objective trends of development. Therefore, the subject can "work", in concrete situations of choice, not towards a result that has the greatest probability of achievement in the given conditions, but towards that which corresponds most fully in content with the deep-lying dynamics of the social process. It is this that explains the paradoxical, at first glance, viability and promising future of behaviour orientated towards an ideal, as against behaviour based on a complex of utilitarianism, on considerations lying on the surface of advisability. The subject's orientation towards a social ideal that reflects the essence of the course of events reveals his ability to come out as a really free being. From this point of view, the activity of free choice operates as a means of eliminating the variative indefiniteness of the social process, as a kind of "transition" from the statistical to the dynamic determination of a reality that is being given effect.

A classification of actions involving choice—this in respect of structure, objects of choice, degrees of generalisation, heuristic tension, etc.—does not come within the purview of this article. However, we consider it necessary to touch upon only one essential point of the problem—the subject's self-determination in the shaping of free action.

At the level of the individual's emotional life, the inner complex of determination takes shape in a variety of desires, inclinations and considerations. In this sense, desires and inclinations are also a form of expression of the objectness of the "I": they are functions of subjectivity. A normal subject is not a slave to his desires. The subject is always relatively independent of any particular desire. The latter is experienced and "registered" by the individual as a certain sequence of portions, a chain of "quanta".

The quantification of desires and inclinations is also expressed in their not operating as direct *realia* of the subject's actions, though they do operate as direct *realia* of his "I". They lose their immediately impulsive character at the rational stage of consciousness and are

realised in the form of motivations of various degrees of emotional concentration. As such, motives are of necessity included in a definite conceptual structure of the subject, the system of his world-understanding and past experience, and can accordingly be appraised, measured against one another, and be subjected to intellectual control and correction.

Against this background and in the process of the formation of purposes, there takes place a concretisation of some particular sphere of man's activities, a choice is made of the concrete objects of his purposeful activities, and certain stereotypes of behaviour develop. As a rule, the choice is mediated by other motivated links and regulators. It is tested axiologically at various levels of the activities of the mind and the intellect and is moulded and fixed by the political, moral, aesthetic and other structures of the subject's consciousness. It is in so complex and indirect a way that a desire or inclination is gradually included as an individual component in the subject's constantly functioning motivational sphere, and begins to play a definite part in the mechanism of self-determination.

In all phases of choice (the cognitive and the immediately practical), the subject reveals himself as a socially determined creature but, for that reason, a being with potential freedom of volition. Just as a phenomenon does not separate the cognising subject from the essence—this despite all the trancendentalist arguments, social determinatedness—despite all the assurances of the indeterminists—does not separate the subject from freedom: the former because a phenomenon (as already proved by Hegel) is always essential, a form of the being of essence, and the latter because social determination (as distinct from natural causality) is a form of the being of the subject's freedom, a mode of his self-realisation.

* * *

In whatever sphere it is effected, the activity of free choice today affects, in one way or another, the sphere of the individual's social and political orientations. The problem of the individual's activities cannot be taken up without a consideration of the question of responsibility.

Bourgeois philosophers say a great deal about freedom and people's responsibility in the life of present-day society, but they are incapable of throwing light on this problem from the scientific positions of materialism. They see the criteria of responsibility, not in the results of human actions, in their relatedness to the human and class norms and sets of the subject's behaviour as a social creature, but in individuals' speculative reminiscences on certain non-sensory contacts with the ontological structure of being, and so on. The selfsame representatives of bourgeois science who, in proclaiming their adherence to "free" and "unfettered" research, follow the behaviourist tradition, simply ignore, in their philosophical conclusions, the problem of free choice. The behaviourists, for instance, deny the very

possibility of free choice. In their opinion, choice is the subject's mechanical reaction to the impact of the environment. Thus, N. Ach asserts that there can be no talk of choice, since, from the psychological point of view, all processes proceed in such a way that no room remains for choice.[14] Edward Titchener was of the same opinion, stating that in the reaction of choice, we can effect various operations, but we do not choose.[15]

On the philosophical plane, the behaviourist doctrine is merely another variant of a theoretical sanctification of the practice of the purposeless and asocial behaviour in a self-enclosed human "monad", who reacts mechanically to various "cultural stimuli", therefore feels no responsibility for their fate, and is negative towards all spiritual values lying beyond the sphere of his trite utilitarianism.

This trend is inherent in many ramifications of bourgeois ideology. It is characteristic that Existentialism, which holds a diametrically opposite stand as compared with Behaviourism, in its attitude towards the phenomenon of freedom, also cancels, in essence, the social significance of the problem of responsibility.

Existentialism's point of departure is the proposition that the individual's social behaviour can and should be presented as emerging, as it were, beyond the framework of social conditionality. What we have is Existentialism seeking for the roots of human freedom outside of human society and its history. Man is abandoned in this world (Heidegger); he is condemned to be free (Sartre).

The structure of external reality (natural and social) is such that it, of necessity, places man in various alternative situations, without in any way determining the direction of his decisions. This latter is the outcome of his subjective efforts, for which he bears the full measure of responsibility, not to society but only to himself, since there is nothing in the links between the subject and society that can determine his choice and at the same time serve as a foundation and measure of the social advisability and significance of that choice.

In its understanding of the phenomenon of responsibility and of its structure, Marxist philosophy also recognises the tremendous role of subjectivity, of man's self-consciousness. However, it regards subjectivity itself quite differently in principle.

There can be no doubt that the individual makes his choice at a definite level of realisation of the tasks and aims of his life; the character of the choice made depends, in certain measure, on that realisation. On the other hand, the result achieved on the basis of any act of choice also becomes an act of awareness of its rightfulness. It is on this plane that the individual is social: the rightfulness of any act of behaviour can be determined only if the social "yardstick" is applied to it, and if its significance is established in respect of the system of social links.

Man is, of necessity, a social creature, which is why, irrespective

[14] See L. Vygotsky, *The Development of Higher Psychological Functions*, Moscow, 1960, p. 114 (in Russian).

[15] Ibidem.

of his desires, it is the social environment, the system of social relations in which he is included, that holds the criterion and measure of all his manifestations. The subject is free in the choice of his actions, but this does not take him beyond the borders of social links, and is no "breakthrough" into a kind of asocial space, in which he allegedly acts as an absolutely unique being, a kind of "pure" individuality. Man always acts as a member of a definite social community. Consequently, any act of choice with some content, however individual and personal it may seem, can and should be regarded, as a rule, as a moment in the functioning of that community, inasmuch as the latter is a link in the constantly functioning system of links among individuals. Man acts as a single subject of choice, but it is through him — by means of his acts of choice in the totality of the acts of many other individuals — that larger social formations — groups, collectives, parties and classes — give effect to their activities in the sphere of choice.

The phenomenon of responsibility and the imperative of duty that it induces are realised at this inter-individual level of links between the subject and his environment. In other words, the nature of the subject's responsibility for his actions hinges on the system of those links. Man's responsibility grows together with his mounting self-consciousness as a being that freely chooses, but thereby realises in his acts of choice something greater than simply some individual aim.

In bourgeois society, individual freedom, as Karl Marx pointed out, "places any man in a position in which he regards another man not as a *realisation* of his freedom, but, on the contrary, as the latter's *limit*."[16] That is why the individual's responsibility to the integrity of society is inevitably of an alienated and negative character.

In the conditions of the communist system, the content of responsibility becomes positive, in the main. Responsibility operates as a form of such self-realisation of man's individual freedom that takes place on the basis of his scientific and practical self-consciousness.

[16] K. Marx and F. Engels, *Works*, Vol. I, p. 401 (in Russian).

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The Specific Features of the Genesis of Capitalism in Russia as Compared with Western Europe and the USA

The successive change of socio-economic formations is an indefeasible law of the single worldwide historical process. The conditions in which formations succeed one another were scientifically analysed by the founders of Marxism-Leninism. Marx, Engels and Lenin made an especially detailed study of the genesis of the capitalist mode of production; the fundamental conclusions of their research provide Marxists with the methodological basis for studying the emergence of capitalism in various countries of Europe, America and Asia.

A necessary prerequisite for the emergence of capitalist relations is a definite level in the development of the productive forces, which have to reach a point at which not only the technical but also the social division of labour takes shape, at which industry has separated from agriculture, and economic specialisation between the various regions of the country has become evident. That is the starting point for the development of commodity production and the processes invariably attendant upon it: the formation of a sufficienty large market and the growing role of commercial capital. Even at that early stage in the genesis of capitalism, the merchant becomes a buyer-up of the goods produced by scattered petty producers, no longer merely operating as a middle-man but also helping to transform production itself. However, commodity production cannot move into the capitalist stage without the primitive accumulation of capital, which results from the massive expropriation of the actual producers and the formation of sufficiently large-scale money capital. This creates the conditions for the formation of opposite classes: on the one hand, free sellers of labour-power, and on the other hand, owners of the means of production, who appropriate, in the form of profit, the surplus-value produced by the workers.

Industry has to play the leading role in this complex process. It outstrips agriculture and consistently goes through these stages: simple cooperation; manufacture based on the technical division of manual labour; and the factory, equipped with machines fully or partially substituting for manual labour. Capitalism wins out only when a technological revolution occurs in industry, when large-scale factory production is created and sizable masses of workers are concentrated at the enterprises. It is radical advance in the development of the productive forces that works a fundamental change in the old social relations, draws masses of women and children into the factories,

promotes the rapid growth of towns, generates an intense struggle for markets and sharpens the class struggle between the employers and the workers.

In accordance with the changes in the basic, economic relations, fundamental changes also take place in the political, legal and ideological relations between men, while the changing superstructure begins to have a retroactive effect on the course of socio-economic life. The transition from feudalism to the capitalist mode of production is accompanied by profound class conflicts: revolutions with the active participation of working people or reforms put through by the feudal authority under the pressure of mass revolutionary movements.

Such are the general regularities inherent in any possible variant of the genesis of capitalism, whatever the country or continent. That is not to say, however, that the process described above takes place simultaneously and assumes uniform shape everywhere. In his writings, Marx repeatedly warned against such a primitive notion of the origin of capitalism. By applying the comparative historical method, we are able not only to consider the general laws governing the genesis of the capitalist formation, but also to bring out the national specifics of this worldwide historical phenomenon. That is the only way we can obtain a correct dialectical understanding of the genesis of capitalism in the various countries, notably Russia.

* * *

In his lifetime, Marx made a deep analysis of the genesis of capitalism in Britain. The facts of life in Britain helped to produce the clearest picture of the general laws governing the change-over from the feudal system to the capitalist system, because Britain offered the classic example of this change. That is why, before going on to a comparison of Russia and the major countries of Europe and America, it is well worth-while to analyse the British example.

Nature itself helped Britain to rise to a leading place in the economic life of Western Europe. This great island, lying off the coast of Europe in the Atlantic and the North Sea, was not only protected from outside attack, but, and this is especially important, was naturally open to extensive maritime trade. Britain's population was relatively homogeneous and sufficiently densely settled, and both these factors helped to accelerate the pace of her economic development. By the 14th and 15th centuries, English merchants carried their goods not only to the European continent, but also to the remote countries of the East. Following the discovery of America and its settlement by English immigrants, trade ties were extended westwards. In the early 16th century, large-scale manufacture (mainly of cloth) began to take shape in Britain, undermining the mediaeval guilds. By then, English landowners who paid quitrent to the feudal lords, had succeeded in escaping from feudal bondage by means of acts in private law. The benefits to be derived from sheep-breeding, the source of raw materials for the cloth industry, induced the landowners to start the enclosure of the common lands; the farmers, despite fierce resistance, were

ruthlessly driven off their land, some to become paupers, others wage-workers. The big landlords and the manufacturers battened on the ruin of the small and independent working people. This marked the start of the process known as "primitive accumulation", which in the 16th and 17th centuries was intensified by the appropriation of monastery lands, the plunder of state property and seizure of drained bogs.

As indusry grew and trade developed the English bourgeoisie gained in strength: it did not confine itself to increasing its economic influence but in alliance with the "new gentry", which was involved in capitalist relations, started a drive against the absolute monarchy and the established church. Masses of working people in town and country were the driving force behind the 1642-1649 revolution, but they were not yet sufficiently well organised and could not use the victory to promote their own interests. The confiscated lands of the royalists and the bishops were bought up by the monied élite; feudal limitations on bourgeois property were eliminated but feud levies on the peasants were maintained; the enclosures of common lands continued, becoming ever more massive and ruthless. In the 18th century and the first few decades of the 19th century, Parliamentary acts were passed handing millions of acres of land to the landlords and the bourgeoisie. This forcible expropriation almost completely annihilated the yeomanry, the free class of English peasants. The mid-17th century revolution brought about a fundamental change in the balance of social forces in the country. The colonisation of distant countries, above all possession of the riches of India, greatly enhanced the influence of English capital. Britain became Europe's leading maritime power and, on the basis of her colonial might, rapidly advanced along the way of capitalist accumulation. The creation of bank credit and the introduction of protectionist tariffs greatly promoted the accumulation of money.

A new stage in the genesis of capitalism was marked by the industrial revolution, which started in the early half of the 18th century; machinery helped to create the large-scale factory industry, first, the textile and then the iron and steel and metal-working industries, inflicting a mortal blow on small-scale production by hand. Simultaneously with the reconstruction of industry a fundamental rationalisation process took place in agriculture. The use of fertiliser, the growing of rootcrops, crop-rotation in farming, the use of improved implements and machines required of farmers large-scale capital investments. Not only members of the aristocracy, but also of the urban bourgeoisie and the newly-rich peasants swelled the ranks of the rural landowners. Capitalist lease-holdings became the dominant phenomenon of agricultural life in the country. Society in Britain was finally split into three main classes: the large landowners, who preferred to receive land rent without doing any work; the commercial and industrial bourgeoisie and the gentleman farmer, who used wage labour to make fat profits; and the urban and rural working people, who sold their labour-power and existed on wages. Thus, the genesis of capitalism in Britain was marked by a radical break-up of feudal

relations, the disappearance of the class of small rural producers, and complete subordination of economic life to the laws of capitalist development.

In France, capitalism had a different genesis, although it had some common features with the genesis and development of capitalism in Britain. Like Britain, France had a long maritime border, lying, as it did, on the shore of the Atlantic and the Mediterranean, a factor which promoted the early development of foreign trade. With the growth of commodity-money relations the peasants in France, like those in Britain, escaped from feudal bondage at an early period. Towards the end of the Middle Ages and the start of the new period, the peasantry consisted of two main sections: the *censitaires* (copyholders), who continued to pay quitrent to the landowners, and the leaseholders, who held small plots of land mainly for payment in kind. In France, as in Britain, the landowners rarely had their own fields, and confined themselves to receiving feudal rent. Although the territory of France was fragmented into various provinces, each with its own ancient traditions, the population was as homogeneous in national and economic terms as that of Britain: there was no sharp distinction in level of economic development.

However, France (in contrast to Britain) took the path of capitalist development later: her foreign trade was not as broadly developed; her internal exchange grew at a slower pace and without destroying the subsistence farming in the backward areas. France's colonial expansion began only in the 17th century and could not provide for the local merchants and industrialists the fabulous wealth that fell to the lot of the English colonialists. There were equally marked distinctions between the political systems of the two countries: in contrast to Britain, where the right of self-government was wrested from the kings very early on, France on the eve of the new period became an absolute monarchy resting mainly on the feudal aristocracy and safeguarding the survivals of mediaeval institutions. Although the peasantry enjoyed personal freedom, it groaned under the burden of numerous state taxes and levies in favour of the clerical and the secular feudals. The result was slower growth in primitive accumulation and less rapid development than in Britain not only of the centralised but also of the scattered manufactories, and the continuation of the state farming-out system and aristocratic privileges which tended to narrow down the domestic market. Whereas the 17th-century bourgeois revolution in Britain had paved the way for capitalist development, in France in that period the absolute monarchy just reached the peak of its development.

On the other hand, despite the landowners' attempt to appropriate the common lands, the French countryside managed to retain the institution of the common land and the class of small peasantry. But in France in the 17th and 18th centuries, the guilds were also gradually giving way to capitalist manufactory; here too, large-scale enterprises (mainly engaged in the manufacture of luxuries) flourished, while the bourgeoisie slowly won its economic positions in the domestic and external markets. At the end of the 18th century, the disintegration of

the absolutist feudal system sparked off a financial, commercial and industrial crisis, which went hand in hand with the impoverishment of the farmers and workers.

The bourgeoisie's struggle for power merged with massive uprisings by the peasantry and the urban plebs. The French revolution of 1789-1794 assumed a pronounced democratic character. In the process of revolutionary change, the survivals of feudalism were completely eliminated, while the church lands and the estates of the émigré aristocracy and persons hostile to the revolution were confiscated and sold off. Rank-and-file farmers also bought up small plots. In contrast to the peasantry in Britain, the French peasantry not only survived but in effect secured for itself parcel holdings, which up to a point enabled it to engage in independent small-scale farming.

The bourgeois-democratic revolution gave impetus to the industrial revolution, which gathered momentum mainly in the early decades of the 19th century. France became a major capitalist power, but did not succeed in reaching the level of development attained by Britain. Comparing the economic condition of the two countries in the 1850s, Marx observed that the parcel system in France "kept a sizable part of the population tied down to the land and occupations on it". That is why industrial enterprises in France had smaller concentrations of workers than those in Britain, and had relatively fewer machines and steam engines per worker, and consequently, a lower productivity of labour. Marx added: "This shows how necessary the expropriation of land is for the development of large-scale industry."[1] But as capitalism developed, parcel holdings could not withstand competition from the large-scale farming enterprises, gradually falling victim to usurers and giving way to large estates and vast capitalist farms.

Thus, a distinctive feature of the genesis of capitalism in France was the temporary prevalence of peasant parcel holdings and her lag behind Britain in technical equipment and industrial concentration.

Prussia, the largest of the German states, offers a different example of the genesis and development of capitalism. In contrast to Britain and France, Prussia was far away from the maritime trade routes: her ports on the North and Baltic Seas could not compete with ports on the Atlantic in the export and import of goods. The Thirty Years' War (1618-1648) led to protracted economic stagnation and kept the country divided into independent principalities. In the latter half of the 17th century, when the free peasants in Britain were being subjected to massive expropriation and the French peasants enjoyed personal liberty, even if they did suffer from feudal levies, the peasants of Prussia inhabiting the area east of the Elbe, were subjected to a "second bondage"; under the influence of the increased demand for grain and agricultural raw materials on the part of Britain and Holland, Prussia's feudal landowners converted their peasants partly into "hereditary subjects" and partly into landless labourers. The landowners derived large incomes from their estates by enlarging the area under their own crop and forcing their serfs to do corvee.

[1] *Marx and Engels Archives*, Vol. II(VII), Moscow, 1933, pp. 249-257 (in Russian).

At that time, handicraft guilds with coercive regulation of production and marketing of products dominated Prussia's industry. There were few cities and commercial ties between town and country remained weak and incapable of enriching the burghers. Despite the growing export of agricultural produce, much more was imported from abroad, so that the trade balance carried a loss for the state. The Electors of Brandenburg, who became the kings of Prussia, set up a strong military-feudal monarchy standing on guard of the feudal system and the privileges of the gentry. Separated from the other German states by customs boundaries and divided in like manner internally, the Prussia of the 17th and 18th centuries was an economically backward state abiding by the traditions of the feudal Middle Ages.

However, even the remote regions east of the Elbe could not escape the influence of the world economy. For military and fiscal reasons the Prussian kings were forced to take the path of economic innovations. With its population decimated by the Thirty Years' War, Prussia was settled by immigrants from the West of Europe, among them the French Huguenots, skilled artisans and merchants. While carrying on a policy of aggrandisement and building up their armies, the kings of Prussia encouraged the development of large manufactories supplying the army with weapons and accoutrements. Independently of the state power, textile and metal-working industries free of guild regulation developed in the rural localities, gradually falling under the control of the buyers-up with respect to the sale and production of goods. Consequently, the process of primitive accumulation was taking place, but it was a slow one, meeting numerous obstacles on its way: serfdom narrowed down the labour market, while the tenacity of the subsistence farming and the absence of colonies made it impossible for Prussia rapidly to accumulate money capital.

Handicraft guilds continued to dominate in the towns. Only in a few industrial centres — Berlin, Silesia and Solingen — were the scattered manufactories developing into large centralised enterprises. The emergent Prussian bourgeoisie was weak economically and politically, and was dependent on the state power and the feudal class of Junkers.

Despite her active foreign policy, Prussia was unable to compete economically and, therefore, militarily with bourgeois France, who had been transformed by the 18th-century revolution. In 1806, Prussia was routed by Napoleon's army and was forced, for her own salvation, to commence a reform of its backward agrarian system. By the 1807 edict the privately owned peasants in the East Elbe regions were released from feudal bondage (the peasants owned by the royal family and those of Pomerania had been formally released back in the late 18th century). This edict was followed by other laws on the redemption of feudal services, with from one-half to two-thirds of the allotments passing into the ownership of the peasants, and the rest of the lands going to the landowners by way of compensation. These reforms met with strong resistance from the Junkers and were subsequently hedged with various limitations: the categories of peasants subject to the announced "regulation" were markedly reduced, while

the redemption payments were greatly increased. At the same time, communal practices were eliminated, among them the compulsory crop-rotation and the open-field system.

The reforms paved the way for the more productive use of land: the three-field system gave way to the full crop-rotation system, the development of feed crops and the extensive raising and industrial use of potatoes and beet root. However, these changes took place mainly on the landed estates, and on some rich peasant farms; with few exceptions, the small farmers continued to use routine methods of cultivation.

Nevertheless, the agrarian reforms had a definite influence on the development of industry and trade: in the decade that followed the number of centralised manufactories increased and machinery was introduced on a much larger scale. From 1835 on, Prussia began to develop her railways, many roads were laid, and shipping on the big rivers was intensified. Large fairs in Leipzig and Frankfort-on-Oder testified to the successes of internal exchange. Internal customs boundaries were lifted and the foundations were laid for the future Zollverein: The extraction of coal and iron ore and the export of iron and metal products and also of textile goods and haberdashery increased. Prussia s economic life was markedly enlivened by the growing differentiation of the peasantry and the use of wage-labour. In this period of transition from feudalism to capitalism the working people of town and country were in extremely hard conditions: industrial workers and farm labourers were subjected to fierce exploitation, while the middle and small peasants suffered from feudal survivals and the impossibility of going over to independent farming.

Only the 1848 revolution, which was accompanied by peasant attacks on the castles of the aristocracy and led to the destruction of the hated feudal and redemption deeds, forced the government to complete the agrarian reforms it had started. Although in that period the Prussian bourgeoisie showed itself to be politically impotent and apprehensive as a class in face of the working-class movement, the Junkers made further concessions to the peasantry: enactments from 1850 to 1852 abolished all the remaining services and established mandatory redemption of feudal rent. Engels estimated that the peasants had paid the landowners something like a thousand million marks.

From then on, Prussia's economic life finally entered the capitalist way. The 1850s were a period of industrial upswing, the establishment of many joint-stock companies and intensified construction of railways, a sign of the growing productive forces in town and country. Nevertheless, the 1848-1849 revolution did not have the same results as the French revolution of the 18th century: not only was the Hohenzollern monarchy retained in Prussia, but the Junkers continued to dominate its rural and political life. A wealthy section of *Grossbauers* as firmly established among the peasantry; the bulk of the peasants found themselves deep in debt, producing a steady stream of ruined farmers who joined the industrial reserve army. Such was the Prussian way of agrarian capitalist development, which was equally unlike the massive dispossession of peasants in Britain or the revolutionary establishment of parcel holdings among the farmers in France.

Prussia entered the capitalist path later than Britain and France; it could borrow the latest technical inventions from the more advanced countries and so accelerate the pace of capitalist accumulation, but its socio-economic system retained many more survivals of the feudal past as a result of her former backwardness and the sway of large-landed estates.

The genesis of capitalism in the United States was in some respects similar to the British variant but sharply differed from it both in the course of development and ultimate results. The core of the United States was formed by the British colonies, which had taken shape in the 17th and 18th centuries as a result of the massive influx of immigrants from the metropolitan country. They came into a new country with vast and sparsely populated lands, rich mineral deposits and scattered tribes of aborigines, the Indians, who were defenceless in face of European arms and their higher economic and living standards. The settlers brought along with them their labour skills and the economic achievements of the metropolitan country. The British authorities tried to implant the feudal order in the American colonies and to convert their overseas possessions into a raw material appendage of Britain that was going capitalist. The kings handed out great tracts of land to English aristocrates using the labour of the poorer settlers ("indentured servants", that is, in effect, white slaves). Laws limiting the economic development of the colonies were enacted in the metropolis. Not only raw materials, purchased at low prices, but also revenues in the form of heavy taxes, were being siphoned off from the American colonies.

However, the American settlers fought hard for their economic independence and were helped, most importantly, by the favourable climate: they steadily advanced westwards and southwards over a period of many years, ruthlessly and continuously fighting the native population. The destruction of the Indians, deprivation of the remaining tribes of their age-old rights and their herding into special reservations constituted a necessary element of the primitive accumulation of capital in North America.

Alongside the establishment of vast estates by the rich, who speculated in land and leased tracts of it, there arose the squatter movement, in the course of which the poorer settlers occupied public lands and set up small farmsteads. The big capitalists took possession of the fertile lands in the south of the country, where they set up tobacco and later on cotton and sugar plantations, which because of the shortage of local labour were worked by imported Negro slaves.

In the 17th and 18th centuries, the slave trade became one of the most profitable enterprises for British speculators. Slave labour yielded vast profits for the North American plantation owners but did not become the dominant element of economic life in the colonies. Capitalist manufacture in shipbuilding, the textile industry and metallurgy played the leading role in the North, organically springing from small-scale production and developing under the impact of a burgeon-

ing domestic market and the export of goods to the West Indies and Europe. As in Britain, the use of the world's sea-routes had a strong effect on economic development in the colonies.

In the 17th and 18th centuries, the rich American lands were a source of discord between Britain and other European states: France, the Netherlands and Spain. Colonial wars interwove with the persecution of the fighting Indians, the efforts of the colonies to maintain their independence, and the class struggle between the small farmers and the big landowners and businessmen.

By the mid-18th century, the struggle between the colonies and the metropolis was aggravated and developed into an open war against Britain's political domination. Inspired by the slogan of independence and backed by their economic strength and the advanced ideology of the Enlightenment, the British colonies of North America set up an independent federal state. The War of Independence was a bourgeois revolution which went hand in hand with the abolition of slavery in the Northern states, nationalisation of the possessions of the British aristocracy, establishment of a large national land fund and the distribution and sale of unsettled lands. In 1841, despite stubborn resistance from the wealthier sections, the new state sanctioned the institution of squatterism that had taken shape.

Independence gave powerful impetus to economic development in the USA. The influx of immigrants from Europe provided the necessary labour. Feverish construction of canals, highways and later also of railways was started. In the 1830s and 1840s, agriculture was being equipped with improved implements and machines. The technological revolution in Britain's industry was followed by similar developments in the United States. In the mid-19th century, North America had thousands of factories employing hundreds of thousands of industrial workers. Steadily enlarging its possessions, the USA rolled up to the Pacific seaboard and extended its exports to Asia in the East. At the turn of the century, we find a strike movement developing among the wage workers, visual evidence of the social antagonism between the classes that had taken shape, the proletariat and the bourgeoisie.

However, the more successfully US capitalism developed, the sharper were the economic contradictions between the advanced industrial North and the plantation slave-holding South. Slavery tended to narrow down the domestic market and lower the productivity of labour on the plantations, and led to a crisis of the plantation economy. Now and again the slaves rose up in their fight for freedom; tens of thousands of Negro slaves fled from their masters to the free states in the North and West and settled the unoccupied areas. The question of eliminting slavery came to the fore and led to the Civil War of the 1860s, between the industrial North and the slave-holding South. In content and consequences this was another bourgeois revolution. At the height of the struggle, the Federal Government issued its Homestead Act, which gave the have-nots the right to occupy free land in the areas being settled. The victory of the North led to the aboliton of slavery and gave the Negroes equality in law with the

whites. While these measures did give powerful impetus to captalist development in the USA, they were unable to do away with all the survivals of the past: despite the "reconstruction" of the South—the break-up of the latifundias, the removal of the active advocates of slavery, and so on—the Negroes remained unequal in actual fact, most of them becoming sharecroppers, leasing land from their old plantation masters. At the same time, capitalist competition sparked off a process in which the small farms were concentrated into large capitalist farms.

Thus, the genesis of capitalism in the USA differed markedly from the corresponding process in Western Europe: the primitive accumulation of capital in the USA was closely interwoven with the settlement of a rich and sparsely populated territory, involving two bourgeois revolutions and resulting in a rapid growth not only of capitalist industry, but also of large farms, with large-scale and technically well-equipped cropping and livestock breeding. The free American agrarian-capitalist way of development, whose features were described by Lenin, laid a solid foundation for the subsequent accelerated development of industry in the country.

Summing up this review of the genesis of capitalism in the major countries of Western Europe and America, we have good reason to draw the following conclusion: the main stages of this process were similar among all nations, but each of these passed through the process in its own way, depending on its natural, demographic and social conditions. The facts bear out the methodological propositions put forward by the founders of Marxism-Leninism: the transition from feudalism to capitalism was not synchronous, not quite coinciding in time; in virtue of their more favourable conditions, some countries forged ahead, while others lagged behind, sometimes centuries behind. In this context, we find some highly interesting facts in a comparison of capitalist development in Britain and the USA. Britain's overseas colonies did not attain the economic level of the metropolis all at once; it took more than a century to assimilate the vast expanses of the new continent and to use its natural resources; slavery in the South was a heavy drag on capitalist development.

For historical reasons, the various countries advanced at a different pace: take the impact of the two bourgeois revolutions in North America and compare this with the protracted economic development in Prussia's provinces east of the Elbe. The revolutionary activity of the bourgeoisie and the urban and rural working people had a great influence on economic processes. While the leading socio-economic movement was naturally coherent, it did not rule out periods of reaction and elements of deformation: that is what happened in the USA once it achieved independence, in Britain after the 1648-1649 revolution, and especially on the European continent, in France and Prussia.

Finally, let us note the economic interaction of the developing states. The USA was able to make use of the ready-made inventions of the metropolitan country, France obtained much from Britain, and Prussia from the economic achievements of the advanced European

countries. In the capitalist epoch, each of these countries took part in the overall world economic system, being constantly in cooperation and competition with other parts of the whole.

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Commencing our consideration of the specific features of the genesis of capitalism in Russia, we need to formulate several basic questions. What are the natural, ethnic and socio-economic conditions which immediately preceded the origination of capitalism in Russia? What effect did these conditions have on the emergence and early development of capitalism? What was the interaction—economic, political and cultural—between Russia, lying as it did on the borders of Europe and Asia, and the other European and Asian peoples? What were the similarities and distinctions of the Russian way of capitalist development as compared with the other, typical forms of transition from feudalism to capitalism? Finally, what effect did these specific features of national development have on the economic and political development of the state? In replying to these questions, we should start above all from an analysis of the processes that were under way in the leading core of the country, i.e., the Russian state: that is precisely where the future capitalist system first originated and assumed its forms.

In the 16th century, which Marx considered the start of the world capitalist era, Russia was a fully-formed centralised state occupying a large part of the East European plain. In expanse it differed equally from Britain, France and Prussia, but was similar to Britain's North America colonies: both had a much more populous core and vast still to be cultivated fertile lands cut by powerful river arteries and latent with undiscovered mineral wealth.

As in North America, the colonisation drive that began was not to be halted by forest, marshland or mountain range. The movement of the population in the direction of Asia was facilitated by the existence of the Urals-Caspian gateway, which in earlier ages had been used for repeated incursions by the nomads of Asia, mainly the Pechenegs, the Polovtsy and the Tatars. Earlier on, in the period of feudal fragmentation, the population of the East European plain was powerless to stop these raids. In the 13th century, it fell victim to the Mongol invasion with the result that for two and a half centuries it was weakened economically and isolated from the other branches of the Eastern Slavs.

The newly-shaped state was able to throw off the alien yoke and to secure possession of the whole length of the Volga only through strong unification round the Moscow Principality and the subsequent weakening of the Golden Horde.

The Russian state, advancing from the Urals into Siberia, had simultaneously to expect attacks from the south, to keep armed contingents along its borders and to engage in subtle diplomatic moves so as to retain the expanses it had taken over. Danger also threatened

from the West, from Livonia, Sweden and Poland. While the possibility of extensive settlement in various directions made Russia similar to the American colonies, the presence of a constant military threat made it quite different.

Another basic distinction not only from the American colonies but also from Britain and France was Russia's remoteness from the world's commercial sea-routes. Russia was a continental country long unable to use the advantages of the great geographical discoveries of the 15th and 16th centuries. In possession of no more than the White Sea coast, whose ports froze over in the winter, Russia was unable actively to participate in the world economy in the 16th century; small settlements near the Gulf of Finland, which changed hands between Sweden and Russia, were likewise unreliable as points for developing maritime trade. Russia's economic relations with Western Europe were conducted almost entirely across the land frontier, mainly via Novgorod, Pskov and Smolensk, with foreign merchants playing an active role in these economic relations, and exporting mainly agricultural produce from Russia.

Ivan the Terrible did not succeed in his attempt to reach the Baltic coast and to establish more convenient sea links with Western Europe: the protracted Livonian War of 1558-1595 did not result in a decisive victory for Russia.

In the 16th century, the population of the Russian state was highly peculiar. In the North East, the Eastern Slav settlers who had come from the Dnieper area, gradually mixed with the local Finno-Ugric tribes, who were at a lower level of economic and cultural development, producing the type of Great Russian, who differed ethnically both from the Byelorussian and the Ukrainian. Fanning out northwards and eastwards from the non-black-soil center, the Russians encountered on their way nationalities which lived in tight groups—the Karelians and the Nentsy in the Kola Peninsula, the Udmurts and Komi in the area beyond the Kama River, the Mordovians and the Mari in the Central Volga area. Lagging behind the Russian settlers economically and culturally, they fell under their influence, while maintaining their own specific languages, customs and way of life. The Turkic peoples—the Chuvashy and the Volga Tatars who were Moslems and once a part of the Golden Horde—lived in even more isolated groups.

Thus, even in the 16th century the main core of the Russian population was directly connected with the other, non-Russian nationalities and together with them constituted the single Russian state. This was a major distinction between Russia, and Britain and France, with their homogeneous ethnic composition, the result of the ancient merger of the Celts and the Anglo-Saxons in the one instance, and the Gauls and Romans in the other. Prussia's population was not as homogeneous, for it had remnants of assimilated Baltic Slavs and subsequently of the integrated Poles of Poznan; still, in ethnic terms, Prussia was closer to Britain and France than to the multinational Russian state. However, one finds much similarity between Russia and the North American colonies, where the bulk of the population in

the northern part of the New World consisted of Englishmen, who were followed by a flood of immigrants from various countries, mainly from Western Europe. Like Russia, the United States became a multinational state. But the immigrants who came to America were not isolated from the English settlers and gradually merged with them to constitute the American nation (the Yankees).

By contrast, as Russia expanded to the west, the south and the east, the main core of the Great Russians was joined by the fully formed nationalities on the western fringes, in the Caucasus, Siberia and Central Asia, each with its own, clearly pronounced ethnic boundaries, economic peculiarities and national culture. The existence of different and spatially separated ethnic complexes made the process of socio-economic development much more complex and protracted, until all these diverse nationalities merged into a single socialist state after the Great October Socialist Revolution.

Summing up, we find how difficult were the conditions in which the Russian state moved from the feudal system to the new capitalist formation. Russia entered the new epoch burdened with survivals of the Tatar yoke and the constant threat of armed invasion, lying far away from the world's sea-routes and sprawling over vast and undeveloped expanses with a motley population.

Despite these retarding factors, economic life in the feudal state continued to develop. Following the rehabilitation of the towns and villages laid waste by the Mongol invaders, a period of marked revival came from the 13th to 15th centuries. The peasants cleared forests, drained marshlands and ploughed up virgin lands. The slash-and-burn system gave way to the three-field system, new types of the wooden plough, including the two-pronged plough, allowing deep ploughing were developed. In livestock breeding, a tough, even if short, species of draught animals and dairy cattle was grown. Under the prevailing subsistence farming the household industries were combined with agriculture, with the peasant family producing its own dwellings, clothes, footwear and food.

Nevertheless, the separation of industry from agriculture, notably in salt-making, the collecting of wild honey, fishing and flour-milling, continued. New towns arose and there was a growth of the urban handicrafts, continuing the traditions of the pre-Mongol period. Skills in the working of metals and wood, in the making of fabrics, leather goods, glassware and pottery were improved. The chronicles of the 14th and 15th centuries contain mention of artisans—blacksmiths, smelters, locksmiths, coopers, saddlers, bone-carvers, jewellers, and so on. Looms were used to make fabrics not only from local raw materials (wool and flax), but also from imported silk and cotton.

The social division of labour continued in the 16th century, with growing specialisation of the handicrafts in the making of metal, leather, wood and other articles, giving rise to regional centers of the handicraft industry, chiefly close to the sources of raw material supplies. As the demand for various products grew, custom work developed into small-scale production for the market, while rows of

shops specialising in the sale of ironware, silverware, footwear, etc., appeared in various towns, notably Moscow.

Many buyers toured the villages and the handicraft centres, carrying large consignments of small articles, grain, tallow, and flax to the large towns. Permanent economic links were established between the various commercial areas. There was a growing number of small rural and urban market places which developed into large fairs (especially near monasteries), timed for definite days and months of the year. Such fairs were attended not only by Russians, but also by foreign merchants—from England, Holland and Turkey. The rural population was increasingly involved in trade. The towns acquired a new look and character, there was a growth of commercial suburbs with their warehouses and hostels. From the ranks of the buyers arose those who had large amounts of capital at their disposal. Non-equivalent trade in precious furs, weapons and jewellery became a source of money accumulation. Still, the economic successes from the 14th to 16th centuries did not help to overcome Russia's economic lag behind Western Europe: the trading centres did not yet fuse into a single national market; the handicraft workshops were still to rise to the level of the manufactories, while the towns did not yet have the economic and political importance which they had in Britain, France and the settled American colonies in the 16th century.

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The results of the massive labour effort under the feudal system went to benefit mainly the big landowners and the state authority. The formation of the centralised state was, in fact, prepared by the growth of economic ties but it was gained at the high price of growing feudal dependence for the farmers. The secular, like the clerical, owners of the patriarchal estates both displayed the same urge to enlarge their feudal farms, to extract maximum produce from them and to convert these into cash: both strove to take over as much land as possible and to settle it with those who were to pay rent in kind. In view of the wars and the incursions from the Crimea, the feudal authorities sought to consolidate their military strength through the establishment of a system of landed estates. The chief of the feudal state regarded himself as the supreme owner of the "black lands" inhabited by the indentured peasants, who paid state levies. When increasing the numerical strength of its troops, the state handed out such black lands to members of the gentry who came to serve, the land, the reward for their military service, being tilled by the indentured peasants. As early as the 15th century, alongside the rent in kind, there was a spread of peasant corvée and a growth of state taxes.

Intensified feudal exploitation forced the peasants to move from place to place, many fleeing to the south and east to start farms on their own. In the 15th century, an armed community of such fugitives, known as the Don Cossacks, took shape in the lower reaches of the Don. Somewhat later, a community of free Urals Cossacks was

founded in the lower reaches of the Yaik River (the Urals). The Cossacks beat back attacks from the Crimean Tatars and the Asian nomads; they were independent of the central state authority and, defending the southern borders of the country, maintained relations with it on an equal footing.

The massive flight of peasants became especially intensive during the devastating Livonian War and as a result of ruthless measures (*oprichnina*) taken by Ivan the Terrible. Whole areas of the country were denuded of one-third and sometimes even of one-half of their rural population. The big landowners exerted steady pressure on the government, demanding that it should put an end to the free movement of peasants. By the end of the 15th century, the 1497 Code of Laws limited the peasants' traditional right of transfer to the short period "from one week before St. George's Day in autumn and one week after St. George's Day in autumn", a stipulation that was reiterated in the 1550 Tsar's Code of Laws. In view of the acute shortage of labour, the feudal landowners got the tsar's government temporarily to decree a ban on peasant transfers. This decree on the "forbidden years", which was issued in 1581, in effect finally secured the peasants to their allotments. A head count of the rural population throughout the country was recorded in cadastral books and after 1592, in accordance with a special *ukase* (decree), feudal owners had the right to track down and return every fugitive peasant to his old place.

The establishment of this official and universal bondage sparked off the first peasant war led by Ivan Bolotnikov. Most of the insurgents were fugitive peasants, who were joined by impoverished townsmen, Cossacks and, for a period, even noblemen in service who were in opposition to the ruling boyars. In contrast to the Peasant War of 1525 in Germany, that was the first attempt on the part of the peasants to throw off the chains of serfdom and reflected the socio-economic backwardness of the Russian state. Despite its broad scale, the uprising was internally divided and lacked any solid organisation. The peasant struggle was complicated by the intervention on the part of the Polish-Lithuanian state and Sweden, and was suppressed by the superior forces of the centralised feudal authority.

In the 17th century, the feudal owners demanded even stricter laws against the fugitive peasants. In 1649, the government met their wishes: the 1649 Council Code lifted all limitations on the period in which fugitive peasants were to be tracked down, converting the search for fugitives into an organised state function, and issued *ukases* increasing the power of the feudal owners over their serfs. This process was completed with the first census of 1718-1721, whose records became the basis for the ruthless search of the fugitives over an indefinite period.

Throughout the 18th century, serfdom was gradually extended and intensified, ranging over new sections of the rural population and giving the landowners unlimited power to arrange the labour and all the other vital relations of their serfs. This extreme feudalisation of the economic system, bordering on slavery, was in total contradiction

with the socio-economic development of the advanced West European states. Neither the second peasant war of 1667-1671, led by Stepan Razin, nor the uprising of 1707-1708, led by Kondraty Bulavin, nor even the peasant war of 1773-1775, under the leadership of Emelyan Pugachov, were able to rely on a class of strong urban bourgeoisie, which in Russia was yet to emerge. The initiative and organisation in all these movements came from the free Cossacks, but they lacked the material force and the anti-feudal ideology which had supported the struggle of the lower social orders, led by the bourgeoisie, in Britain and France.

In the USA, there was an even harsher system of exploitation than in Russia, namely, the slavery of Negroes imported from Africa, but that was an alien growth on the capitalist body of the American Republic: the slave-owners were capitalist entrepreneurs connected with banking circles and operating in a fully established bourgeois formation. In the United States slavery was confined to the South, with its large tobacco, sugar and cotton plantations.

In Russia, on the other hand, the serf system constituted the main pillar of feudal property, routine farming techniques and prevalence of subsistence farming over a period of two and a half centuries. The development of serfdom in Russia was a repetition of the back-tracking movement which had taken place in Prussia's provinces east of the Elbe from the 16th to 18th centuries. But in contrast to Prussia, the development of the serf system in Russia was prepared not only by the growth of the area under the landowners' crops, but also by foreign-policy conditions which forced a feudal state with a backward economy to build up a strong army at the expense of the steadily enslaved rural population.

The growth of serfdom in the 17th and 18th centuries not only slowed down the process of primitive accumulation but also left its imprint on every aspect of social and political life. The government routed the boyar opposition, put down massive protests by the working people in town and country, establishing itself firmly through an organised army and a well-functioning tax system, and easily doing away with what was left of the representation of the social estates. Expressing the interests of the landowners, it stood on guard of the serf system, which constituted the basis of its own military and financial power. The autocracy and the serf system grew into a single indivisible whole, being sanctified by the Orthodox Church, and into a source of the dominant reactionary patriarchal ideology.

But what should be borne in mind is that the serf system did not affect all the working people in the countryside. There remained and gradually grew a class of state peasants who were held in feudal bondage by the Treasury but who enjoyed personal liberty officially recognised by the law. In the forests of the Perm region and in the Volga area, across the vast expanses of Siberia and in the Southern steppes masses of fugitive men and women settled and managed to escape organised searches, government censuses and harassment by the local authorities. In this way, centres of free economic development, similar to the American institution of squatterism, took shape in

serf-holding Russia in the 16th and 17th centuries thanks to the vast unpopulated expanses with their untapped natural resources. The difference between these independent farms and the squatter homesteads lay in the fact that they emerged within the boundaries of a feudal and serf-holding monarchy, instead of a full-fledged capitalist system, and were faced with a constant threat of persecution and destruction. Their economic development was on a primitive level and their isolated existence — hazardous.

In the wake of these pioneers of agriculture there was a steady movement to the south and east of big landowners and organs of state power, who frequently caught up with the free settlers and saddled them anew with the hated yoke. Even the armed Cossack communities could not escape this danger, and gradually, under pressure from their elders, submitted to the central autocratic authority. There is also need to bear in mind the stubborn and day-to-day struggle between the enslaved peasants and their owners. Only intervention by government agencies was able to keep the rural population forcibly docile.

* * *

However, the feudal serf system was already threatened with economic processes going on deep within the entrails of the dominant formation; at some stage in their development they were bound to run into contradiction with the feudal mode of production. Lenin said that the 17th century was the start of a "new period" in the history of Russia: he pointed to the extension of trade ties, which had led to the merger of separate local markets into the single national market of a centralised state.

In that period, a struggle between two contradictory tendencies was going on over the vast and growing territory of the East European plain: on the one hand, serf law was intensified, as the ancestral estates merged with the new landed estates and the power of the tsarist autocracy was consolidated; on the other hand, the preliminary conditions were being created for the emergence of the capitalist economy: there was a growing social division of labour, an increase in the number of commercial towns, and a growing influence of monetary circulation. In the countryside itself, not only in that part of it which was owned by the state, but also in that which was privately owned, there was ever more pronounced evidence of proprietary inequality among the peasants. Tens of thousands of men left their villages to do seasonal work along the Volga and the Sukhona-Dvina waterways; astute merchants exported from Siberia valuable furs, which they sold not only to the tsar's treasury and the feudal élite but also to foreign merchants; English, Dutch and Swedish merchants took out of the country large consignments of hides and skins, tallow, grain, flax and other goods. Trade with the countries in the East was growing. There was a steady, even if slow, accumulation of money capital, which in the 17th century was first partially invested in the extracting and manufacturing industries. Capitalist enterprise first appeared in the embryonic form of simple cooperation and manufacture. These larger industrial enterprises, notably in metallurgy and the treatment of fabrics, above all met the requirements of the state in accoutrements and weapons for the army.

The economic policy pursued by Peter the Great, who set himself the task of making his way to the sea-coast and doing away with Russia's economic and cultural lag behind Western Europe, gave strong impetus to large-scale production. In the course of the Northern War a regular army and a navy were built up at feverish speed. The government began to use Western Europe's advanced experience in prospecting for iron and copper ores, in establishment of commercial and industrial companies and the construction of large metallurgical and textile manufactories. Tsar Peter's mercantilist policy was a natural one; at the start of the capitalist era the advanced states also supported the emergent capitalist enterprises, as in Britain under Cromwell and in France, when Colbert put through his economic plans. A policy of mercantilism was adopted somewhat later than in Russia by King Frederick II of Prussia. However, in Russia the introduction of large-scale production came up against two formidable obstacles: scarcity of private capital and acute shortage of labour. Nor did Russia have the rich colonies Britain and France had in the period of rising capitalism; the rural population of this agrarian country was tied down to the allotments and the number of labourers that trickled into industry from its ranks fell far short of requirements.

The needs of the feudal state far outstripped the primitive accumulation of capital in Russia and helped to stimulate it. The feudal authority had to display initiative in involving wealthy merchants and noblemen in its economic undertakings, holding out the prospect of subsidies and bonuses, opening up and starting government enterprises, which later passed into private ownership. In the early half of the 18th century, the government increased its tax levies, more or less coping with the task of providing monetary support for the new enterprises, but because of the serf system it was unable to provide the necessary labour.

In trying to step up the development of large-scale manufactories, especially in the mineral-rich Urals, the government and the factory owners resorted to an economic measure unheard of in Western Europe: tens of thousands of state peasants were forcibly tied down to industrial enterprises; the owners were given permission to buy peasants and to use them in industrial production. At the newly established factories and plants, the peasants — registered, in possession, purchased and "handed over for all time" — had to do corvée work. This was "an original" form of large-scale industry, as Lenin put it. Its structure reflected the internal contradiction between diverse economic elements: it was large in scale and satisfied not only the orders of the state, but also the requirements of the domestic and external markets, and was based on extensive technical division of labour, something that made it akin to the capitalist manufactory in the full sense of the term. But in most instances it made use of forced labour, provided by the enslaved petty producers, and so was an

organic growth out of the very entrails of the feudal formation. It is true that at the start of the capitalist era the transformation of free men into factory workers did not run smoothly even in Britain: the government, supporting the capitalist entrepreneurs, herded paupers, vagrants and criminals into the factories, but that was a temporary measure which was soon abandoned.

For its part, the Russian government did not confine itself to such measures: it issued special laws to create a special form of serf manufactory which lasted for a century and a half. Free wage labour did not disappear and continued to be used, sometimes alongside forced labour, and now and again fully on the basis of free contracts. But these embryonic capitalist relations were stifled and deformed by the whole atmosphere of the feudal serf system: the wage labourers did not consist of proletarians, who had been deprived of the means of production, or who had gained personal liberty, but were mostly serf peasants let off for a time by their owners to earn wages in part payment of their quitrent; the number of townsfolk (mainly ruined artisans) and free labourers engaged in working off quitrent for the benefit of the state was small. Besides, relations between the employers and the wage-workers who enjoyed personal liberty were subject to the customs of the serf-holding country.

Most Soviet historians agree that the growth of free wage-labour, which eroded the feudal formation, began in Russia as a process roughly in the 1760s, by which time there was clear evidence of social stratification among the peasants, the formation of a sizable labour reserve and the existence of private capital, which could be invested in new and free enterprises. The conquest of the Baltic and the Black Sea coasts, the steady growth of foreign and domestic trade, the working of gold, lead and other ore deposits, the rising productivity of labour connected with technical innovations (the laying of canals between the Volga and the Baltic Sea, the use of hydropower installations and cylinder bellows in the Urals, etc.) led to the merger of the various separate elements of capitalism into a stable capitalist system.

However, even in that period, there was a gap between the economic levels of the advanced West European states and the United States, which were entering the stage of the industrial revolution, and serf-holding Russia, with its prevailing manual handicrafts and manufactories. The autocrats of Russia, like the kings of Prussia, were forced to make concessions to the demands of the new period: under the fashionable banner of "enlightened absolutism" the clerical estates were secularised, the purchase of serf peasants for newly-established enterprises was prohibited, industrial enterprise was declared to be free, and the need to mitigate the serf system was officially recognised. But all these progressive measures, as in Prussia, alternated with reactionary serf laws and open struggle against the influence of the bourgeois-democratic revolution in France.

In the early half of the 19th century, the boundaries of the Russian Empire were broadly extended to the west, the south and the east: it now included, on the one hand, economically developed Finland and a

great part of Poland, and, on the other, peoples who were on various levels of feudal development, the population of Georgia, Armenia, Azerbaijan, the mountain regions of the Transcaucasia, Bessarabia and Kazakhstan. With respect to the non-Russian fringe areas the tsarist autocracy adopted the traditional policy of national oppression, and sought to convert the less developed regions into a colonial appendage of the Russian Empire. However, economic development tended to bring closer together the diverse sections of the multinational state: trade ties and mutual exchanges of labour skills and the fruits of mass labour grew between the center of Russia that had taken shape earlier and the population of the non-Russian areas on the outskirts. As their living conditions were equalised, the Russian and other working people joined together in fighting against feudal exploitation and the government's oppression.

In that period, the feudal formation was also disintegrating in Prussia, which was ahead of Russia in its advance to capitalism. Following Napoleon's defeat of the Prussian army, the Hohenzollern government was forced to abolish the feudal system and to put through bourgeois reforms. By contrast, Alexander I proved equal to the task only of giving personal emancipation to the peasants in the Baltic areas and wasted his time in the futile writing of a draft constitution and emancipation projects. In Prussia, the reforms of the early 19th century gave noticeable impetus to economic development, while the 1848 revolution in the main did away with the survivals of feudalism. By the 1830s, the industrial revolution was over in Britain, France and the USA, and large-scale production became the basis of established capitalism. In the tsarist empire, the serf system continued to be an obstacle to free economic development.

Nevertheless, even in Russia the growth of the productive forces tended to undermine the pillars of the feudal formation: new and large-scale enterprises emerged, the number of industrial workers increased, and the scale of industrial output grew. Free wage-labour increasingly took the place of "factory corvée". As in the other states, the textile industry was at the fore. Thanks to the influence of the world economy, notably, the import of foreign machinery, the spinning of cotton yarn was based entirely on new machinery. Gradually but steadily, cotton printing and, to a lesser extent, weaving, were also being mechanised. Mechanical looms and steam engines were being introduced in woollen, cloth and silk production. Similar changes were also taking place in paper making and sugar refining. Even the backward metallurgical plants began to install steam engines and improved rolling mills. The appearance of large-scale factories did not eliminate petty-commodity production. As in Britain in the late 18th century, machine cotton spinning created a heightened demand for weavers, who continued to use primitive looms in their homes, fulfilling orders for the big entrepreneurs.

The introduction of machinery led to definite social consequences: the emergence of factories not only in the towns but also in the rural areas became a source of intensified use of female and child labour as a substitute for the labour of men. Large factory centres began to take

shape. Simultaneously, there was a reorganisation of transport, first, along the major river arteries and then on the overland routes. Regular shipping lines were started on the Baltic, the Black and Caspian Seas, and then along the Volga River. Railway construction started in 1839, with the Moscow-St. Petersburg railway becoming of major economic importance. By the early 1860s, the railway network came to 1,626 versts. The accumulation of capital advanced more rapidly and successfully: factories in Moscow and Vladimir helped to found big bourgeois dynasties. However, the successes of industry were confined mainly to the central non-black soil areas, the Baltic area, some parts of the Ukraine, Byelorussia and Lithuania. The first elements of capitalism also appeared in Georgia, Armenia and Azerbaijan.

In agriculture, there were also new signs of transition from the feudal to the capitalist formation. The peasantry was being increasingly stratified: its wealthier upper section was being drawn into a commodity-monetary relations; not only in the state-owned, but also in the privately owned villages the newly rich kulaks bought and leased land tracts, starting well-organised rational farming operation, planting technical crops, and selling large consignments of grain to the urban centres. There was a growing urge among the forward-looking section of the landowning class to transform agriculture, and from the 1830s to the 1850s several dozen agricultural societies appeared and agrotechnical literature was published. Full crop rotation and grass cultivation were introduced on some estates, which also had vineyards, grew sunflower and the mulberry tree and used improved implements and machines. In the southern and south-eastern provinces, where serf peasants were less numerous, and where there was private enterprise in agriculture, the labour of free workers was used on a massive scale. Thus, the industrial revolution in the 1830s-1850s also saw the emergence of embryonic capitalist relations in agriculture.

However, the continuation of the serf system still tended to hamper the new processes. In some industries, especially in metallurgy and cloth-making, forced labour continued to prevail. Sizable numbers of farmers were unwilling to improve their agrotechnical methods, preferring to do things the old way: in order to increase their incomes, they enlarged the area under their own crop, ploughed up waste land and increased the peasant services. In the non-black-soil provinces, which had well-developed peasant industries and the practice of seasonal work in the towns, landowners increased cash quitrent and frequently neglected their own farming. The big landowners, habitually short of circulating capital and leading a parasitic existence, mortgaged their inhabited lands with government banks. The peasants had no right to work where they liked: their masters could prevent them from engaging in trade or any of the industries; not only the peasant's economy but his very family life remained within the power of his owner, who suppressed the initiatives of his "baptised property"

There was a growing discrepancy between the level of the productive forces and the feudal relations of production. In that period,

Russia's feudal serf system was in the throes of a growing crisis, which occurred much later than it did in the countries that found themselves in more favourable natural and historical conditions (Britain went through the crisis period on the eve of its mid-17th century bourgeois revolutin, the USA, just before its War of Independence, and France at the very end of the 18th century. In Prussia, the symptoms of the coming crisis were felt throughout the first half of the 19th century right up to the 1848 revolution). The result was Russia's growing economic lag behind the advanced capitalist countries.

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The Crimean War, which broke out in 1833, "demonstrated the rottenness and impotence of feudal Russia."[2] Russia's technical, industrial and administrative backwardness was the cause of its military defeat. The war had the same kind of sobering effect on Russia as the 1807 events had on Prussia. The serf system had to go: however, it was not swept away by a popular revolution, but was abolished by government reform from the top.

The survivals of feudalism in France had been abolished by the laws of the 1793 revolutionary Convent, the peasants being given land into full possession without any monetary compensation. During the second bourgeois revolution in the United States the emancipated slaves were not given any land, as the forward-looking democratic circles demanded, but the Homestead Act gave the Negroes an opportunity to settle and farm the wastelands free of charge.

Prussia and Russia took a different way: under strong pressure from the landowners and under the threat of a spontaneous peasant uprising the government undertook to draft laws chiefly with the interests of propertied classes in mind. Not only in the 1807-1816 period, but also in 1848, the Prussian bourgeoisie proved to be politically impotent and incapable of acting on its own. The amorphous class of the Russian bourgeoisie displayed even less political energy after the Crimean defeat. While peasant societies, demanding radical reform of agrarian relations, appeared in Prussia in 1848 under the influence of revolutionary democrats, in Russia all the action from 1856 to 1860 was confined to the movement against wine tax-farmers and scattered protests against dispossession of land; the democratic revolutionary-minded intelligentsia was numerically small and had no organisational links with the masses. While the reform was being drafted, the liberal-minded landowners sought to make use of Prussia's experience.

A comparison of the content of the laws in Prussia and Russia shows that they are similar in basic principles, while differing essentially to the clear disadvantage of the Russian peasantry. In the tsarist empire, pressure from the serf-owners turned out to be stronger, and the government's concessions to the serf-owning opposition greater than was the case in Prussia.

[2] V. I. Lenin, *Collected Works*, Moscow, Vol. 17, p. 121.

In both countries the reform was planned in three stages: personal emancipation of the peasants; regulation of relations between the peasants and the landowners; redemption of feudal services by the peasants (in Russia it was formally known as the "redemption of land"). In Prussia, the personal emancipation of the peasants was proclaimed in 1807 and came into force within three years. In Russia, throughout the period of temporarily indentured relations, that is, up to the redemption of land, the former serfs continued in personal dependence on their own former owners.

In Prussia, relations between the peasants and the landowners were regulated by the laws of 1850-1852 and consisted in a cash assessment of the land services, the abolition of corvée and the securing of the existing allotment to the former serfs. On the strength of binding rules that had been worked out all the rights and duties falling on each land allotment were duly assessed, and any grievances were settled by arbitration courts, that is, with the participation of the peasants. The conversion of services into cash terms in Prussia was carried out under a single set of rules applicable in all the provinces. In Russia, by virtue of the diverse economic conditions, the establishment of the relations between the peasants and the owners varied by region and by category of feudally dependent peasants, and was a process that dragged out over a whole decade.

In contrast to Prussia, preference was given in Russia to "voluntary agreements" between landowners and peasants instead of the generally binding rules of the law. The charters which determined the size of the allotments and services were drawn up by the landowners themselves, signed and sealed by local magistrates, that is, the local landowners, and any peasant grievances were considered by the gubernia offices, that, is by an assembly of local landowners and officials, who were on the side of the ruling class. Under the Prussian law of 1850, the peasants received their full allotments, including the forests and subsoil. In Russia, large cut-off portions went to the landowners, with the peasants, except in the northern areas, deprived of the forests. Land tracts where mineral deposits were discovered were replaced by others. Even after the charters had been drawn up, a demarcation of lands was provided for and, as practice showed, this in effect resulted in the best lands in terms of soil, situation, etc., being replaced by worse ones.

Under the Prussian laws of the 1850s, the redemption operation was connected with regulation and necessarily followed upon it; both operations were started upon the application of one of the parties: in this respect the landowners and the peasants had equal rights. In Russia, regulation was separated from redemption and, where there was no voluntary agreement, regulation was carried out in detail by government law: the size of the allotments and the services were established by the government for each region and each locality. The drawing up and realisation of the charters was mandatory, but redemption could be started only upon the landowner's voluntary declaration, irrespective of whether the peasants did or did not agree. The Statutes of February 19, 1861 did not set any date for the landowners

to end the "temporarily indentured" (that is, feudal) relations. (An exception were the peasants owned by members of the royal family, who were switched to redemption at once on the basis of the 1863 law, and also peasants on the right bank of the Dnieper in the Ukraine, in Lithuania and Byelorussia, who were switched to mandatory redemption under the impact of the Polish uprising of 1863.) Privately-owned peasants were subjected to the law on mandatory redemption only within 20 years, that is, in 1881. The redemption operation was extended to the state-owned peasants even later — 1886.

Both in Prussia and in Russia the redemption operation was carried out with the help of the state, which handed over to the landowners the peasants' promissory notes entitling them to collect annual instalments of their debts directly from the peasants. In Prussia, this operation was carried out by local rent banks, with the landowners receiving an income of 4 per cent on the promissory notes. By 1865, all the peasant allotments had been redeemed. In Russia, the functions of the redemption institution was performed by the State Bank, the landowners being guaranteed a higher interest rate (5 per cent instead of the generally accepted 4 per cent), and the peasants being forced to pay into the Treasury an additional 6 per cent of the redemption amount, including 1 per cent in repayment of their debt and to cover administrative expenses.

The result of the 1861 laws was an accumulation of surplus funds in the state treasury and a growing incapacity of the peasants to pay their redemption instalments. Finally, one of the most negative aspects of the 1861 Statutes, which helped to ruin the peasants, was that the landowners were allowed to make available to the peasants, with their consent, an extremely reduced gift allotment. Most of the peasants receiving these "gift allotments" became impoverished farmers who had to neglect their farming and seek means of sustenance by leasing land from the landowner or working outside agriculture.

Regulation and redemption — equally in Prussia and in Russia — did not apply to the whole population of the countryside. In Prussia, following the laws of 1807-1816, and the 1850s, many owners of the small allotments not subject to regulation were deprived of their land and became farm labourers. In Russia, household peasants, who had been earlier deprived of their land by the landowners, did not receive any allotments, while the workers of serf-owning factories and plants did not receive any field allotment. Finally, in contrast to Prussia, the tsarist autocracy maintained the feudal institution of the land commune and the principle of collective liability which was inherently connected with it, a practice that tended to hamper the farmer's initiative.

Thus, both in Prussia and in Russia the abolition of the serf system was carried out in the interests of the landowning class, but in Russia the emancipation of the peasants was carried out in conditions that were much harder for the peasants than in Prussia. The content of the Statutes predetermined more difficult conditions for the peasant masses of the Russian Empire in transition to independent farming. In other words, the Russian variant of the Prussian way of agrarian-

capitalist development and, consequently, the establishment of the capitalist formation was less progressive and tended to slow down economic development in the countryside.

Still, the reforms of the 1860s — not only the abolition of serfdom, but also the subsequent judicial, administrative and educational changes — were the dividing line between the two formations. The personal liberation of serfs, privately owned and those belonging to members of the royal family, provided them with an opportunity of working where they liked and so gave impetus to personal initiative and enterprise. However, the first 20 years after the 1861 Reform, until the agrarian question was finally settled, constituted a transition stage, similar to the period between the 1816 Edict and the laws issued under the impact of the 1848 revolution in Prussia.

From 1861 to 1881, capitalism was fully established in Russia's industry. Under the influence of bourgeois reforms, the process of primitive accumulation ran its final stage and ensured the prevalence of the system of capitalist exploitation. The 1861 Reform threw into the labour market sizable masses of peasants and workers, including those who did not receive any land allotments, those who received "gift allotments", and farmers ruined through kulak usury, excessive redemption payment and growing taxes. Despite every effort to become independent farmers, parcel holders were frequently forced to abandon their farming and to seek their means of sustenance by working fully or part-time as factory workers or farmhands. Lenin considered this disintegration of the peasantry, its "de-peasantification", as a most important consequence of the reform, a "clearing of the lands" for capitalism.[3]

At the same time, there was a feverish and growing accumulation of capital. Redemption payments over the 20 years helped to siphon off cash from the peasants to the state, the landowners, the merchants and the speculators who made their money on the rise and fall in the price of securities. Soon after the 1861 Reform, numerous credit institutions began to emerge, among them the State Bank, and public and private banks, which collected and accumulated resources and issued loans on favourable terms. There was a rapid establishment of joint-stock companies. Many of these financed the burgeoning industry, which also obtained large amounts of money from the newly-rich kulaks, merchants and landowners. Finally, foreign capital investments, flowing into Russia in the hope of using cheap labour and making fat profits, also had played an important part. For its part, the state of the gentry was chronically in financial difficulties, and after a short period of enthusiasm over free trade, it reverted to the old protectionist system and encouraged the development of industry and transport by means of customs tariffs, guarantees, subsidies and credits.

Towards the end of the 1870s, the process of primitive accumulation had ensured progressive growth of the large-scale enterprises: according to official statistics, critically processed by Lenin, Russia

[3] See V. I. Lenin, *Collected Works*, Vol. 4, p. 421; Vol. 13, p. 203.

had 1,238 large factories employing 509,643 workers and turning out 629,926,000 rubles' worth of goods.[4]

The textile industry, working mainly for the domestic market, scored the greatest successes. There was marked growth in the other industries as well, notably, in mechanical engineering. The extraction of iron ore, coal and oil was growing at a rapid pace.

An important factor that helped to establish the victory of capitalism was the broad spread and completion of the industrial revolution. Lenin said that the main indicator of this process was the increase in the number of steam engines: his statistical table shows that of the 3,319 large enterprises 2,065 employed steam engines.[5] An equally important indicator was the transformation of transport: after the reform came the construction of the most important railway lines linking up the agricultural areas with the industrial centres and the seaports. The technical re-equipment of the country was promoted not only by the budding engineering industry but also by increased imports of machinery, steam locomotives and rails.

By the 1860s and 1870s, Russia was fully integrated within the system of the world economy and was being subjected to the impact of its cyclic fluctuations: periods of economic boom and feverish business growth alternated with crises and depressions. The antagonistic classes of the capitalist society — the bourgeoisie and the proletariat, with its reserve army of unemployed, as an inevitable concomitant — had taken final shape.

The development of capitalist industry gave strong impetus to the further growth of domestic and foreign trade. Commodity-money relations were introduced into the remotest corners of the country, grain flowed in a steady stream to the industrial regions and the seaports, and into the old and the newly-emergent towns. Factory production made its way to the East, into the less developed Asian states. Money eroded the stagnant patriarchal relations under the subsistence economy.

After the reform, agriculture developed along totally different lines. The economic backwardness of the serf countryside could not be overcome within the first 20 years after the reform. Most of the peasants still living as dependent serfs in the private and the state sectors and, what was especially important, the lack of capital, greatly hampered the development of capitalism in this sector of the nationa economy. The accumulation of money sufficed for the development o large-scale industry, but it was very scarce when it came to transforming agriculture and livestock breeding. Besides, the ruling class of big landowners had no interest in rationalising agriculture, for it had brought with it from the serf epoch the habit of economic parasitism. It is true that the more enterprising section of the landowners, especially in the Baltic Area and the Ukraine, managed to adapt itself to the new conditions, purchasing livestock and farming implements

[4] By large factories Lenin meant enterprises employing 100 and more workers (for all industries). See V. I. Lenin, *Collected Works*, Vol. 3, p. 510.

[5] See V. I. Lenin, *Collected Works*, Vol. 3, p. 510.

and machinery, doing away with the system of serf labour and hiring free farmhands on a daily, seasonal or annual basis. The merchants, the newly rich peasants and landowners constituted a section of the agrarian bourgeoisie which sought to derive the utmost benefits from the farming transformed on capitalist lines.

However, the overall economic situation in the countryside produced by the 1861 Reform (an acute shortage of land and money among the peasants, economic dependence and lack of full rights among the petty farmers, and the pressure of the feudal-minded administration) did little to promote strict profit-and-loss calculations and bring about the technical re-equipment of agriculture. In Britain, the big landed estates had been broken up into individual farms to become the sphere of advanced capitalist farming. In Russia, the big estates had become the mainstay of the survivals of serfdom as early as the 1860s and the 1870s: they were leased out in tracts not to capitalist farmers but to poor peasants on the harsh terms of sharecropping, inflated prices and quitrent in kind; where such tracts were leased by merchants or rural kulaks, they were broken up into smaller plots and subleased at much higher prices to needy rural societies, associations or farmers on the verge of ruin.

Feudal survivals also remained in other forms, such as the hiring of farmhands in winter, when they were especially hard up, on terms that were extremely disadvantageous; the making of cash loans to be later worked off, etc. The rank-and-file small farmer was unable to buy improved implements and a better breed of cattle. Crop failures and animal diseases continued to play havoc even after the reform. In the non-black soil area the peasants sought to make ends meet by casual earnings, at factories and plants and in small-scale village industries. The peasants continued to move to the south and the south-east from the central black soil area, where the serf system had been most developed and where the feudal survivals were most persistent. As in earlier centuries, the settlers started new farms, and those who managed to keep going in the new areas made use of the natural wealth in a more favourable climate, setting up areas of solid farming and livestock breeding which developed on capitalist lines. The more densely populated the southern Ukraine (New Russia) and the Northern Caucasus became, the more the centre of agricultural production moved to those parts.

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Completion of the industrial revolution, which coincided with the final elimination of the feudal system, did not at all mean that handicraft and petty-commodity production had been altogether ousted by the developing capitalist enterprises. In this vast agrarian country with different levels of economic development and burdened with survivals, there could be no rapid or straightforward transition from the feudal to the capitalist system. It was Lenin who, in the late 19th century, mustered much factual material to substantiate the cardinal conclusion that capitalist Russia had a multisectoral socio-

economic structure. Triumphant capitalism did not rule out the existence of the handicrafts, petty-commodity production, and the manufactories, which arose and up to a point developed in the more backward branches of industry. The more primitive forms, "combinations of industry and agriculture", did not disappear, but continued to exist, being doomed to gradual extinction, even in the provinces which had developed industrial capitalism. At definite stages in the development of the new formation all the capitalist countries had a multisectoral economy. In Russia, by virture of her natural, demographic and historical conditions, this turned out to be more tenacious and more clearly expressed than in Western Europe, the Prussia of the early 20th century included.

As a result of the internally contradictory development of the Russian countryside over the centuries, the objective prerequisites took shape for two possible ways of agrarian-capitalist development, which Lenin designated as the "Prussian" and the "American" ways. The consequences of the Russian variant of the "Prussian way" were most tangibly felt in the central and the western areas of European Russia. In the areas of the south and the south-east, which were being colonised and where the descendants of the fugitive serfs prevailed among the old and new settlers, conditions were created for a phenomenon similar to squatterism in the USA. On the country's subsequent economic development and the revolutionary energy of the working people depended the possibility of this or that way winning out in the post-reform countryside of Russia. That was the socio-economic problem that was the basic and most burning one under the new capitalist system. It could not be solved by the bourgeois-democratic revolution in its most progressive variant, that of 1905-1907, nor could it be settled in the reverse sense by the Stolypin reform, which was dictated by the interests of the landowning class. Only the Great October Socialist Revolution, which handed power to the proletariat and was supported by the peasantry, eliminated the old problem and put forward the new one of bringing about the complete socialist transformation of town and country.

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D. Sc. (Philol.)

Mythological Theories in the West in the 20th Century

Delving deep into the origins of religion, literature, art and philosophy itself we find ourselves face with myth. All ideological, speculative concepts bore a mythological character at the most archaic stages of their development. As a syncretic, diffuse unity myth preceded, logically and historically, more developed forms of religion and conscious artistic creation, philosophical theories and scientific classifications. Mythological consciousness seems to have first become superseded in ancient Greek and Indian philosophies, which, at the same time, derived much of their symbolic apparatus from mythic imagery. Genesis is transformed here into ontology. Folklore and ancient literatures are directly rooted in mythological traditions, they are, as it were, imbued with mythology. Conscious use of mythological plots and motifs was a permanent feature of Western literature until the late 17th century; in Oriental literatures this process continued even later. At the same time, the history of literature (not to speak of the history of philosophy) may be treated, roughly speaking, as the history of demythologisation. Demythologisation reached its first peak during the 18th-century Enlightenment which equated myth and superstition (only Giambattista Vico was opposed to this view at the beginning of the 18th century). Its second peak was the 19th-century realism, a reaction, to some extent, against the Romantic interest towards myth and its aesthetisation, exemplified, among others, by Schelling who made myth the cornerstone of his philosophy. In the positivist science of the 19th-century myths attracted only the attention of ethnographers. Classical 19th-century English anthropology (E. Tylor, A. Lang) interpreted myths in the light of survivals theory as remnants of long extinct folkways and customs that preserved a naive, archaic explanation of the outside world, typical of the pre-scientific stage of human knowledge. It went without saying that any scientific progress became possible only because such naive mythological interpretations had been abandoned as far back as in antiquity.

However, at the turn of the 20th century the process of demythologisation already lost its momentum, and writers, critics, philosophers and sociologists, let alone ethnologists, again directed their sympathetic attention towards myth, and soon the reverse process of remythologisation was in full swing. This new attitude towards myths was doubtlessly to a large extent inspired by Richard Wagner and Friedrich Nietzsche, the latter being known not only as the creator of the famous antithesis "Dionysos — Apollo", but also as the

author of the philosophical treatise *Also sprach Zarathustra*. An apologetic treatment of myths is typical of the Symbolists in Russia (Alexander Blok and Vyacheslav Ivanov) as well as in Europe.

A new, positive attitude to myth is discovered in philosophy: it is vividly expressed by the intuitionist Henri Bergson who regards mythology as Nature's defensive reaction against the destructive force of the intellect; it is found in the writings of the Neo-Kantian Ernst Cassirer; myth was positively evaluated by W. M. Urban, Niebuhr, N. Berdyaev, etc. A positive view of myth was expressed by the school of psychoanalysis.

Myth, usually combined with psychoanalysis, was a powerful source of inspiration, conscious or unconscious, for such different modernist writers as D. H. Lawrence, W. B. Yeats, J. Joyce, T. S. Eliott, Th. Mann and F. Kafka. Mythopoetic trends in 20th-century literature have developed the ideas of "eternal return", of cycle; the human world is represented as historically and psychologically "closed"; heroes may be "substitutable" and/or identical, just as different mythological systems. These features are not identical with the peculiarities of the "real" primitive myths. Kafka, for instance, built up his "myth" on the hypostatisation of pedestrian, everyday life and the corresponding legal system, a feature, incidentally, typical of 20th-century myth-making as a whole. Mythopoetic tendencies are found in the work of other writers as well: W. Faulkner, J. Updike, the young African authors J. P. Clark and W. Shoyinka, some Latin American writers, among them Gabriel Garcia Marques.

Joseph Frank has pointed out in his interesting study,[1] that in the modern novel objective historical time is replaced by mythological imagination, because actions and events are represented as realisations of eternal prototypes. Spatial forms of artistic imagery seem to supersede temporal ones. Frank views from this angle not only T. S. Eliott and J. Joyce, but also Ezra Pound and even Marcel Proust.

Mythologising in 20th-century literature has gradually extended to literary criticism, and a new and very popular school of myth-and-ritual criticism has emerged. This school[2] describes in terms of myth and ritual not only the creations of 20th-century writers who deliberately turned to myth, but also the work of many others, including such classic figures as John Milton and William Blake who treated of Biblical subjects, Dante with his own epoch-making interpretation of Roman Catholic Christian eschatology and, of course, Shakespeare whose dramas still preserved the ties with the ritual-mythic roots of drama as a genre; mediaeval literature attracted the attention of the

[1] J. Frank, *Spatial Form in Modern Literature. The Widening Gyre*, New Brunswick-New York, 1963, pp. 3-62.

[2] Many articles by the representatives of the myth-and-ritual school of literary criticism have been selected in such influential publications as *Myth and Mythmaking*, ed. by H. A. Murray, New York, 1960, *Myth and Symbol*, Lincoln, 1963 and especially in the anthology *Myth and Literature. Contemporary Theory and Practice*, ed. by John Vickery, Lincoln, 1966; cf. also *Myths and Symbols. Studies in Honour of Mircea Eliade*, ed. by I. M. Kitagawa and Ch. H. Long, Chicago, London, 1969.

myth-and-ritual criticism, in particular the Round Table cycle embedded in the Celtic folklore and mythological traditions. Among other authors, of special interest was H. Melville, as the author of *Moby Dick,* as well as D. Defoe, S. T. Coleridge, J. Keats, A. Tennyson, Th. Hardy, N. Hawthorne, N. Thoreau, S. Crane, V. Woolf, J. Conrad and even Stendhal and E. Zola. Conscious and unconscious mythological motifs, symbols and metaphors are discovered in the works of these authors. Of course, certain ritual patterns are being constantly recreated in literature, especially initiation paradigms supposedly rooted in the immanent psychological archetype of death and re-birth. The theoretical foundations of this school have been elaborated in such books as *Archetypal Patterns in Poetry* by Maud Bodkin, *Quest for Myth* by Richard Chase and *Anatomy of Criticism* by Northrop Frye.[3] Bodkin is chiefly interested in emotional and psychological patterns and invariants of literary genres and individual creations. Chase seems to identify myth and literature: on the one hand, he considers myth to be the same aesthetic phenomenon as literature, while, on the other, he identifies the aesthetic impact of myth with magic and the primitive notions of "mana"—"orenda". Frye postulates an inherent unity of myth and ritual, myth and archetype. According to Frye, literary images and genres are rooted in myths and archetypes, ritual being the original source of narrative. Frye suggests a new theory of literary studies: literary anthropology. He believes that analysing Shakespeare's *Hamlet* by studying the original legend about Amleth told by Saxo Grammaticus in his *Historia Danica* does not imply a rupture with Shakespeare. On the contrary, this would be a return to Shakespeare, a deeper understanding of his meaning, a study of the essence rather than the genesis of the Shakespearean tragedy. The original pattern of myth and archetypal symbols in literature still employs the imagery of the gods and demons and is articulated in two contrasting worlds corresponding to two types of metaphorisation based on the opposition of desired versus undesirable. Frye sees in the symbolism of the Bible and classical mythology "a grammar of literary archetypes", and contrasts, correspondingly, "apocalyptic" and "demonic" imagery. According to Frye, apocalyptic and demonic imagery correspond, to some extent, to the comic and the tragic (in part ironic) in the world-view of the artist. Alongside with this purely metaphoric identification Frye describes other (analogic) patterns of imagery and creation: similes and analogic associations. Insofar as literature re-creates not only states but processes, it is oriented to cyclic changes in nature and their ritual representation. He distinguishes four stages in the life of nature correlated with myths and archetypes, images and genres. Thus, sunrise is correlated with spring, myths about the hero's birth and his resurrection, with dithyrambic and rhapsodic poetry, while, on the

[3] M. Bodkin, *Archetypal Patterns in Poetry. Psychological Studies of Imagination*, New York, 1934 (3rd Edition, 1963); R. Chase, *Quest for Myth*, Baton Rouge, 1949; N. Frye, *Anatomy of Criticism*, Princeton, 1957.

other hand, sunset is related to autumn, death, myths about the death of the god, tragedy and elegy.

Such a blurring of boundaries between myth and literature led to what may be described as inflation of the myth concept, which understandably resulted in a certain scepticism. Thus, Henry A. Murray[4] while sharing the basic tenets of the myth-and-ritual criticism thinks that the functions of myth and literature may be very similar, although the content of literature differs somewhat from that of myth, since, unlike myth, it depicts everyday life.

This sort of identification of myth with literature, as well as the whole mythological method in literary criticism resulted from a synthesis of the Jungean analytic psychology and the ritual-mythological school in the study of archaic and primitive cultures. It is not accidental that Frye chose C. G. Jung and J. G. Frazer as his teachers. Frazer's *Golden Bough* and Jung's work on the symbolism of the libido are, according to Frye, the first "guideline" of the new mythological criticism. Frazer was both an ethnologist and a classic philologist. Expansion of ethnology into literary and art criticism began in classical philology. Frazer adopted the thesis of Robertson Smith about the primacy of ritual over myth. Frazer's followers, the Cambridge school (Jane Harrison, A. B. Cook, F. M. Cornford),[5] and its adherent Gilbert Murray, later followed by S. H. Hook, T. Gaster, E. Carpenter, E. Miroux, Ch. Autran, E. O. James, G. R. Levy and many others have elaborated a theory of the ritual origins of the ancient theatre, the heroic epic, the entire sacred literature of the Ancient East, ancient philosophy, the mediaeval epic, romance and fairy-tale (B. Fillpots, F. Ström, Jan de Vries, P. Saintyves). In their works attention was focused on the myth about the death and resurrection of the god, about the ritual immolation of priest-kings, about the sacred marriage of the gods or heroes, myths reflecting seasonal agricultural ritual. Myth and other cultural phenomena were seen as the reflection of the ritual; myth and ritual were treated as the two sides (verbal and behavioural) of one basic reality (dromenon and legomenon).

In its extreme form the ritual theory of myth was expounded in the fundamental works of Lord Raglan and Sidney Edgar Hyman.[6] The myth-and-ritual criticism has assimilated the basic theoretical positions of ritual theory of myth, but since it dealt with modern and contemporary literature rather than with antiquity, with archaic genres or folklore, literary criticism could not be satisfied with establishing a genetic link between literature and myth or ritual; their ontological unity had to be justified. Thus S. E. Hyman insisted on treating myth-and-ritual models as the structure of the poetic imagination

[4] See *Myth and Mythmaking*, ed. by H. A. Murray, pp. 300-353.

[5] Jane E. Harrison, *Prolegomena to the Study of Greek Religion*, Cambridge, 1903 (3rd ed. 1922); *Themis*, Cambridge, 1912; R. R. Marett (ed), *Anthropology and the Classics*, Oxford. 1907; A. B. Cook, *Zeus*, Cambridge, 1914-1940.

[6] F. R. S. Raglan, *The Hero. A Study in Tradition: Myth and Drama*, London, 1936; *The Origins of Religions*, London, 1949; S. E. Hyman, "The Ritual View of Myth and the Mythic", *Journal of American Folklore*, Vol. 68, 1955, pp. 462-472.

rather than its source. Such a statement of the literature-myth relationship derived naturally from the Jungean theory of archetypes which became widely accepted by the myth-and-ritual critics.

The 20th century has witnessed the expansion of myth beyond literature and literary criticism. Sometimes the notion of "myth" includes political ideology, acquiring, as it often does, a negative connotation. Ernst Cassirer and Thomas Mann spoke of political myths. In his tetralogy *Joseph und seine Brüder* Mann tried to counter myth with myth. R. Niebuhr, G. Sorel, J. Marcus, M. Eliade, R. Barthes and other authors wrote about political myths. According to Barthes, political myths emerge because myth is what transforms history into ideology; myth does not have to be a conscious falsification, rather it seeks an ultra-meaning by "amplifying" the natural language, therefore within myth certain discrepancies between the signans and the signatum are perceived as natural and so is the replacement of values by the "facts". Barthes regards the modern epoch to be especially receptive to all kinds of mythology, because bourgeois society, while declaring itself free (the myth of bourgeois democracy), and tries to "depoliticalise" itself through mythologisation.[7] Georges Sorel wrote about the myth of "the general strike of the working people", etc. At the same time he equates revolutionary principles with myth and gives it a positive evaluation. The Nazi myths are often discussed, etc.[8]

W. W. Douglas was right when he wrote[9] that in the 20th century the meaning of the term "myth" expanded and became extremely contradictory. In fact myth is now more a term of polemics rather than analysis. It denotes such different things as falsification and false propaganda, faith, convention, a fantastic representation of values, a sacralised or dogmatic expression of social norms and customs, etc. Myth is used to distinguish between tradition and disorder, poetry and science, symbol and statement, the common and the original, the concrete and the abstract, order and chaos, the intensive and the extensive, structure and texture, etc.

The evaluation of 20th-century mythologism was discussed both abroad and here. Mythological trends are usually closely related to certain fundamental tendencies of the modernist culture; it is stressed that in literature they are opposed to realistic tendencies, while in philosophy mythologism is contrasted to materialism. The American critic Philip Rahv[10] discerns behind the idealisation of myth the fear of history. Since, according to Rahv, a true return to mythological consciousness is impossible, the only way out is in manipulating mythic ideas. In fact, ritual and mythic cyclic concepts, a search for norms and sanctions in the past, traditional mythological models of the world as well as the myth's symbolic language may easily be used

[7] R. Barthes, *Mythologies*, Paris, 1957.

[8] See H. Hatfield, "The Myth of Nazism", *Myth and Mythmaking*, pp. 199-220.

[9] W. W. Douglas, "The Meaning of 'Myth' in Modern Criticism", *Modern Philology*, I, 1953.

[10] Ph. Rahv, "The Myth and the Power House", *Partisan Review*, Vol. XX, 1953, pp. 635-648.

both to express stable harmonious order and to describe eternal, ever-present conflicts, social and psychological. Exploration of ritual-magical patterns draws one's attention to panchronic foundations of culture as contrasted to the idea of historical progress. On the other hand, a positive evaluation of myth may be rooted in conservatism with its fear of revolutionary upheavals and sympathies for intuitionism and mysticism, for traditional religious forms or ecstatic revelations, or it may be connected with a desire to escape from acute problems of social life into the realm of fantasy or the depths of the personal subconscious. Such explanations may often be found in the press, but, of course, they are far from sufficient.

To put these ideas into a proper perspective it might be useful to remember that in the 20th century myth has been viewed both positively and negatively. Thus, for instance, in philosophy such different figures as the intuitionist Bergson and the Neo-Kantian Cassirer expressed a positive evaluation of myth; mythological trends have been prominent in the work of James Joyce and Thomas Mann, who otherwise might be placed at opposite poles of the creative spectrum. However, the main argument lies not along these lines. Mythological tendencies, apart from the ideological atmosphere of the 20th century, reflect new interpretations of myth within anthropology and ethnography. We know that the myth-and-ritual criticism is based on the work of C. G. Jung and the ritualists, followers of Frazer and Robertson Smith; but there are other sources as well: they often quote B. Malinowski, E. Cassirer, S. Langer, J. Campbell and others. The identification of myth with political doctrines is partly rooted in the discovery by 20th-century ethnography (B. Malinowski) of the fundamental role of myths in maintaining the stable social order in primitive societies. The conclusions reached by R. Barthes are based on the mythological theory of Claude Lévi-Strauss; the use of mythological material in psychoanalytic studies is closely connected with new ethnologic studies of "primitive mentality" (cf. the ideas of L. Lévy-Bruhl, etc.). Twentieth-century ethnology itself developed in a definite ideological atmosphere which, to some extent, enhanced anti-evolutionist and irrationalist tendencies within this field of research. While ideological overtones do remain in the background, some achievements of 20th-century comparative mythology deserve careful study and evaluation. In spite of all its contradictions, overestimations and one-sidedness 20th-century ethnology has deepened our understanding of mythology and it is our duty to take account of its achievements. Traditional 19th-century ethnography viewed myths as largely naive, pre- and (anti-) scientific attempts to explain the world. This explanation was to satisfy the "curiosity" of the savage unable to rise above the awesome forces of nature. Such a view was gradually abandoned, and at the turn of the century new approaches to myth, often emphasising only one of its aspects, but at the same time capable of far deeper insights, were elaborated by such different scholars as J. Frazer, E. Durkheim and F. Boas. The new mythology then achieved its complete expression in the ritual functionalism of Bronislaw Malinowski, in Lévy-Bruhl's theory of *représentations col-*

léctives, in Cassirer's logical symbolism as well as in Jung's psychological symbolism and in Lévi-Strauss' structural analysis. Other names may be added to this list, those of R. Marett, Vierkandt, Ch. Schmidt, N. Preuss, M. Radin, J. Campbell, M. Eliade, G. Dumézil and G. Gusdorf (as well as the Soviet mythologist Losev who has undergone a complex evolution).

The ritualists have discovered and studied a very extensive class of myths that originated in the ritual of the calendar cycle. Especially important in this respect was the work of Frazer. In contrast to Tylor's animism he regarded magic as the primary aspect of religion. This helped to orient the study of mythology towards ritual. The role of ritual patterns in the origin of certain genres came to the foreground. Indeed, the ritual and mythological roots of drama and lyrical poetry are very deep. However, the same cannot be said of the heroic epic. The present author has tried to show that the leading role in the development of the heroic epic was played by archaic myths about the mythical ancestors or cultural heroes rather than by cultic myths.[11] True enough, the theory of ritual's priority over myth cannot be accepted, at any rate as a universal law (in spite of the basic role of the sensory-motor aspect of the intellect shown by J. Piaget). Cl. Kluckhohn, W. Bascom, W. J. Greenway and G. S. Kirk have scored some convincing points in their criticism of ritualism. G. Fontenrose displayed a thoroughly negative attitude to this theory.[12] Recently E. W. H. Stanner[13] convincingly demonstrated that the folklore of the Australian aborigines includes riteless myths and that the unity of myth and ritual is structural rather than genetic. The problem of the relationship between myth and ritual is often formulated like the famous question of the mutual precedence of the hen and the egg. It is evident that myth is fundamentally related to magic and ritual. It is not "just a narrative", nor is it an allegory. Myth does not simply satisfy the savage's curiosity about the outside world.

In archaic societies myth performs a definite social function that is vital to their survival: it is man's "Holy Writ", an effective means of maintaining the natural and social order and administering social control. The myth's reality goes back to the events of pre-historic times: it remains an immanent psychological reality due to the representation of myths in rituals which have a magic significance. This new aspect of myth was first discovered by Bronislaw Malinowski, the founder of the functionalist school in anthropology. Malinowski based his theory on his extensive field studies of the natives of the

[11] See E. M. Meletinsky, *The Origin of the Heroic Epos*, Moscow, 1963; *Edda and the Early Forms of Epos*, Moscow, 1968 (in Russian).

[12] W. Bascom, "The Myth-Ritual Theory", *Journal of American Folklore*, Vol. 70, 1957, pp. 103-114; W. J. Greenway, "Literature Among the Primitives", *Folklore Associate*, Hatboro, 1964; G. Fontenrose, "The Ritual Theory of Myth", Univ. of California Press, *Folklore Studies*, 18, Berkeley-Los Angeles, 1966; Cl. Kluckhohn, "Myths and Rituals. A General Theory", *Harvard Theological Review*, Vol. XXXV, 1942, pp. 145-179; G. S. Kirk, *Myth, Its Meaning and Functions in Ancient and Other Cultures*, Los Angeles, 1970.

[13] See E. W. H. Stanner, "On Aboriginal Religion", *Oceania Monographs*, No. 11, Sidney, 1966.

Trobriand Islands (*Myth in Primitive Psychology*[14] and other works). After Malinowski's pioneering work it was no longer possible to share the naive views of Tylor and Lang. His ideas were supported and developed by H. Preuss, and later by Georges Gusdorf and Mircea Eliade. The ideas of M. Eliade[15] are especially interesting in this respect. He elaborated Malinowski's ideas on primitive mythological ontology and showed that in myth the reality and value of human existence are determined by their relation to sacral mythological times. Their justification is derived from the "paradigmatic" sanctions instituted by supernatural ancestors. According to Eliade, primitive and archaic ontology possesses a "Platonic" structure, and the same principles underlie the Indian technique of meditation. At the same time while classifying myths in terms of their function in rituals Eliade gives a rather modernistic interpretation of mythological consciousness: it is believed not only to ignore historical time, but to actively oppose the profane time with its irreversibility and historical perspective. This is, supposedly, the meaning of periodic purification and new creation, of all cyclic regeneration in rituals. In our view, the annihilation of historical time in myth is a "by-product" of a specific mode of thinking, rather than the purpose of mythology which, on the whole, is free from any subjective fear of history. It is understandable that the experience of certain highly developed 20th-century societies may provide a legitimate source for such a fear; this, however, is not the case in primitive archaic communities. The cyclic conception of time which is so important for 20th-century mythological tendencies, was, strictly speaking, a feature of ritual rather than mythology. It reflects the desire to maintain through magic the existing natural and social order (the emphasis in ritual is also not on repetition and return, but on the magical enhancement of declining fertility). The idea of historical epochs and cycles becomes explicit only in more developed mythologies, in Ancient India, Greece and Iran. Thus, an all too close identification of myth with ritual supports modernist interpretations of myth. In fact, primitive mythology gave birth not only to the ideas of cyclic time but also to the Promethean notion of cultural achievement which puts man above nature. It is also important, in our opinion, that the sacral mythological time of creation is an archaic diffuse notion of time, but in no way its negation. This mythological notion contains, although in a naive form, the seeds of the future causal concept of time elaborated by Leibniz and Kant (the past—the sphere of "priori"—is the domain of causes for "posteriori"). This time is irreversible in principle: it is precisely this feeling of the irreversibility of mythological time that correlates with the idea of ordering the world, transforming chaos into cosmos. Again, this correlation reminds one of the negative correlation between irreversibility and entropy as it is treated in modern physics and psychology. In this way

[14] B. Malinowski, *Myth in Primitive Psychology*, London, 1926.

[15] Among others see: M. Eliade, *Le mythe de l'éternel retour*, Paris, 1949; *Mythes, rêves et mystères*, Paris, 1947; *Le Yoga*, Paris, 1954; *Aspects du mythe*, Paris, 1963; *Le sacré et le profane*, Paris, 1965, and many other works.

we can establish the relationship between the truly rational, scientific basis of the discoveries made by the ritualists and the functionalists and their likely exaggerations and modernisations.

Emile Durkheim, the founder of the French sociological school, introduced the notion of *représentations colléctives* at the beginning of the 20th century. His approach was based on the postulates of collective psychology and on his evaluation of the special status of the body social. Two forms of consciousness correspond to the collective and the individual aspects of human life. These two forms of consciousness, in their turn, determine the opposition between the sacred and the profane. Durkheim made an important discovery that the totemic mythology models the clan structure, while serving as its justification.

Emphasising the social aspect of mythology, Durkheim, like Malinowski, departed from the traditional 19th-century ideas about the explanatory role of mythology. Like Frazer and Boas and his Russian colleagues and collaborators Bogoras and Sternberg, Durkheim postulates the fundamental unity of the "primitive" and "civilised" forms of thinking; only some of his remarks about the peculiarities of "primitive mentality" appear to forerun the ideas of Lévy-Bruhl and even Lévi-Strauss who abandoned a narrow sociological approach.[16] It was Lévy-Bruhl who for the first time directly approached the problem of "primitive mentality" and mythological consciousness.[17] He emphasised the importance of the affective aspect of the *représentations colléctives* that seem to have taken the place of logical inclusions and exclusions. Lévy-Bruhl tried to demonstrate the prelogical nature of collective ideas, their complete indifference to contradictions and ignorance of the logical law of the excluded third, their manifestation in mystical participation. Lévy-Bruhl described the operation of mythological thinking, especially its ability to generalise while remaining concrete and specific in the use of signs. However, neither the intellectual meaning of mythological thinking nor its practical cognitive results became apparent to Lévy-Bruhl through the veil of "mystical participation". Evidently, Lévy-Bruhl's mistake was that he represented diffuse and syncretic "primitive" thinking as a special "illogical" logic, as a rigid system closed to personal and social experience, alien to the rules of logic. Limited though the scope of this theory was, it performed a positive role in discovering the logical peculiarity of mythological thought.

The next stage in the study of mythological thought was reached by Cassirer in his fundamental monograph *The Mythic Thought* (1925), the second volume of his *Philosophy of Symbolic Forms*.[18] Drawing on the work of Preuss and Marett, Malinowski, Durkheim and Lévy-Bruhl, as well as on the studies of ancient mythology by F.Otto and

[16] E. Durkheim, *Les formes élémentaires de la vie religieuse*, Paris, 1912.
[17] L. Lévy-Bruhl, *La mythologie primitive*, Paris, 1935; *La mentalité primitive*, Paris, 1925; *La surnaturel et la nature dans la mentalité primitive*, Paris, 1922.
[18] E. Cassirer, *Philosophie der symbolischen Formen*; II *Das mythische Denken*, Berlin, 1925; *An Essay on Man*, New Haven-London, 1945; *The Myth of the State*, New Haven, 1946.

H.Usener who were under the influence of anthropology, Cassirer elaborated his system of the philosophy of myth. His work was based on an important new principle: all spiritual activity of man (myth-making in particular) is viewed as symbolic *ab origine*. According to Cassirer, mythology, alongside language and art, is an autonomous symbolic form of culture with its own special mode of symbolic representation of the sense world. Mythology is a closed system characterised by a special mode of functioning and a special approach to modelling the outside world. Cassirer sought to discover the function and structural forms of folk imagery rather than its genesis or empirical background. This approach was in sharp contrast to the general tenor of the 19th-century scientific method. It should, however, be remembered that Cassirer's interpretation of structure is rather static, somewhat in the spirit of *Gestaltpsychologie*. Here lies a boundary between Cassirer and later structuralists. According to Cassirer, the distinctive feature of mythic thought is its non-distinction between the real and the ideal, the thing and the image, the body and the property, the origin and the principle. As a result, similarity and contiguity are transformed into a causal chain, which, in turn, is interpreted as a material metamorphosis; relations are perceived as indentical rather than synthetic; concrete universal images take the place of laws; part is functionally identical to the whole, and the entire cosmos follows a single underlying pattern and is articulated by the opposition of *sacral* versus *profane* related, among others, to the four cardinal points. This determines the notions of space, time and number that were exhaustively studied by Cassirer. According to Cassirer, the mythic feeling of the unity of life is manifested in man's orientation on those aspects of reality which are in practice close to him, in the magical communion of human groups with animal species (totemism). The most valuable part of Cassirer's legacy is the discovery of certain fundamental structures of the mythic thinking and the elucidation of the nature of mythological symbolism. Naturally Cassirer could not adequately understand and describe the dynamic mechanisms of the symbolic language of myth and the deep processes of myth-making at the time when the modern communication theory did not exist. In addition, his interpretation was under the impact of the Neo-Kantian conception of the foundations of communication which, in our view, is a philosophical barrier to the understanding of myth. This transcendental conception mystifies the social nature of communication ignoring the basic fact that mythic symbolism cannot be abstracted from the social network by which it is often generated. Cassirer's idea of mythology as a model of the world is very deep, but since this modelling is only remotely related to social experience, symbolisation is treated in a purely Kantian spirit as an innate function. It is not by chance that the structural anthropology and mythology which draw many of their tenets from the modern communication theory have grown from the French sociological school with its *représentations colléctives* and not from the Marburg Neo-Kantian school in which the idea of the collective appears as a trans-subjective community based on the transcendental "I". At the

same time Cassirer was not able to prove that mythology is really completely autonomous with regard to other cultural forms. In fact, this autonomy is relative owing to the syncretic nature of mythology itself. Cassirer sometimes combines in a somewhat eclectic fashion the ideas which affirm the existence in man of an intuitive feeling of unity between nature and society and postulates of the pragmatic function of myth which ought to confirm this unity.

Among Cassirer's followers mention should be made of Suzanne Langer. She abandons Cassirer's transcendental conception of communication in favour of the "naturalist" empirical approach proceeding from the individual "I" rather than from the transcendental, in keeping with the traditions of Anglo-Saxon scholarship.[19] Langer is indebted in her approach not only to Cassirer, but also to Boas, Radin, Whitehead and Morris. She may be described as moving within the mainstream of logical positivism.

An interesting later example of the symbolic interpretation of myth is E.W.Count's article "Myth as World View" (1960).[20]

Let us now dwell shortly on the psychoanalytic interpretations of myth. The Freudian school (Freud himself, O. Rank, Riklin, G. Róheim) regards the myth as an expression of the crucial psychological situation and as a realisation of paradoxical sexual drives that were historically satisfied before the emergence of the family (the myth about Oedipus, Kronos, etc.). Fairy-tale, as opposed to myth, is believed to reflect the displacement of the original drives into the subconscious, creating substitutes masking the real motives. Originally, Freudianism was oriented on the individual psychology only. The notion of "super-ego" appeared later, and still later the theory was supplemented by sociological considerations; this was achieved by Neo-Freudians who, however, devoted little attention to mythology. Psychology oriented on the individual could draw on mythology only for allegoric illustrations (an allegory of erotic complexes displaced from the consciousness). A transition from allegory to symbolism in Cassirer's sense could be expected on the psychological plane only when the psychology of the individual was superseded by the collective psychology. This task was performed by C.G. Jung who transplanted the sociological concept of *représentations colléctives* into psychology. The French sociological school, especially Lévy-Bruhl, exerted a serious influence on Jung. Jung's theory[21] of the deep stratum of the collective unconscious, the domain of archetypes as the structures of primeval images enacted by the collective unconscious fantasy, is too well known to be reviewed here. Jung compares archetypes with mythic images and motifs as products of the primitive mentality. Unlike

[19] S. Langer, *The Philosophy in a New Key*, Cambridge, Mass., 1951.

[20] E. W. Count, "Myth as World View. A Biosocial Synthesis", *Culture in History, Essays in Honor of P. Radin*, New York, 1960, pp. 580-627.

[21] See a very important work on mythology by C. G. Jung and K. Kerènyi, *Einführung in das Wesen der Mythologie*, 4-te Auflage, Zürich, 1951. For Jung's works on the theory of archetypes and mythology see *The Collected Works of C. G. Jung*, Vol. 9, Part 1, London, 1959.

Freud, Jung admits the possibility of multiple interpretation of the unconscious content depending on the situation, as well as a double interpretation of dreams and fantasies (in terms of the subject and the object); in his opinion the "synchronisation" of originally distant aspects may lead to semantic coincidences. Thus, Jung departs from the Freudian allegorisation and achieves a deeper understanding of myth. Especially deep is Jung's notion of the metaphoric nature of mythic symbolism which can never be completely rationalised, but only transposed into other, also imaginative and symbolic, languages. Here he is a direct precursor of Claude Lévi-Strauss, just as in other aspects: thus, the analogic and causative types of the symbolisation of libido described by Jung resemble Lévi-Strauss' (and R.Jakobson's) opposition of the metaphor and the metonymy; even his somewhat vague notions of the "dialectics" of psychic energy and of entropy as related to psychic processes seem to predict later discoveries of the information theory. Jung's role as a pioneer of the modern approach should be emphasised, because it may seem rather paradoxical: Lévi-Strauss has adopted an extremely anti-psychological stand and this comparison helps to visualise the most productive elements in Jung's theory, while Jung himself was inclined to interpret not only myth but all culture in psychological terms alone. The most vulnerable point in Jung's approach was his hypothesis of the inherited nature of the archetypes. Jung sometimes goes too far claiming that in mythology the cognition of nature is but the external code of an unconscious internal process. The reduction of mythology to a mere reflection of the archetypes and of the unconscious complexes of the human life-cycle is, in fact, an inadmissible limitation of mythology, a clear underestimation of its social aspect. This limitation is especially apparent in the work of Joseph Campbell and of some adherents of the myth-and-ritual criticism. Mythology, the principal manifestation of the "primitive" and archaic culture, can never be totally identical with dreams, visions and other products of personal fantasy in civilised society, although in primitive societies dreams do play a major role in myth-making. Not every form of imagination deserves the name of myth. This should be especially emphasised because such a panmythological tendency is a very typical product of modern thought. However, for all his spiritualist and even mystic exaggerations (as distinct from Freud) Jung has discovered several fundamental truths about mythology: that it is homogeneous with some other (basically collective) forms of human fantasy, that it is rooted in the unconscious layers of psyche and that all human imagination is symbolic.

The latest significant theory of myth was advanced from the vantage point of structuralism by the French ethnologist Claude Lévi-Strauss.[22] It should be stressed that Lévi-Strauss is more dependent on the preceding mythological conceptions than is usually admitted, irrespective of whether or not he consciously borrowed their ideas. Thus, I find that Lévi-Strauss is quite close to Jung in spite of

[22] See his main works: *Anthropologie structurale*, Paris, 1958; *La pensée sauvage*, Paris, 1962; *Mythologiques*, I-IV, Paris, 1964-1972.

his own very critical attitude to the Swiss scholar in favour of Freud. The achievements of Lévi-Strauss would not have been possible without the pioneering studies of Cassirer; he was also directly influenced by Georges Dumézil, although this influence apparently became mutual. It is interesting that Lévi-Strauss' approach is, in a way, anticipated by the works on mythological semantics and paradigmatics of the Soviet Marrist philologists Freidenberg and Frank-Kamenetsky which he, undoubtedly, never had occasion to read. But just as it is necessary to replace psychology with logic in order to "proceed" from Jung to Lévi-Strauss, it is equally necessary to switch from the diachronic plane (construed along the fantastic lines of the Marrist "paleontology" of plots) to the synchronic plane for this connection to become obvious.

Lévi-Strauss' direct predecessor was the French sociological school, although he was also influenced by American cultural anthropology. The French scholar integrated these traditions with the ideas of linguistic structuralism (Roman Jakobson's studies in phonology, etc.) and information theory, and created structural anthropology and the corresponding theory of myth. The structural approach enabled Lévi-Strauss to describe the effective functioning of the logical mechanisms of "primitive" thinking. According to Lévi-Strauss primitive thinking is collective and unconscious (this is reminiscent of Jung); it is relatively independent from other forms of tribal activity and from socio-economic infrastructures. Consequently it is able to reflect adequately the "anatomy of reason" itself. For Lévi-Strauss the freedom of myth-making is a direct reflection of the intellectual flexibility of primitive thought, which may pursue all conceivable logical variants and not merely serve as a slavish mirror of the tribal social institutions.

Lévi-Strauss has elaborated a new theory of mythological thinking in clear opposition to the ideas of Lévy-Bruhl. He was able to demonstrate the specific nature of mythological thinking as based on the concrete logic of the sensual qualities. It is a metaphoric thinking which operates with a set of "ready-made" elements that are constantly rearranged kaleidoscopically. The rules of this rearrangement are those of "bricolage", etc. However, while it remains so specific, mythological thinking is able to generalise, classify and analyse; and it is this ability which formed the intellectual basis of what is known as the neolithic technological revolution and which in a way anticipates latest scientific approaches. Mythological thought generates a variety of sign systems, and Lévi-Strauss analyses kinship systems and totemic classifications in terms of their semiotic structure. He has elucidated the role of binary oppositions in primitive classifications and generalisations. According to Lévi-Strauss, the redundancy of sign vehicles in myth does not interfere with communication due to the structure of distinctive levels and codes; the semantisation of myth is, in fact, a potentially infinite chain of transformations, because, as we know, mythological thinking is basically metaphoric. This, however, does not limit the intelligibility of myth. One of Lévi-Strauss' undisputed achievements has been his synthesis of various approaches to myth:

the traditional 19th-century cognitive view of myth, the modern understanding of myth's role in the control of social and natural order, the realisation of close affinity between myth and ritual as well as of its affective and "pre-logical" aspect, etc. Certain aspects of Lévi-Strauss' method may give rise to doubts, arguments or, even, objections. In our view, he does not draw a clear enough line between the two classes of oppositions: fundamental antinomies like life/death, good/evil, etc., and allomorphs in which the same relations are projected onto different planes (space/time, above/below, feminine/masculine). He also does not seem to differentiate between the oppositions which are relevant for the real (be it even unconscious) thinking processes of the natives and the oppositions which structure the mind of the anthropologist. Thus, his favourite opposition nature/culture is hardly immanent for the thinking of South American Indians. At first Lévi-Strauss used language, this universal medium of information, as a frame of reference for myth (cf. his article "The Structure of Myth", 1955), but later *Mythologiques,* 1964-1972) this position is reserved for music as the ideal artistic structure. This later correlation emphasises the metaphoric nature of myth. However, to conclude that information can easily be transposed from one level to another, that correlations between codes can easily be established would mean to agree that information in myth is not after all so important. This could lead to formalism which is so unacceptable to Lévi-Strauss himself. This theoretic danger is more than compensated for by a minute attention to cultural and ethnographic context so aptly demonstrated by the scholar. Lévi-Strauss has developed a fundamentally logical view of myth when it is regarded as an instrument for solving cardinal logical antinomies by means of progressive mediation. He elicits the logical relations between the motifs, plots and hierarchical mythological systems. Mythological semantics is the main object of Lévi-Strauss' structural analysis, his purpose is to discover the structure of mythological thought, and therefore the analysis is largely paradigmatic, although the scholar seems to recognise the importance of the syntagmatic aspect. Here Lévi-Strauss' method is somewhat one-sided, but this one-sidedness has nothing to do with structuralism as a whole: V. Propp, the Soviet founder of structural folkloristics, suggested a model for the structural analysis of narrative syntagmatics already in the twenties.[23] Recently a number of attempts have been made to combine the Lévi-Straussian paradigmatics with the Proppian syntagmatics, e.g., in the work of the French semiotician A.J.Greimas.[24] Incidentally, a certain underestimation of the narrative aspect of myth is a common shortcoming of practically all theories of myth. It should not be forgotten that the events of mythological time are elementary units of the mythic model of the world. There have been interesting

[23] V. J. Propp, *The Morphology of a Fairy Tale*, Moscow, 1968 (the first edition, Leningrad, 1928), (in Russian).

[24] A. J. Greimas, *La sémantique structurale*, Paris, 1966; *Du sens*, Paris, 1970.

recent attempts, the most promising by the Marandas,[25] to apply computers for the study of myth structure.

As we have seen the development of the theory of myth in the 20th century has followed a complicated path. Many theories could not avoid exaggerations, mistakes and one-sidedness. Some have even led into philosophic and ideological blind alleys. However there can be no doubt that as a whole the study of myth in the 20th century has made very important discoveries. These discoveries should receive a deeper scientific and philosophical interpretation. To ignore the achievements of 20th-century scholarship because of the narrow approach or ideological limitations of some authors would be short-sighted.

The 20th century has broadened our view of myth, its function and structure. A close relationship has been discovered between myth and the creative psychology or the psychology of the individual. Myth has been established not only as the genetic source of the artistic imagination but also as its immanent model and essential ingredient. At the same time the current panmythological trend should be somewhat limited so that the notion of myth should not be allowed to include and dissolve such important spheres of consciousness as literature, psychology or political ideology, no matter what it may be. The fact that myth is homogeneous with other ideological forms as well as with personal fantasy does not make it actually identical with them. On the contrary, it is necessary to study the process of their crystallisation from the original syncretic unity of the mythological consciousness. Their relationship at various historical stages should be studied in detail, and modern rationalist methods should be used to investigate the common psychological background of mythology and other types of fantasy.

[25] E. K. Köngäs, P. Maranda, *Structural Models in Folklore and Transformational Analysis*, The Hague, 1971; P. Maranda, "Computers in the Bush", *Essays on the Verbal and Visual Arts*, ed. by J. Helm, Washington, 1967, pp. 77-83; "Analyse quantitative et qualitative de mythes sur ordinateur", *Calcul et formalisation dans les sciences de l'homme*, Paris, 1968, pp. 79-86, cf. I. B. Buchler, H. A. Selby, *A Formal Study of Myth*, Austin, 1968.

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Discrete Variables and Random Factors in Mathematico-Economic models

The rapid development of mathematical methods in economics has put forward a number of new problems—both computational and methodological. As we know, the actual statement of an optimal planning problem, the very definition of an optimal plan, presupposes a given mathematical model of the economic unit. The economic unit in question may be an industrial or agricultural enterprise, a production association, a commercial firm, etc., in short, any administrative-economic entity or any chain of technologically related production operations. It is assumed that the mathematical model adequately describes the economic unit, i. e., gives a sufficiently complete and precise picture of the properties of the economic unit needed for planning.

The mathematical model used in planning consists of two main components: the set D of admissible plans and the objective function φ. Suppose X_i is some techno-economic index characterising the economic unit and let I be the total number of such indices in the mathematical model. X_i is called a component of the plan, and by the plan we mean the sequence of all the components $X=(X_1, \ldots, X_I)$. A plan is called admissible, if it satisfies a set of conditions $g_1, \ldots, g_n$, expressing the specific technical, technological and economic aspects of the economic unit, and inadmissible if it does not. Thus, $D=\{X \mid g_1(X), \ldots, g_n(X)\}$.

The objective function φ assigns to every plan X a corresponding value $\varphi(X)$. Let $X^1, X^2 \in D$ be two certain admissible plans. The plan X^1 is considered to be better (B) than the plan X^2 ($X^1 {}_B X^2$), if $\varphi(X^1) > \varphi(X^2)$. [Depending on the problem set, it is possible that $X^1 {}_B X^2$ if $\varphi(X^1) < \varphi(X^2)$. For a more definite solution we shall deal with the maximisation problem, in other words, we shall consider that $X^1 {}_B X^2$ if $\varphi(X^1) > \varphi(X^2)$, if not stipulated otherwise.]

Thus, the objective function induces a structure of the order B in the set of admissible plans. The optimal plan, denoted X^{opt}, is the maximal element of D, i. e., $X^{opt} = max_B D$. In other words, the optimal plan is the solution of the conditional extreme value problem $\max_{X \in D} \varphi(X)$.

Thus the planning problem in the above described model is an extreme value problem.

To determine the optimal plan we must:

1) design a mathematical model of the economic unit, i. e., state the limiting conditions $g_1, \ldots, g_n$ and the objective function φ, and

2) solve the problem $\max\limits_{X \in D} \varphi(X)$.

COMPUTATIONAL PROBLEMS. DISCRETE VARIABLES

There are various methods for the solution of the problem $\max\limits_{X \in D} \varphi(X)$ (extreme value methods). Their applicability and efficacity depend on the properties of φ, $g_1, \ldots, g_n$ and D. For example, if all the $g_1, \ldots, g_n$ are expressed as equations $g_i^\circ(x)=0$, where all the g_i° and φ are continuous differentiable functions, we may find the optimal plan by combining the Lagrange multipliers method with the classical extreme value methods of calculus.

However, in economic problems, conditions $g_1, \ldots, g_n$ are most expressed in the form of linear inequalities, so D in this case is an I-dimensional simplex. Usually φ is also a linear function, so the problem $\max\limits_{X \in D} \varphi(X)$ turns out to be a problem in linear programming.

A large and constantly increasing number of practical economic problems has been solved by means of linear programming. But experience shows that the possibility of applying linear programming has its limitations. Many problems considered today cannot be solved by linear programming, or indeed by other usual methods, in view of computational difficulties. These difficulties cannot be resolved even by using the largest existing computers.

One of the sources of computational difficulties is the discrete nature of the variables. The incorporation of discrete variables into the mathematical model makes it possible to take into consideration many important aspects of the economic unit and to improve the adequacy of the mathematical model. For example, any discrete production, such as that of plant and machinery, assembly lines, etc., calls for discrete variables in the mathematical model. It is important to note that the incorporation of discrete variables allows for taking account of logical relationships within the framework of the mathematical model.

In this connection, consider the following example. Suppose we are to draw up a plan for a design organisation, or, what is the same thing, to distribute resources among certain versions of the projects. The actual content of these projects does not interest us at present. They may be factory construction or modernisation projects, automation projects, designs of machines, equipment, apparatus, etc. It is possible, in particular, that certain projects exclude each other. In other words, the inclusion of project P_1 into the plan excludes project P_2 and vice versa. Such a situation may arise, for example, when P_1 and P_2 use incompatible technique means.

Let us consider P_1 and P_2 as propositional variables, related by the logical operator $\triangle$ which is defined by the following truth table:

P_1 \ P_2	$\triangle$	T	F
T		F	T
F		T	T

Here T and F stand for true and false respectively.

As we know, logical operators combine simple propositions—in the given case the propositional variables P_1 and P_2—into a compound proposition $P_1 \triangle P_2$ whose truth-values may be obtained from the truth-values of P_1 and P_2 by means of a truth table.

In working out the plan, an opposite problem arises: given a true compound proposition $P_1 \triangle P_2$, find the truth-values of P_1 and P_2. It is easy to see that this problem has three solutions (its difficulty grows considerably when the number of propositional variables increases). Denote by (P) the truth-value of P. Then $(P_1)=T$, $(P_2)=F$, as well as $(P_1)=F$, $(P_2)=T$ and $(P_1)=(P_2)=F$, are admissible solutions. (Only $(P_1)=(P_2)=T$ is inadmissible). The existence of an objective function allows for choosing the optimal solution from among the admissible ones.

Now consider a method by which the condition $(P_1 \triangle P_2)=T$ may be incorporated into the mathematical model. Suppose $\alpha(P)$ is the representation function:

$$\alpha(P)=\begin{cases} 1 \text{ if } (P)=T \\ 0 \text{ if } (P)=F \end{cases}$$

Obviously, the condition $(P_1 \triangle P_2)=T$ may be equivalently expressed by the inequality

$$\alpha(P_1)+\alpha(P_2) \leqslant 1$$

Thus we have discrete variables $\alpha(P_1)$ and $\alpha(P_2)$ in our model, which are capable of taking on only one of the two values: 0 or 1 (they are called boolean variables). Boolean variables also permit expressing other logical relations, e. g., implication. The implication $\rightarrow$ is defined by the following truth table:

P_1 \ P_2	$\rightarrow$	T	F
T		T	F
F		T	T

Here P_1 is the antecedent and P_2—the consequence of the implication. The notation $P_1 \rightarrow P_2$ is read" if... then...". (As we see from the table, a false antecedent may imply a true as well as a false consequence).

Assume that the initial information intended for the elaboration of the plan contains the proposition $(P_1 \rightarrow P_2)=T$. This means that if $(P_1)=T$, then P_2 must also be true, since for a false P_2 the proposition $P_1 \rightarrow P_2$ is false. But if $(P_1)=F$, then P_2 may be true as well as false. Conversely, if $(P_2)=F$, then P_1 must also be false, and if $(P_2)=T$, then P_1 may have any truth-value. In other words, if the plan does not include project P_2, i. e., $(P_2)=F$, then project P_1 may not be included in the plan either. But if P_2 is included in the plan, then P_1 may be either included or not. Such a situation arises in cases when project P_1 is the continuation of project P_2 or when P_1 somehow makes use of the results of P_2.

It is easy to verify that the proposition $(P_1 \rightarrow P_2)=T$ is equivalently expressed by the following inequality in the corresponding boolean variables: $\alpha(P_2) \geqslant \alpha(P_1)$. (The set of the above inequalities between boolean variables, together vith resources limitations and the objective function, constitute a model for choosing possible projects.)

We must note that methods for solving mathematical programming problems in which all, or some, of the variables are discrete, are discussed in a special branch of applied mathematics called discrete programming.

Despite many achievements in this field, most problems in discrete programming of a sufficiently high dimension (say 30—40 variables and as many conditions) turn out to be practically unsolvable. But even for some low-dimension problems general methods are less efficient than the total enumeration of all the possibilities, i. e., are in fact inadmissible. As a result, a large nuber of various combinatorial methods, especially designed for specific problems in discrete programming, have been developed. And still a large number of problems encounter difficulties insurmountable so far.

Discreteness and high dimensionality are not the only sources of computational difficulties. Another source is the non-linear character of some of the relations. If the objective function φ or at least one of the limiting conditions $g_1, \ldots, g_n$ is non-linear, then the highly effective algorithms of linear programming are no longer applicable.

Many non-linear problems may be reduced to discrete problems, special methods are devised for others, but a large number of problems remain unsolved.

METHODOLOGICAL PROBLEMS (RANDOM FACTORS)

The problem of an optimal plan assumes that any admissible plan may be adopted and then precisely fulfilled. If this is not so, the search

for an optimal plan, or indeed the notion of optimal plan itself, becomes meaningless.

Since the plan is admissible, i. e., satisfies all the necessary technical, technological and economic conditions, it would seem natural that such a plan may be adopted and fulfilled. Nevertheless, in the vast majority of practical problems, this is not so. On the contrary, plans which may be adopted and strictly fulfilled, e. g., the timetable or cutting-put problem, are rare exceptions. This is due to the presence and operation of random factors. A number of different random factors interfere with the process of production. For example, such a random factor as the weather has direct effect on almost all branches of agricultural production, on the construction, fishery and hunting, transportation. Indirectly (via these branches) the weather influences production as a whole and each of its links.

Further, any production process is linked with a large number of regulating and control processes. Indeed, the production process is simultaneously influenced by a wide range of regulators, beggining with the technical regulators of the technological parameters of production (temperature, pressure, flow rate, velocity, etc.) and ending with the control functions executed by various administrative organisations.

As we know from cybernetics, under certain conditions a regulator may lead to vacillations. Such vacillations constantly arise in various places with various force and are another random factor. The actual process of decision-making does not exclude errors or miscalculations. Thus another random component, which may be called the "error noise", arises here.

Random factors to some extent permeate all human activity: as an example of a random factor with positive influence we may mention unplanned inventions facilitating the process of production. The breakdown of machines, accidents, illness are examples of random factors which exercise a negative influence. The failure to take them into consideration will result in the choice of an insufficiently realistic or completely inapplicable plan.

Accounting for the influence of these random factors calls for a different definition of the notion "plan", the combination of planning and forecasting, a reconsideration of the functions and tasks of planning. An analysis and a strict definition of the notion "realistic plan" opens the way for overcoming these methodological difficulties.

We must note that methodological problems, as well as specific computational problems, connected with random factors, are the subject of a number of papers which constitute a separate branch of mathematical programming, which is called stochastic programming. It contains a number of theoretically and practically useful approaches to the problem considered. But these approaches are disparate, each of them is only suitable for resolving a narrow class of special problems.

It is important to note that each stochastic problem is characterised by the following main properties:

1) a measure of probability P is defined through the set D;

2) the solution of a stochastic problem is determined with the aid of P and φ.

ANALYTICAL AND ALGORITHMIC MODELS. THE SIMULATIVE METHOD

A set of admissible plans was previously defined by means of conditions $g_1, \ldots, g_n$. The specificity of this method of prescribing sets consists in that for any element X of Euclidean space E^l it is possible to see which of the statements $X \in D$ or $X \notin D$ is true. For this purpose it is sufficient to check whether the conditions $g_1, \ldots, g_n$ are satisfied. We shall call this an analytical method of prescribing a set.

Besides, there is an algorithmic method of prescribing sets. However, a set may not be given at all, although defined. An arbitrary set D is considered defined if some special definition enumerates its elements.

In the general case we shall consider that a definite set D is given analytically, if there is some established set of algorithms ρ which defines a procedure allowing to determine, for any X, in a finite number of steps, which of the statements, $X \in D$ or $X \notin D$ is true.

We shall say that a set D is given algorithmically, if there is some established set of algorithms ρ which determines a procedure allowing for obtaining in a finite number of steps, an element $X \in D$ but not allowing for obtaining an element not from D. In other words, in this case D is a set of those and only those Xs which may arise in carrying out the algorithms ρ. Here ρ is called a simulator. Assume $M = \{1,2,\ldots\}$ and $e \in M$ and e is a simulation number. Call a single application of the simulator a simulation. (When defining an analytically and algorithmically given set, we used the concepts of "procedure" and "operation" which had not been previously defined. This lack of strictness is explained by the generality of the definitions. Here we assume that the meaning of the concepts of "procedure" and "operation" is intuitively clear).

Clearly, not only arbitrary sets, but images too, can be defined as analytically or algorithmically given. This directly follows from the fact that any image f : T→G is a subset of the universe of discourse $T \otimes G$ and, therefore, f may be defined and given as a set.

Any mathematical model of an economic unit in which either the set D of admissible plans or the objective function φ, or both, are given algorithmically, is called a simulative model.

The simulative method consists in applying simulative models to the solution of problems in planning, forecasting, etc.

A simulative model has many important advantages over an analytical model (i. e., the model in which both D and φ are given analytically). The algorithms of a simulative model may include those turning to any tabular or reference data in any form, algorithms determining any experimental procedure (measurement, calculation, numerical experiment, etc.). Moreover, a simulative model may contain algorithms for computation by any formula or any set of formulas, algorithms for the exact or approximate solution of any problem, such as systems of algebraic equations, differential equations, computation of eigenvalues of an operator, extreme value problems for linear, nonlinear, discrete, parametric, dynamic and other types of mathematical programming.

Here discrete variables or non-linear relations between the variables give rise to no specific computational difficulties. Thus, the simulative model opens up ample opportunities before the deviser of an economic unit model by considerably widening the range of modelling means.

However, despite the undisputable advantages referred to above, the simulative method also has a number of shortcomings which sharply narrow its scope of application. Indeed, whenever D and/or φ are algorithmically given, the properties of the region D and/or of the function φ, needed to find the extremum, remain unknown. In other words, in this case we do not known, for instance, if D is convex, continuous, simply-connected, etc. The cases when we can ascertain some of these properties are few and far between. Only in these exceptional cases can we apply, to find the optimal plan, such methods as the gradient method, the method of tangents to the level line and so on, which constitute so called "partial combinatorial simulation".

Just as rare are the cases when D is finite and consists of a small number of elements, so that the optimal plan may be found by total enumeration of all the admissible plans. This constitutes so called "total combinatorial simulation"

Sometimes it is possible to apply one of the methods of random search, in particular, random learning search. This is called "formal euristic simulation". But the application of random search methods also involves a number of difficulties. For example, random search based on the homeostat principle necessitates simulations to be effected so that plans can cover each point of the region D with equal probability, and this cannot always be realised. Moreover, the number of necessary simulations grows exponentially with the number of variables, so this method is practically inapplicable in problems with more than four or five variables.

The method of iterated random search also requires simulations to be carried out so as to embrace each point of the region D with equal probability. On the other hand, if the optimum value of the objective function is not given in advance, this method is in fact

inapplicable, since we do not know when to stop the search and how far from the optimal plan (in absolute values of the objective function) is the plan we have found. These reasons explain the wide use of so-called "nonformal euristic simulation".

This type of simulation consists in carrying out a number of simulations according to the orders of an expert or a client, after which the expert analyses the results and makes a decision. Here the simulation model serves simply as a means of mechanising the computation of various possibilities. All the tasks, connected with the search for the optimal plan, involving risk, uncertainty, etc., are then dependent on the expert and his intuition. This, of course, cannot be considered as a solution of the problem.

Besides the above methods, the so-called "stochastic simulation" method is used to solve forecasting problems. It essentially consists in the following. Suppose a number of components of the plan X, we shall denote them by $X_1, \ldots, X_k$, are independent variables with given laws of distribution, while the remaining $X_{k+1}, \ldots, X_l$ are determined functions of $X_1, \ldots, X_k$. (In other words, with each realisation of the values $X_1, \ldots, X_k$ we can unambiguously find the values $X_{k+1}, \ldots, X_l$.)

In this case, by using random number units, we can simulate the realisation of the values $X_1, \ldots, X_k$ and then compute the corresponding $X_{k+1}, \ldots, X_l$. This will constitute the simulation. Then, by carrying out a sufficient number of simulations, we will obtain statistical information about $X_{k+1}, \ldots, X_l$, which may be used to compute any statistical characteristics of these variables, thus obtaining the predicted values of $X_{k+1}, \ldots, X_l$ with the aid of the known predictions $X_1, \ldots, X_k$. This scheme for the application of the simulative model for forecasting purposes is, at the same time, a scheme for applying the Monte Carlo method. This scheme is extremely effective, but as we see, here the planning problem is neither stated nor solved

METHODOLOGICAL PRINCIPLES OF THE EVOLUTIONARY-SIMULATIVE METHOD

The brief sketch of the present situation in the methods of mathematical economics as applied to planning theory discussed above leads us to conclude that the main problems still awaiting their solution are the methodological problems, involved in dealing with random factors, and computing problems. An important step in their solution is the evolutionary-simulative method (ES-method) which we shall now briefly discuss.

Here and subsequently we shall no longer need to assume that X is a finite-dimensional vector, nor that D is a region of finite-dimen-

sional Euclidean space. The subsequent considerations, in particular, the algorithms of the ES-method, are equally applicable if D is any set, say, a region of any space A. The necessary conditions and assumptions will be stated as we proceed.

Now let the set (universe of discourse) A be the Cartesian product of a finite family of arbitrary sets $A_1, \ldots, A_l$, i. e., $A = \prod_{i=1}^{l} A_i$. In this case each element (plan) is, as before, a set of components $(X_1, \ldots, X_l)$. Here, however, each component does not necessarily take on numerical values (it can, for example, take on values for a set of functions, vectors, etc.).

Assume that all the components of the plan are related to each other, i. e., the value of each component in one way or another determines (or is determined by) the values of the others. If this is not so, i. e., some of the components, say, X_d and X_τ depend on each other but do not depend nor have influence on the other

$$X_i,\ i=1, \ldots, l,\ i \neq d \text{ and } i \neq \tau,$$

then the original planning problem splits into two completely independent problems. In one of them the variables will be X_d and X_τ and in the other — X_i, $i=1, \ldots, l$, $i \neq d$, $i \neq \tau$.

Now consider some component of the plan X. Let $X_{i\#}$ denote a determined independent variable, if we can at will ascribe to $X_{i\#}$ any value and if it does not depend on the values of the other components of the plan (although it may influence their values).

The presence of random factors means that among the components of the plan there is at least one the value of which is an independent random variable, i. e., a variable, the values of which vary independently of the other components in accordance with a fixed probability distrubution law.

Suppose the component $X_{i\#}$ is an independent random variable. In this case none of the components $X_{i'}$ of the plan can possibly be a determined independent variable, since with each realisation of $X_{i\#}$ we should ascribe to $X_{i'}$ a value which, together with the realisation of $X_{i\#}$, gives a maximum of the objective function. In other words, we come to the conclusion that all the components of the plan are random variables, some independent, others dependent.

Assume (D, σ, P) is a probability space. We shall not give rather lengthy strict definitions of an analytically (or an algorithmically) prescribed probability space. We shall simply note some specific properties of what is given algorithmically (D, σ, P). In the ES-method it is assumed that (D, σ, P) is prescribed algorithmically. This means, in particular, that for each independent random variable $X_{i\#}$, $i\# \in I^{ind}$ (here I^{ind} is a set of indices of independent random vari-

ables) there is a set of algorithms $\mu_{i\#}$ (called simulators), which in each simulation realise the value of $X_{i\#}$. (*If*, $X_{i\#}$ is a real random variable, then $\mu_{i\#}$ is a random number unit.)

Besides the simulators, we are given a set of algorithms, which allows for finding the values of X_i, $i \in \{1, \ldots, I\}/I^{ind}$ from the given realisations μ_i, $i \in I^{ind}$.

Thus we come to the structure of a simulative model analogous to the one referred to above as an example illustrating the use of stochastic simulation for forecasting purposes.

This fact in itself allows for stating one of the most important methodological principles of the ES-method: the initial information furnished for the elaboration of the plan must contain, in particular, the laws of distribution of all the independent random variables; these laws are obtained as a result of the fulfilment of the forecast. Thus, forecasting turns out to be a means of obtaining information for planning.

Since (D, σ, P) is a probability space and, therefore, the plans in D are realised according to the law P, the objective function defined for D also takes on its values stochastically. Assume that we had adopted some plan X^1, and that as a result of our activity and the influence of random factors another admissible plan X^2, was actually fulfilled. Since both X^1 and X^2 are admissible (i. e., X^1, $X^2 \in D$), we shall regard the plan X^1 as fulfilled, if $\varphi(X^2) > \varphi(X^1)$, as strictly fulfilled if $\varphi(X^2) = \varphi(X^1)$, and not fulfilled if $\varphi(X^2) < \varphi(X^1)$.
By the reality of the plan X^1 we mean the probability $P[\varphi(X^2) \geqslant \varphi(X^1)]$. Hence, the reality of the plan is the probability of it being fulfilled or strictly fulfilled.

When D is continuous, the reality of the optimal plan X^{opt} equals zero, i. e., $P[\varphi(X^2) \geqslant \varphi(X^{opt})] = 0$. This implies that in cases when random factors are in operation it is meaningless to search for an optimal plan. An optimal plan in this case is not realistic.

Suppose P° is the a priori level of reality, i. e., a number in the interval [0; 1] expressing the desired probability of fulfilling the plan. The plan which can be fulfilled with probability P° will be denoted X^b and called the best plan. Thus the best plan X^b is one which satisfies the relation $P[\varphi(X^2) \geqslant \varphi(X^b)] = P^\circ$

Having introduced this definition, we have in fact stated the problem of stochastic programming. Its solution is the best plan X^b.

The above formulation differs from the already known formulations of the stochastic problem and generalises some of them. We can show, in particular, that the problem in its rigid presentation is a particular case of our problem. The most important aspect of this formulation is the fact that here D is given algorithmically by means of a simulator.

With $P^\circ = 0$ our problem turns into a determined conditionally extreme-value problem of searching for an optimal plan.

In devising economico-mathematical models for concrete economic units, P° can be found directly, e. g., with the aid of expert estimates. But P° can also be found by means of the so called penalty function F. Suppose $F(X^\#, X^b)$ is an arbitrary penalty function of two variables: the adopted plan X^b and the plan $X^\#$ actually fulfilled as a result of our activity and of the influence of random factors. (Naturally, when working out the plan, both $X^\#$ and X^b are unknown).

Let $\Phi(X^\#, X^b) = sign(X^\# - X^b) / F(X^\#, X^b) /$; and let $M\Phi(X^\#, X^b)$ denote the mathematical expectation $\Phi(X^\#, X^b)$.

The condition $M\Phi(X^\#, X^b) \to min$ defines the best plan. Thus we have obtained two definitions of the best plan: $P[\varphi(X^\#) \geqslant \varphi(X_b)] = P^\circ$ and $M\Phi(X^\#, X^b) \to min$.

These two definitions are equivalent, since for any P° there exists such an F that X^b, defined via P°, coincides with X^b, defined via F, and, conversely: for each F there is such a P° that X^b, defined via F, coincides with X^b, defined via P°.

Note at once that the algorithms of the ES-method are algorithms for finding the best plan. There are three types of such algorithms: evolutionary, convergent and generalised. The evolutionary algorithms serve to find an approximation (but a highly precise and reliable one) of X^b for a given P°, while the generalised algorithms allow for finding X^b and the corresponding P° for a given F.

In the preceding exposition we pointed out some of the most important aspects of the original information necessary for the planning problem involving random factors; we defined the best plan—the solution of the planning problem—and briefly characterised the algorithms for finding this solution. In all these aspects of planning we note deep specific properties due to the influence of random factors.

But this does not by far exhaust the specific nature of the problem. The existence of random factors implies that among the components of the plan some are not unambiguously determined by each other (while others, of course, are).

In other words, since our problem is a stochastic one, it is quite possible that the value of some component $X_{i'}$ and of the objective function φ are correlated, but not unambiguously determined by each other. In this case the choice of the value $\varphi(X^b)$ for the objective function does not unambiguously determine the component $X_{i'}$ (although it may determine the distribution of probabilities of the variable $X_{i'}$). Hence, independently of $\varphi(X)$, we can search for the best value of $X_{i'}$. To do this, consider a new problem, in which $X_{i'}$, and not $\varphi(X)$, plays the role of objective function. Defining for $X_{i'}$ its a priori reality level $P^\circ_{i'}$ or its penalty function $F_{i'}$, we can use the

algorithms of the ES-method to find the corresponding best plan, and hence the best value of $X_{i'}^b$.

Thus we see that φ in itself has no specific properties as compared with the other components of the plan and should be considered together with them. Hence, instead of singling out one and only one objective function, as is the case with determined conditionally extreme-value planning problems, we shall split the entire set of plan components into two groups. One will be called adopted (or planned) techno-economic indices, the other—forecasted techno-economic indices.

Suppose $\nu \subset \{1, \ldots, I\}$ is a set of planned techno-economic indices. Then (if they have no determined relations), prescribing for each $i \in \nu$ either P_i° or F_i, we can find the corresponding values of X_i^b, $i \in \nu$ by using the algorithms of the ES-method. We shall call them control figures of the plan. The other forecasted techno-economic indices are worked out in the same way as when applying stochastic simulation.

In all, as distinct from the optimal plan dealt with in determined models, we have obtained a plan-forecast which contains: 1) the control figures of the plan x_i^b, $i \in \nu$, i. e., the best values of all the adopted techno-economic indices with the corresponding probabilities P_i°, $i \in \nu$ of fulfilling the plan for each approved target; 2) a forecast for the rest of these indices, i. e., the probability distribution laws for all X_i, $i \in \nu$.

The elaboration of a plan-forecast is closer to the actual practice of planning. Indeed, in practice, planning is mainly carried out by means of control figures. The efficacity and flexibility of this method has been tested by long experience. By finding the best control figures we improve upon existing planning practices without any important changes in organisation.

This is not only practically valuable, but also very noteworthy. Indeed, in practice (in constract to theory), the influence of random factors has never been ignored. On the other hand, planning by means of control figures permits realising centralisation and decentralisation combined. The managing unit standing higher in the hierarchy controls the "adopted techno-economic indices", whereas the lower unit, whose model is represented by the simulator ρ, controls the "forecasted indices". This is also fully in line with the existing practice of planning.

At the present time, seven different models based on the ES-method have been developed, which clearly illustrate the possibilities of this method. Some of these models have been applied in practice and serve as a methodological foundation for short-range or long-range planning

THE ES-MODEL. EVOLUTIONARY ALGORITHMS OF THE ES-METHOD

By the ES-model we mean the determination of the best plan by choosing an a priori reality level. Let us consider this definition in more detail. Suppose $X_{i'}$ is a planned techno-economic index, and $P_{i'}^\circ$ is its a priori reality level.

The set[1]

$$\beta_{P_{i'}^\circ} = \begin{cases} \{X \in D/P\,(X_{i'}^\# \geqslant X_{i'}) \geqslant P_{i'}^\circ\}, & X_{i'} \to \max \\ \{X \in D/P\,(X_{i'}^\# \leqslant X_{i'}) \geqslant P_{i'}^\circ\}, & X_{i'} \to \min \end{cases}$$

will be called a set of sufficiently realistic plans, and the set $\overline{\beta_{P_{i'}^\circ}} = D/\beta_{P_{i'}^\circ}$ — a set of insufficiently realistic plans.

The stochastic programming problem $\max\limits_{X \in \beta_{P_{i'}^\circ}} (min)\, X_{i'}$ is the ES-model. Its solution is the best plan.

The evolutionary algorithms of the ES-method may be considered as the application of random search methods to stochastic problems. These algorithms are similar in form to the algorithms of iterated random search, but differ from them in principle in the following aspect: simulation in the evolutionary algorithms of the ES-method is carried out so as to realise the probability distribution P over D given by the simulative model ρ. In the algorithms of iterated random search this distribution law must necessarily be uniform. The solution obtained by the evolutionary algorithms of the ES-method is considered as an approximation to the best plan X^b, whereas the solution obtained by means of iterated random search algorithms is regarded as an approximation to the optimal plan X^{opt}. As a result, the evolutionary algorithms turn out to be more precise and effective by thousands(!) of times (the corresponding evaluations are given below).

So let us pass on to evolutionary algorithms.

It follows from the definition of $\beta_{P_{i'}^\circ}$ that the probability of finding a plan from $\beta_{P_{i'}^\circ}$ in a single simulation equals $1-P^\circ$. This last quantity is the probability of not finding a plan from $\overline{\beta_{P_{i'}^\circ}}$.

Considering simulation as a statistical experiment with two possible outcomes: $X \in \beta_{P_{i'}^\circ}$ and $X \in \overline{\beta_{P_{i'}^\circ}}$, and also keeping in mind that a sequence of simulations may be considered as a sequence of independent experiments in Bernoulli's scheme, we conclude that in N simulations at least one of the plans obtained will belong to $\overline{\beta_{P_{i'}^\circ}}$ with probability $P^* = 1-(1-P^\circ)^N$.

[1] Here we assume that the objective function $\varphi(X)$ is at the same time one of the components $X_{i'}$ of the plan X, i. e., $\varphi(X) = X_{i'}(X)$.

Hence $N \simeq \left]\frac{\ln(1-P^*)}{\ln(1-P^\circ)}+0.5\right[$

(where $]C[$ denotes an integer part of number C).

It can be shown that P^* should be taken equal to 0.9. In this case the relationship between P° and N may be expressed in the following table:

P°	0.900	0.800	0.700	0.600	0.500	0.400	0.300	0.200
N	1	1	2	3	4	5	7	11

P°	0.150	0.100	0.050	0.025	0.010	0.005
N	14	22	45	91	230	460

The evolutionary algorithms are as follows: 1) using the table above find N from the given P°, 2) carry out N simulations and find X^e, $e=1, \ldots, N$ (here $X^e=\rho(e)$, 3) choose such a plan $\hat{X}$ whose component $\hat{X}_{i'}=max\ (min)\ \{X_{i'}^1, \ldots, X_{i'}^N\}$. The plan $\hat{X}$ will be called a pseudo-best plan, and $\hat{X}_{i'}$—a pseudo-best control figure.

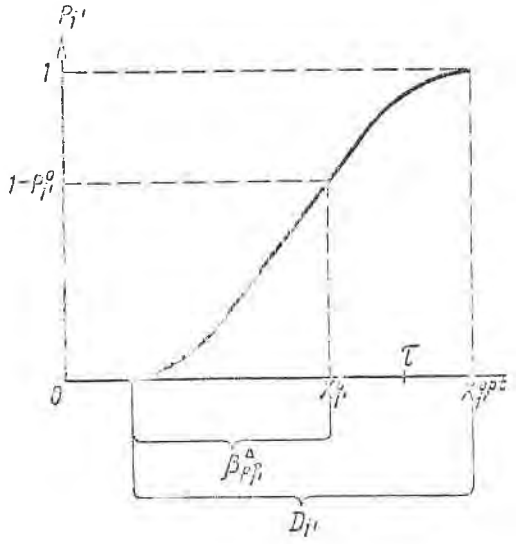
Let us note the main properties of these algorithms and of the plan $\hat{X}$. An obvious advantage is their simplicity, we may even say their elementariness. They define a number of simulations (necessary for finding the pseudo-best plan) which is not large. To see this suffice it to glance at the table above. Practically P° is never less than 0.050, so N does not exceed 45. In the overwhelming majority of problems dealt with in practice, P° equals 0.700 or 0.800. (As we see, the number of simulations is so small, that the sampling thus effected cannot be regarded as a representative sampling of the general collection under any criterion.)

The number of simulations N depends neither on the dimension I of the plan X, nor on the distribution law P_i and the law P given for D, nor on the properties of the images $X_{i'}(X)$, nor on the properties of the region D, although all these factors determine the set $\overline{\beta_{P_{i'}^\circ}}$, the best plan X^b and, finally, the best control figure $X_{i'}^b$.

The pseudo-best plan $\hat{X}$ found by means of algorithms 1—3 has the following property: with probability $P^*=0.9$ it assigns to the component $X_{i'}$ a value not greater than the best value $X_{i'}^b$ of this component if $X_{i'} \to min$, and not less than its best value if $X_{i'} \to max$.

The probability of deviation from the best plan in the direction of the optimal plan (as well as in the opposite direction) decreases rapidly as we move away from the best plan. Under certain very general and weak assumptions we have the following evaluation: if the length of the interval $[X_{i'}^b, \tau]$ equals the length of $[\tau, X_{i'}^{opt}]$ (see the Figure), then $P\ (X_{i'}^b \leqslant \hat{X}_{i'} < \tau)/P\ (\tau \leqslant \hat{X}_{i'} \leqslant X_{i'}^{opt}) = 2^I$. This evaluation allows for comparing the efficacity of the algorithms 1—3, expressed in the number of necessary simulations, with the efficacity of other random search algorithms used to solve the determined problem: $\max\limits_{X \in D}\ (min)\ \varphi(X)$.

Suppose that to find the best plan with some accuracy χ (we shall say that the pseudo-best plan $\hat{X}$ approximates the point $\bar{X}$ of the region D with accuracy χ if $\chi=|\hat{X}_{i'}-\bar{X}_{i'}|$, algorithms 1—3 require for the purpose N simulations and give us a realibility equal to P_χ (by the realibility of the pseudo-best plan $\hat{X}$, with accuracy χ we mean $P_\chi=P\ (|\hat{X}_{i'}-\bar{X}_{i'}| \leqslant \chi)$, whereas to obtain the optimal plan X^{opt} with the same accuracy and realibility by using, say, algorithms based on the homeostat principle, we shall need an average of $N \cdot 2^I$ simulations.



Here $P_{i'}D_{i'}$ are the probability distribution law and the set of planned values of the plan component $X_{i'}$; $X_{i'}^b$ — the best value of this component (i. e., the best control figure); $X_{i'}^{opt}$ — the optimal value; $P_{i'}^\circ$ — the reality of the plan (i. e., the probability of fulfilling the plan for $X_{i'}$). (The reality of the best plan is the a priori level of reality). $\beta^{\Delta}_{P_{i'}^\circ}$ — a set of values assumed by the component $X_{i'}$ when the plan X ranges over the set of sufficiently real plans, i. e., $\beta^{\Delta}_{P_{i'}^\circ} = \{X_{i'}(X)/X \in \beta_{P_{i'}^\circ}\}$.

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The Agrarian Evolution and Class-Formation Processes in India*

It has become increasingly apparent over the last few years that the old structure of agriculture in the Third World countries is having a slowing down effect on the economy. Signs of a powerful new upsurge in the peasant movement are evident in a number of developing countries (for example, in India). Hence, it is economically and politically important to study the changing socio-economic basis in the Afro-Asian village and class-formation processes in a multistructural economy.[1]

The researcher who studies these processes is inevitably faced with the following questions: what is the relationship between the contemporary (bourgeois) classes and the "traditional" classes (and their separate strata)? How intensively is this relationship changing? How in general have the socio-economic features of contemporary classes been shaped and to what extent and in what directions are the traditional classes changing? For example, to what extent has the petty-bourgeois peasantry been formed from the peasantry engaged in subsistence farming in developing Asian countries? To what extent has a class of wage earners in capitalist society emerged from the huge army of people in the village who sell their labour power (including the existing sections of agricultural workers)? What is the socio-economic role of the vast mass of impoverished producers? What characterises the exploiters who represent the epoch of primitive accumulation? To what extent have the exploiting groups in the countryside been divided into a class strata of capitalist society, on the one hand, and of pre-bourgeois society, on the other? And so on and so forth.

A study of these and other aspects of class formation is of primary importance in understanding the nature and the stages, the trend and intensity of the revolutionary process which is taking place in the countryside today. Such a study also makes it possible to trace the bases of the class alliances between the industrial proletariat and

* The article is an abridged version of the corresponding chapters of the monograph *Agrarian Capitalism in a Multistructural Society. The Experience of Independent India*, (Moscow, Nauka Publishers, 1973) written by the same author.

[1] The multistructural economy of the Third World countries was the subject of an article by A. Levkovsky in *Social Sciences*, No. 2(4), 1971.

various class groups in the village, at the stage prior to and after the completion of the democratic anti-feudal revolution.

For this study we have chosen India, a country with diverse economic structures and regional levels of economic development. In the Third World India represents a unique example of the extensive form the agrarian evolution can take. Practically any variant of agricultural development in the Asian countries that have not undergone a radical break-up of the socio-economic system, can find a parallel in India's agricultural development.

* * *

The general laws of the epoch of transition from the feudal to the capitalist mode of production were defined by Marx and Lenin. Lenin, describing the peculiarities of the two types of capitalism in agriculture pointed out: "There are various kinds of capitalism — the semi-feudal capitalism of the landowners with its host of residual privileges, which is the most reactionary and causes the masses the greatest suffering; there is also the capitalism of free farmers, which is the most democratic, causes the masses less suffering and has fewer residual privileges".[2]

In India, the mainstay of agrarian capitalist evolution of the conservative type is not the landowner class as a whole (as was, for example, the case in the Prusso-Russian variant of the conservative evolution), but a separate (socially isolated) upper exploiting strata of rural society: the groups of landowners who under the two-tier structure of the former feudal class made up of its lower tier and representatives of the moneyed classes (merchants and usurers) who in the colonial period expropriated property and possessions on a scale unprecedented in European countries.

The big landowner system which evolved towards capitalism along the conservative path represented the two main types of relations: namely, the disintegrating relations of rent paid in kind and in cash (exploitation of the free or enslaved producer who possesses all or part of the means of production); and the relations of a bonded dependence of the worker deprived of all the means of production by the exploiter, relations which are being transformed into capitalist systems. Thus, as compared with the European variant of the evolution of labour rent directly (to be more exact, with other types of rent which did not develop historically into dominating stages) towards capitalism (former Eastern Europe) or a variant of the conservative evolution which occurred under a more or less complete sequence of the stages of pre-capitalist rent (in a number of regions of Western Europe), the agricultural economy of India, like that of other newly-free Asian countries, furnishes a different core of forces and economic forms which embody in agriculture the tendency of the development of capitalism "from above". This variant which emerged in a later historical epoch, and is observed still now, is determined by the socio-economic pattern of Asian feudalism and by the changes

[2] V. I. Lenin, *Collected Works*, Moscow, Vol. 19, p. 377.

wrought in it by long colonial enslavement.

Colonial exploitation impeded the realisation of the results of primitive accumulation and the formation, on this basis, of capitalist relations. For this reason, the socio-economic evolution of the village has led to a tremendous growth in the intermediate economic structures which assumed a stagnant nature. Hence the formation of a mass of impoverished people.

The emergence of small-scale commodity production, which forms the mass basis of the "capitalism of free farmers", was to a great extent retarded. The structures which in their reproduction relied on natural and semi-natural relations tenaciously retained the biggest part of the national agricultural output. The specific barriers (relative overpopulation, the hampering of the reproduction of fixed capital on a national industrial basis, and so on) created by colonial oppression, combined with the influence of old types of property and other relations, greatly restricted the development of the small-scale commodity structure. In this situation capitalism, which matured on the basis of the latter, was often "polluted" by the sediment of previous economic forms. Not the struggle between "capitalisms" as such (this may also be a particular case of the struggle in present-day India) but the struggle between small-scale commodity production (and agricultural capital developing from it) and the pre-capitalist exploitative ownership, the struggle between the classes representing them, constitute the essence of the relationship of the two competing ways of capitalist agricultural development.

In the period of liberation from colonial oppression no radical break-up of the socio-economic patterns prevailing in the countryside, occurred in India. The land reform carried out in subsequent years was most conservative in nature and as a whole facilitated the change in the relationship of agrarian structures in favour of capitalism. A characteristic feature of this process was that with a certain expansion of the economic basis (landed property) for the development of small-scale commodity production and capitalism evolving from it, the reform led to an even faster development of the intermediate structures, and made them more uniform (for example, by abolishing the hierarchy of landed rights and by some other measures); at the same time, it created conditions for the development of the type of capitalism which arises on the basis of the use of direct force against the producers by the exploiting sections of the old society (eviction from the land). This is why the increasing shift of agriculture towards capitalism exacerbates the main agrarian contradiction of the epoch and gives rise to a situation fraught with an open explosion of the class struggle in the countryside.

In the sphere of land relations, the formation and development of intermediate economic structures manifested itself in the spread and evolution of share-cropping tenancy.

An analysis of materials pertaining to the last fifty years of British rule in India shows that there was a direct interconnection between the increase in the expropriation of peasant landed property by the big landowners and money-lenders, on the one hand, and the spread of

share-cropping, on the other. Within the framework of share-cropping tenancy different forms of "partnership" of the landed proprietor and the producer arose, which rested, however, solely on the old technical basis.

The tremendous disproportion between the demand for land as a source of subsistence and its supply, caused by the increase in the relative overpopulation, the consequent possibility of extracting extremely high rents, the absence of national reproduction of fixed capital and its excessively high prices—all these resulted in the process of the evolution of farming based on share-cropping into capitalist production being extremely dragged out and retarded at the stage of stagnant transitional forms of relations. In the agricultural economy there operated the law of the extensive increase of surplus labour (i.e., through a maximum use of the relations of landed property as such), which was fully appropriated by the landowner, and not the law of the intensive increase of the surplus product (i.e., by investing of additional capital of the owner or share-cropper, or both of them, in production). Only the labour power of the producer, living labour as such, was intensively consumed; on the contrary, the use of materialised labour was limited to a number of absolutely necessary elements (seed, a plough, draught cattle. This was not always the case as, for example, in Kerala). Whatever shifts in the distribution of the means of production between the producer and the landowner (from zero to a full set on one or the other side) might occur in a share-cropping tenancy, the personal factor of production, living labour and its consumption, remained the basis of any variant of a system arising within the bounds of this tendency.

The primitive social productive force of labour which, owing to the unchanged technical basis, was in a stagnant state; the barbarous exploitation of the direct producer which presupposes the systematic expropriation in favour of the landowner of a part of the producer's means of existence; the reproduction of labour power in a "crippled state" (Marx)—all these intrinsic phenomena of any form of share-cropping gave rise to all its variants and created a deep inner unity of economic forms arising on its basis. The share-croppers, at whatever stage of expropriation they were, formed one of the most numerous sections of the impoverished rural population.

Naturally, such a system of share-cropping placed a rigid limit on technological progress within its bounds (in fact, literally over the last three to four years separate centres of share-cropping tenancy have come into being in India, under which some additional investments of capital are being made, but so far mainly in the form of mineral fertilisers).

As regards the whole complex of these features, the Eastern variant of share-cropping, in contrast to the Western, belongs to the category of intermediary structures which perform the mission of "de-peasantisation", of clearing the land for capitalism in the most painful ways for the producer. Under the dominant relations of landed property, however, these structures have an insignificantly small capacity to generate capitalist production relations. In this respect

they are the mainstay of the worst variant of conservative capitalist evolution.

What influence has the land reform exerted on the development of intermediary structures in agriculture?

Firstly, it has given essential impetus to the mass de-centralisation of big landed property. This has mainly been brought about as a result of the tense situation in the countryside; to a certain extent it was also cut in absolute terms (chiefly by the transference of land through the market).

Secondly, with the removal of privileged land tenures (within the bounds of the *zamindari* system and its multi-step ladder of intermediary rent-receivers of the feudal type, free market tenancy, i.e., tenancy with actually unregulated rates of rent (despite the law), is being intensively shaped as a universal type.

Thirdly, such measures of land reform as a ban on leasing out land for permanent tenancy and sub-tenancy, simultaneously permitting share-cropping, which is transformed into transitional forms of economy, and the threat of introducing a landholding ceiling and other measures caused, on the one hand, the intensive development within the framework of the share-cropping tenancy system and, on the other, a major shift towards replacing the "open", officially registered tenancy by concealed tenancy, under which a leasing-in producer is not regarded as a tenant.

Fourthly, all these circumstances brought about a worsening in the terms of tenancy and became one of the causes which engendered the trend to raise the rates of rent.

The upshot of all this was in the early 1960s non-occupancy tenancy of all types (including transitional forms of share-cropping) spread to not less than one-third of the entire cultivated area of India; moreover, share-cropping became the predominant type of tenancy and the small share-cropper became the main type of tenant.

The reform was unable to stop the expropriation of small landed property. It has continued throughout the post-reform epoch. Its natural consequence was the further spread of share-cropping. "Tenancy," an official paper said, "poses an ever recurring problem; as soon as it is dealt with in one form, it re-emerges in another."[3]

The experience of the developing countries in Asia shows that the main prerequisite for the capitalist mode of production, which results from completing the process of separating the mass of producers from the conditions and means of production, is not realised in the emergence of capitalist production in equal measure.[4] Besides the forms of directly combining the expropriated producer with the land on the worst terms (share-cropping), one can see the excessively widespread relations of purchasing and selling the labour power of the

[3] *Implementation of Land Reforms*, Planning Commission, New Delhi, August 1966, p. 129.

[4] The essence of the main contradiction of such an economy was formulated by Lenin as follows: "The old, semi-feudal, natural economy had been eroded, while the conditions for the new, bourgeois economy had not yet been created" (V. I. Lenin, *Collected Works*, Vol. 19, p. 488).

expropriated producer, which is not linked with the functioning of the capitalist structure, on the one hand, and the relations of domination and bondage in the exploitation of labour of such a producer, on the other.

In the first three years of the 1960s a little more than half the rural families in India were engaged, to this or that extent and on some or other terms, on the farms and in rural petty industries for wages.

An analysis shows that the overwhelming part of the labour of others, or outside labour, drawn into agricultural production (possibly up to three quarters of the time expended) was consumed in natural, semi-natural or small-scale commodity farming and did not create any surplus value (or product). Correspondingly, only a small part of outside labour was used in farming which appropriated the surplus product.

Various motives prompted the producers to use outside labour. The labour market is inflated by the extra-economic demand for labour which results from the influence of traditional social institutions (members of the upper castes are, in general, not allowed to engage in manual labour, there exists inverse dependence between social prestige and manual labour in the village community, and so on). But the main factor of the broad enlistment of outside labour in agricultural production, not determined by normal economic needs, is the struggle for the means of subsistence in small-scale commodity production.

The problem is that the agrarian overpopulation is displayed in the underemployment in the labour process of the manpower resources not only of the fully expropriated population but also of numerous strata of peasant producers. (According to Farm Management Studies, in different regions of India the average per farm requirements in family labour is one-fifth to two-fifths of the annual labour time of actual family labourers, i.e., not even of all the able-bodied members of the family.) Small farms, faced by extreme want, intensively oust the surplus labour, even though in brief periods of urgent work normally superfluous labour becomes necessary: the vacuum is filled by outside labour.

Thus, the main economic choice of the small farm is made in favour of the system of exchange of labour through the market: the income from occupations outside the farm, including the sale of labour power, for a long period of time is higher than the sum expended on the outside labour hired for a short period. The agrarian over-population thereby creates its own mechanism which engenders a tendency to even out the level of income of the expropriated and impoverished population, a certain section of which becomes "professional" agricultural labourers.

Outside labour used in agricultural structures functioning on the basis of simple reproduction evidently cannot be regarded as wage labour in the Marxist sense. Hired labourers who offer their labour power to these structures represent a type of the agrarian pre-proletariat. Where the economy is less developed, this group of people is the largest among those who sell their labour power; the degree of

its spread is inversely proportional to the level of development of the capitalist structure and directly proportional to the level of relative overpopulation.

An analysis also brings out opposite tendencies in the use of outside labour in India's agriculture, namely, the tendency to reduce the employment of the labour of others in view of the ousting of "feudal" hire—under the influence of forming a small-scale commodity structure whose representatives increasingly rely on the labour resources of their own family; the tendency to increase the consumption of non-family labour as a result of the development of the capitalist structure; the tendency to increase the exchange of labour through the market in view of the further growth of relative overpopulation.

In contrast to the "free relations of exchange between the sides", "based on an exchange of values and on the relations of domination and bondage"[5] (according to Marx, such an exchange is one of the inalienable attributes of wage labour), it is the different forms of dependence of the worker on the employer that are widespread in the Indian village, especially on the big farms, and that are ultimately realised in reducing the worker's means of subsistence to a minimum.

The shift in agriculture towards the production of exchange values is not automatically accompanied by the withering away of bondage, extra-economic compulsion and the exploitation of outside labour. This "disproportion" reflects only a definite stage in the evolution of the entire system of production relations. It is marked by a wide discrepancy between the scale on which production is taking shape, accumulating surplus value, and the scale of the evolution of the labour engaged in the given production which creates the surplus value, from dependent labour to freely-hired labour. Bondage and the exploitation of the worker in present-day conditions perform the function of primitive accumulation for the consumer of his labour and in the Indian village this embodies one of the most widespread types of relations representing intermediate economic patterns.

The process of forming wage labour with all its intrinsic features is on the whole at the initial stage in the agriculture of India; at the same time, it takes place very unevenly, region by region; moreover, its starting points in different regions relate to different stages in 19th-century history. It has been gaining momentum since the second half of the 1960s in view of the development of the "green revolution" in individual regions. The further technological reconstruction of the productive basis of the farms engaged in accumulation will inevitably promote the crystallisation of a contemporary class of agricultural wage earners.

Thus, the entire huge mass of workers drawn into production on the terms of the free market exchange of their labour power for the means of subsistence, or on the terms of bondage (also including the "professional" agricultural workers), represents not a single class but a conglomerate of classes and class strata whose economic aspect is

[5] K. Marx and F. Engels, *Works*, Vol. 46, p. 452 (in Russian).

determined by the nature of the economic structures in which they are engaged.

The fact that a dominant place in this conglomerate is held by groups which are in pre-capitalist (including transitional, intermediate) structures, has a tremendous impact on the entire aspect of the social psychology and the nature of the socio-economic demands of the workers (allotment of land, i.e., the selfassertion of the worker as an independent producer; social equality, i.e., abolition of the forms of extra-economic compulsion—"untouchability", and so on; an increase in wages first of all by abolishing the different relations of bondage and exploitation of the workers).

* * *

In studying the struggle of the two tendencies of capitalist development, much attention should, of course, be given to the development of a modern class of large landowners.

One of the main results of the post-reform development of the Indian village was the formation of a relatively homogeneous class of large landowners. This homogeneity is determined by the introduction of a system of landed rights which now have equal force throughout the country. Genetically, however, this class does not represent a single whole. It is divided into a number of strata.

The main change in it was that the lower groups of the large landowners, i. e., those residing directly in the village, advanced to the foreground as a result of the relative and absolute weakening of the power of the privileged feudal landowners, and they formed the most powerful group of this class, the rural élite.

Although they have succeeded in widely de-centralising their landownership, nevertheless even at the beginning of the 1960s they possessed about one-fourth of all the land, most of the leased-out areas were concentrated in their hands. At the beginning of the 1970s under the landownership ceiling laws only 1.5 per cent of the entire area held by large landowners (according to Indian standards—more than 50 acres) were taken away for subsequent redistribution.

As for changes in the farming system on the lands of the large landowners, the latter, seeking to obtain rent as an exchange value, just as in the colonial period, exerted the utmost pressure on the personal factor of production, living labour, without changing the foundations of the system (hence the tendency to increase the rent extracted from the producers which was observed in many regions in the post-reform period). At the same time there is a greater tendency to extend the form of "co-partnership" of the landowner and producer within the bounds of share-cropping, but, as a rule, on the old technical basis. This is one more step in clearing the land for capitalism.

Another trend in the changes was the radical clearing of the land by force: the eviction of peasants from the land became a condition for organising a personal entrepreneurial farm of a large landowner

(and not only as a means for the subsequent re-leasing of the land to the peasants on more onerous terms). Radical expropriations, pursuing this aim, have become more frequent, especially in recent years, in view of the development of the "green revolution". Moreover, the farms of large landowners are set up on a new technological basis.

The expropriation of small landed property, the development of share-cropping as the worst form of combining the producer with the means of production, its subsequent evolution into transitional types — new coercion against the producer and the birth of the landowner's own entrepreneurial farm — this protracted process (but completed in its internal development) is going on everywhere in India today. It embodies one of the most painful types of the formation of socio-economic patterns through the emergence and growth of the leading socio-economic structure (i.e., the capitalist structure) in rural areas. Uneven development of each stage is a characteristic of this process. While in some areas it is more evident in the primary stages (for example, in Uttar Pradesh or West Bengal where the proportion of share-cropping in land tenure increased from 22 per cent in 1940 to 30 per cent in the mid-1960s), in other areas its final stage is developing intensively (for example, in the Punjab where, notwithstanding the continued expropriation of peasant land, share-cropping tends to decline), and on a new technical basis.

At the same time, money-lending capital is being intensively concentrated in the hands of large landowners who occupy dominant positions in private rural credit in India. In one decade (1952-1962) the share of outstanding cash loan assets in rural areas held by big money-lenders, who are also cultivators, rose from 32 to 56 per cent of all such assets owned by all cultivators; yet this group of money-lenders, represented by the rich landowners, makes up less than 2 per cent of all rural households.

The large landowners have been investing in intermediary trade a considerable part of the accumulated money (especially since the second half of the 1950s and on a vast scale in the mid-1960s). Together with the big "professional" traders they have practically monopolised the rural market. An analysis shows that at any rate in the mid-1960s, the powerful group of large landowners in India distributed the accumulated wealth in such a way that most of it, calculated in thousands of millions of rupees, was channelled into the non-productive but highly profitable sphere of trading and money-lending capital.

The tendency to integrate the trading, speculating and money-lending interests of the rural topmost groups of exploiters and a number of groups of the urban bourgeoisie which has developed in the last fifteen to twenty years also determines the nature of the social repercussions of this tendency as a whole. In modern society, outside of the village, large landowners are beginning to "fit in", above all as a powerful force which centralises huge money wealth of "their own" and of others (i.e., coming from the city) which increases through the use of pre-capitalist methods of exploitation. This inevitably had to intensify reactionary tendencies within the national bourgeoisie and

give impetus to the further socio-political consolidation of the conservative class strata of capitalism.

Control of a considerable part of the state budget by large landowners determines yet another trend in their crystallisation as a conservative social stratum of capitalism: they have begun to acquire the features of the "bureaucratic bourgeoisie".

Large landowners actively utilise the surviving feudal institutions, first and foremost the caste system, in their interests. The latter performs a dual function for them. First, the estate and caste disunity of the rural population, existing where the general situation in the village is becoming more tense, enables the small, wealthier groups, primarily the landowning élite, to present the divergence of their own interests with the interests of the wide sections of the peasantry as an antithesis of the interests of castes and to uphold — so far, as a rule, not without success — their privileges and property. Second, the caste structure in society provides the large landowners with a "legal" basis for enrichment by methods of extra-economic compulsion (applied especially intensively in exploiting agricultural labourers from among "untouchables"). This particular circumstance explains why the top groups of landowners in the village are the ones that offer the most frenzied resistance to any weakening of the institution of "untouchability".

The broad penetration by the large landowners of the "second stratum" into the political superstructure and, above all, into its major element, the system of state power, is a new process, the conditions for which arose during the period of independence when colonial political structures were eradicated.

In the first ten to fifteen years of development after India gained independence, a new bureaucratic stratum which gained control of a number of links of the state apparatus (primarily at the level of districts and states) arose from the rural élite. Through a ramified system, welded together by different ties of "relatives" and fellow-caste members, people from wealthy landowning families seized posts in the army, the police, the judiciary and other punitive agencies of the state. They penetrated into the legislative assemblies of states in order to influence state policy in the countryside. The measures to set up rural self-government bodies, initiated at the end of the 1950s, opened up a new, wider front of struggle for the influence on the state, and it is the large landowners and the wealthy upper crust of the dominating castes that, in most cases, won key positions in these bodies.

The fact that the large landowners who reside in the countryside have become an independent political force which bolsters up in India's political arena the groups and parties upholding a policy of advantage to them, is an extremely important result of postwar development.

Thus, the formation of a rural élite is an intricate and multifaceted process encompassing both the economic and socio-political spheres. The rural élite in its present variant is a phenomenon of recent origin. In India its rise and consolidation was determined by the structural

changes in this formerly colonial society (this was first of all the "removal" of the upper stratum of the feudal landlords, for which the elimination of the direct political rule of imperialism was a prerequisite).

The essence of the economic shaping of the élite consists in that some specific group of the rural exploiters begins to perform an ever larger number of economic functions (receipt of rent, enterprise, money-lending, intermediary trade, and so on); or, to put it more exactly, the concentration of many economic functions, displayed in the appropriation of unpaid labour and the property of others, in the hands of one or another exploiter makes him a member of the élite in its present variant .

Such a "centripetal" process is taking place parallel to the destruction of the former "division of labour" by the exploiters, under which each function of exploiting the producer was confined to a special social stratum (for example, "professional" money-lenders and traders were regarded as such, because in the Indian village they were singled out in a specific caste, separated from all the other groups of the population). It is obvious that the tendency to combine many types of economic activity, aimed at appropriating the unpaid labour and property of others, could be traced among representatives of the wealthy upper crust of rural society in a number of regions, even long before independence was won. What is new, however, is that in the epoch of independence this process assumes a universal nature and has continued at an increased rate.

On the whole, the modifications taking place at the exploiting section of the village correspond to the epoch of primitive accumulation. The same modifications also determine the general economic characteristics of the rural élite, i.e., of the bourgeoisie of the primitive accumulation stage which personifies the conservative type of capitalist evolution in agriculture.

The élite as a class formation of the transitional type also contains elements of its disintegration and they will operate the more intensively as the process of capitalist development gains momentum. Eroding the rural élite, this process will shape from its different groups representatives of specific types of activity created by the capitalist social division of labour (capital engaged in farming, moreover, subsequently, landed property may be separated from farming on the land; capitalist credit; capitalist trade, and so on). Whether the socio-political situation in the village will allow the natural evolutionary process to reach such a stage of "centrifugal" tendencies, is a different matter.

In the logic of the prolonged historical evolution of India's socio-economic system the rural élite (in its present form), consequently, represents a "negation" of the preceding exploiting classes of feudal society which are displayed in it in a "cancelled form",.just as the developing capitalist class, with all its sub-divisions singled out on fundamentally new principles, is a "negation" of the present-day rural élite.

An analysis of the interaction of the rural élite with the superstructure and other social institutions shows that it is a social force. The main trend of these interactions consists in the direct mutual personification of wealth and power along an ascending line: the higher one or another link is located in the pyramidal structure of power, the more intensively and visually property and power are concentrated there. It is the trend to directly combine the functions of power and the economic functions (which developed in the period of independence with the aim of multiplying the private wealth) within one particular group of people that singles it out as a special social type of population which is opposed to the entire remaining mass in rural localities.

But the pattern of power thereby acquires an oligarchic nature (the term rural oligarchy, so widely used in foreign, specifically Indian, literature, very aptly characterises one of the many aspects of the rural élite).

Such a pattern of power becomes possible precisely in a situation where there is a gigantic prevalence in the rural economy of structures in which an inordinately large share is taken by natural reproduction, i.e., the structures represented by the mass of small and tiniest production units (individual households) which in fact are isolated, are very poorly linked among themselves and with the "outside world" by economic relations of a normal type. The division of society into opposing but subordinate state groups (castes) intensifies the oligarchic nature of power in rural localities.

Rural oligarchy which is gaining in strength possesses ever greater freedom of independent action within the framework of the social patterns in the developing Asian countries. It is not simply the individual resistance of large landowners, but the resistance of the rural oligarchy as a social force, that blocked the implementation of the very modest land reform in India in the 1960s.

The oligarchic structure of agriculture, based on the integration of wealth and power, cannot be eliminated by creating, as a counterweight to it, new institutions of power which are democratic in form. The oligarchic structure is capable of "digesting" any of them and filling them with a content meeting the interests of the rural élite. The oligarchic structure can only be smashed by destroying the main links constituting its basis, and, above all, the most important of them, large landownership, which forms the keystone of the most powerful group of the rural élite.

* * *

The data on regional differences in the topmost strata of the Indian village are of exceptional interest. If we take only the rich groups which engage in farming, we find that the most substantial stratum of rich producers arose in the *rayatwari,* i.e., in the regions where the British colonialists in the epoch of recarving the entire old feudal land system gave property rights in land to taxed landowing households of the village community *(rayats).* On the contrary, a similar category of owners, as a rule, is much weaker in the former *zamindari* districts where the extra-community feudal (and later money-lending) top

groups of pre-colonial society had become the landowners and where the formation of private rights in land (previously expropriated by the British from the direct producers and quite often from the wealthy exploiting strata of the village community proper) dragged out inordinately and in a number of cases has not been completed to this day (a case in point are the *sirdars* in Uttar Pradesh). While in India as a whole the rich producers (with a gross income from crops and fodder of Rs 3,000 and more) comprise only 3.6 per cent of all rural households, in *rayatwari* districts (except Maharashtra) their share reaches 4-8 per cent (in the Punjab 14 per cent) and in *zamindari* districts only 1.3 per cent).

Consequently, there is quite a distinct connection between the relative size of the stratum of rich producers and the duration of the period and degree of development of private landed property within the bounds of the village community. The socio-economic basis of this interconnection was the fact that the earlier large-scale formation (even in a grotesque form) of private landownership of the direct producers opened up in the *rayatwari* districts, much sooner than in the *zamindari* districts and on the widest scale, the possibilities for expropriating this property and concentrating it in the hands of the wealthiest top group in the village itself. That is why the landowners and money-lenders who carried out expropriation in the *rayatwari* entered the period of independence more "prepared" for turning into big owners than their counterparts in the *zamindari* districts.

Lastly, mention should be made of the regional differences in the nature of the economic activity of the uppermost stratum in the village. These differences, taken in their sum total, to a certain extent reflect the sequence of stages in its capitalist development. Within the bounds of a very wide spectrum of activity of the rural élite in any state and in some of the developed regions (the Punjab, partly Gujarat and Mysore) a trend emerged towards the economic division of the village upper crust: groups of agricultural producers are branching out which are completing the process of primitive accumulation and are going over to accumulation on the basis of capitalist production.

* * *

Notwithstanding the development of small-scale commodity production, which evolving towards capitalism, the formation of a system of structures through the emergence of capitalism is taking place in Indian villages as a dominant trend in its worst variant. The shaping of normal commodity ties forming a natural, adequate basis for the development of capitalism, has been disturbed in the biggest sector of the economy, agriculture. For this reason capitalism can act as a system-forming structure in the countryside only to the extent that the exploiters' property shows its extra-economic rather than its economic aspect, i.e., acts as a monopoly, as an "antiquated superstructure"[6]. Two trends arise during the class struggle to resolve the sharp contradictions developing on this basis: first, the trend to replace the functions of the private sector in a number of economic spheres by the functions of state institutions, the trend on a much smaller scale, towards the direct shifting of private, exploiters' property into the hands of the state; second, the trend to abolish this property under the influence of democratic movements. In this respect, the shifts taking place in India's social life are a highly indicative phenomenon.

[6] V. I. Lenin, *Collected Works*, Vol 16, p. 121.

The burden of unsolved agrarian problems, the worsened lot of the mass of the toiling peasantry and agricultural workers as a result of the drop in real wages since the mid-1960s and also because of expropriations in the course of the "green revolution" have prepared the ground for a new, mass agrarian movement. The centres of agrarian conflicts, formerly localised on relatively small territories, are gradually being extended. The seizure of the land of large landowners by the propertyless rural population in a number of the country's biggest regions is a characteristic feature of the new advance.

Mounting social tension in the countryside again brings to the fore as a pressing necessity in India's socio-political life, the problem of a land reform,[7] whose implementation was curtailed in the 1960s.

To combine the direct mass struggle to eliminate the old economic structures and redistribute the land in favour of the working peasantry with the powerful democratic movement for the creation of economic and organisational forms meeting its interests (formation of independent land reform committees in which the exploited groups of the peasants are predominantly represented a wide programme of organising cooperatives of small producers, and so on) is imperative at the present stage of the agrarian movement.

[7] The Ministry of Home Affairs of India, assessing the situation in the countryside at the end of the 1960s, pointed out in the memorandum sent to the House of the Peoples of the Indian Parliament: "The problem, in other words, has to be tackled on a wide front, effectively and imaginatively. Failure to do so may lead to a situation where the discontented elements are compelled to organise themselves and the extreme tensions building up within the 'complex molecules' that is the Indian village end in an explosion." *The Causes and Nature of Current Agrarian Unrest. A Summary*, New Delhi, December 12, 1969, p. 12 (mimeo).

CRITICAL STUDIES AND COMMENT

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The Philosophy of Apostasy

It is impossible to wage any kind of effective struggle against imperialist bourgeois ideology, its false interpretation of present-day realities, its socio-political myths and reactionary utopias without at the same exposing the reformist and revisionist models of bourgeois ideas aimed at disorientating the working class and its allies.

For our critical analysis of the ideas of contemporary Right-wing revisionism we have decided to take the works of Roger Garaudy. While continuing to call himself a Marxist, Garaudy has embarked on the path of revising the fundamental ideas of Marxism-Leninism, of fighting the political line of the French Communist Party and the international communist movement. He has deserted to the camp of anti-Sovietists and now vilifies everything he previously extolled in his numerous speeches, articles and books.

The question arises: why did Garaudy make such a complete turn about from Marxism to evaluations and views which sharply run counter to scientific socialism, to dialectical materialist philosophy? In current literature one finds attempts to explain Garaudy's behaviour by his personal traits: his inability to hold firm, consistent views, his frequent departures from strict scientific thinking, his tendency to be governed by emotion rather than by logic, and his pursuit of new ideas regardless of whether they are correct or not. Of course Garaudy's personality or way of thinking must be taken into account when trying to understand what has happened to him. Yet this alone cannot explain the basic reasons for the mutation which has occurred in his political and theoretical views.

Lenin, revealing the objective causes of revisionism and revisionist departures from the fundamental propositions of Marxism, wrote: "...These departures cannot be attributed to accident, or to the mistakes of individuals and groups, or to the influence of national characteristics and traditions, and so forth. There must be deep-rooted causes in the economic system and in the character of the development of all capitalist countries which constantly give rise to these departures."[1]

What then are the reasons that produced that hotch-potch of bourgeois reformist views, which Garaudy, Fischer, Marek and other Right-wing revisionists are now trying to present as the last word in Marxism, as a creative interpretation of new historical reality?

What told here in the first place, apparently, is the re-evaluation of the "reserve of strength" of the capitalist system, the belief that it has

[1] V. I. Lenin, *Collected Works*, Moscow, Vol. 16, p. 347.

acquired a new lease of life as a result of the scientific and technological revolution. What also made itself felt here is the lack of faith in the forces of socialism, the exaggeration of its contradictions and difficulties of growth and of the differences which had arisen within the world socialist system.

All this prompts the petty-bourgeois mind, not without the help of bourgeois ideologists and propagandists, to ask whether state-monopoly capitalism has not succeeded in harnessing the scientific and technological revolution, in creating an abundance of goods for all, in eliminating all antagonisms and making the class-political struggle and social revolution pointless? From here it is easy to draw the false conclusion that the Marxist ideal and the ways of realising it are unsuitable and obsolete. The more cautious prefer to speak of the need for radically modernising Marxism, adapting it to the age of atomic energy and cybernetics, of liberating Marxist theory from the class psychology of the 19th and the early 20th century.

Thus, although the revolutionary proletariat and its Marxist-Leninist parties are boldly tackling the difficulties on the road to socialism, the broad mass of the petty-bourgeoisie in the developed capitalist countries regard the exacerbation of the class struggle in the modern world quite differently. Overestimation of the strength of capitalism and underestimation of the inexhaustible potentialities of socialism engender and strengthen in this stratum a sense of fear and confusion and orient it on reconciliation, on searching for short cuts to the "world of plenty".

THE ARGUMENT ABOUT MARXIST SELF-ISOLATION

In his attempts to explain the trials and tribulations of Marxist philosophy Garaudy has invented the thesis about the self-isolation of Marxism from other doctrines which preserve and develop different values, different hypotheses and truths. To avoid misunderstanding let us note that Garaudy refers to values, hypotheses and truths of idealist philosophical trends. What does Garaudy intend to borrow from the idealist doctrines of the past and the present for enriching Marxism? If it is a question of scientific knowledge gained in idealist doctrines, Marxism has never rejected such a possibility. Let us recall that when it first originated Marxism borrowed in a revised form quite a few ideas which had been elaborated in idealist doctrines, albeit in a distorted way. Suffice it to note the attitude of the founders of Marxism to the Hegelian dialectics, to the idea of active thought, expressed very distinctly (but again in a distorted way) in the philosophy of Kant and Fichte, to the theory of the qualitative diversity of the world, its heterogeneity in the idealist monadology of Leibniz, and so forth. The existence of scientific ideas in idealist doctrines is one of life's real contradictions. The idealist system inevitably distorts and misinterprets the elements of scientific knowledge, which are contradictory to its very essence. It is no accident that these elements, as it were, seek and find a system of philosophi-

cal generalisation adequate to them in scientific materialist doctrines. The development of 19th-century German idealist dialectics confirms this point. Only a materialist dialectics could become a true instrument of cognition and action.

Today, too, Marxist philosophy does not challenge the real achievements of a specialist in physics, mathematics, chemistry, biology, geology, economics, history, ethnography, and so on, on account of his idealist prejudices and delusions. It would be wrong, for example, to deny the achievements of P. Teilhard de Chardin in geology, palaeontology, the theory of evolution, and so on just because of his religious views. No one would ever dream of dissociating oneself from the scientific discoveries made by Freud simply because he created a mystique around the human psyche. Marxists well remember Lenin's statements on the need to make a strict distinction between Mach the physicist and Mach the subjective idealist.

Garaudy and other revisionists accuse "dogmatic Marxism" of refusing to recognise Einstein's general theory of relativity, genetics and cybernetics. Garaudy cannot but know that these were mistakes not of Marxism but of individual Marxists who were incapable of distinguishing the idealist and mystical speculation around problems of genetics, cybernetics, the theory of relativity, resonance theory, etc., from the essence of these new scientific discoveries.

The argument about the self-isolation of Marxism from science, from progressive ideas is a false one. Marxism, as Lenin pointed out, did not originate far from the highway of world civilisation. Marxism is the logical result of social progress. It has assimilated, and continues to absorb, in a critically interpreted way, all the achievements of progressive thought. The self-isolation of Marxism can mean one thing only: its refusal as a matter of principle to acknowledge anything that is unscientific, to say nothing of openly anti-scientific conceptions. But the term "self-isolation" is a very imprecise expression of the ideological incompatibility of Marxism with idealism, religion, irrationalism, and all conceptions which defend capitalism and its ideology whether overtly or covertly. Marxism does not "isolate itself" from ideas alien and hostile to it—this is a passive attitude—but wages an active struggle against them.

Garaudy and those of like mind are extremely anxious that there should be a mutual interchange of ideas between Marxist philosophy and idealist doctrines, between scientific atheism and religion, between Marxist aesthetics and all kinds of unrealistic and anti-realistic trends in aesthetics, between Marxist ethics and idealist Kantian and Fichtean moral doctrines and, finally, between scientific socialism and the varieties of modern petty-bourgeois utopian socialism. For Garaudy and other revisionists putting an end to the self-isolation of Marxism means replacing the struggle against alien ideological trends by their peaceful coexistence and mutual enrichment. Garaudy would have the reader believe that materialism developed not only by confronting idealism but also by absorbing idealist values.

Following Garaudy's feverish search for links with Kant, Fichte and modern existentialism in order to substantiate the principle of

subjectivity, activity, initiative, etc., one cannot help asking, why does he not choose the shorter and more reliable way, the way leading to Marx, Engels and Lenin? For no serious importance should be attached to the malicious and ignorant assertions about the fatalist nature of Marxism which, it is alleged, in upholding the idea of "iron" historical laws that predetermine in detail the entire course of historical development, leaves no room for man's freedom, for conscious human historical creativity. Garaudy agrees that this is a false picture of Marxism. Why then should it be necessary to appeal to Kant and Fichte if he knows that Marxism inherited in a critically revised way the rational dialectical ideas of these philosophers and was the first to give scientific substantiation to the active role of the consciousness, will, and the initiative of the masses, political parties, and the individual in social development? Yet more ridiculous are his appeals to Sartre and even religion in an attempt to arm himself with arguments in defence of the principle of subjectivity, activity, freedom of choice, self-expression, the self-assertion of the individual, and so on. Despite many of his statements to the contrary Garaudy assumes that Marxism has not fully succeeded in substantiating the principle of subjectivity, of activity. Perhaps that is why he undertakes to complete the task with the help of past and present idealist doctrines.

Garaudy tries to borrow from Fichte not only progressive ideas but also those that could not have been inherited by Marxism from the German philosopher. Let us recall that Marxism highly valued his striving to substantiate the activity of the subject, the creative role of his thinking. Fichte did indeed pay much attention to ethical consciousness and especially to the problem of freedom. Thus, he saw that the degree to which a person may attain freedom is determined not only by his level of intellectual development, but also by the historical conditions of his existence. These and many other rational dialectical ideas of the German philosopher were absorbed, in a *revised form,* in the formation of Marxist philosophy. Garaudy's idealisation of Fichte's philosophy compels us also to recall a number of other well-known truths. Fichte's defence of the idea of subjectivity was purchased at the price of patent subjectivism, and his glorification of the principle of will was inseparable from extreme voluntarism. Fichte tried to overcome Kant's dualism from positions of subjective idealism, sought to oust the materialist element in Kantian philosophy altogether—the recognition of the objectively existing world of noumena, "things-in-themselves". In the subjective idealist system of Fichte the Ego creates the non-Ego, that is, the "objective" world, but ultimately both of them are the products of a supreme, supernatural element which has predetermined everything. The Fichtean subject, too, is governed by this inexorable predetermination. The subject, however, strives to gain freedom. Proof of the possibility of this freedom is regarded by Fichte as one of the crucial tasks of his philosophy. He endowed the Ego with a super-active nature, great will and creative element which recognises no barriers to the achievement of his aims. Fichte subordinated even the subject's consciousness to this all-overpowering will.

The question arises as to how the Fichtean Ego could gain freedom of action in a world where, according to the philosopher himself, fatal necessity reigned supreme? It should be noted that Fichte was unable to resolve this contradiction, just as Kant failed to do so. Ultimately the super-volitional subject of Fichtean philosophy was compelled to confine his activity to trying to comprehend necessity which kept him firmly fettered. Fichte was obliged to call for moderation and self-restriction, and passive contemplation. In this spirit of reconciliation with the inevitable he wrote: "Everything exists (as it does exist) not because God arbitrarily wants that form of existence, but because it cannot manifest itself in any other form. To understand this, to humbly reconcile oneself to this and to be blissful in the realisation of our identity with the Divine force, is accessible to all people."[2] It is easy to notice how Fichte contradicts himself in the understanding of freedom, how he confuses the mutually exclusive principles of voluntarism and fatalism in his philosophy. The elements of Fichtean dialectical thought do not simply coexist with idealism, but are distorted by it, and it is not so simple to accept the dialectical flashes of thought of the German philosopher by mechanically rejecting his idealism.

Ignoring these facts, oversimplifying the problem in the extreme and idealising Fichtean philosophy, Garaudy urges Marxists to learn from Fichte not only dialectics but what almost amounts to historical materialism. Thus, if we are to believe Garaudy, Fichte offers us model of the effort to keep hold of both ends of the chain — ethics and society. "Fichte," he writes, "can help us to keep hold of both ends of the chain. It is on the meeting ground of Fichte's philosophy that the dialogue on morality can be most fruitful if Marxists learn again to assimilate the theory of subjectivity to be found in the existential thought of Fichte and if the present existentialists do not mutilate Fichtean existentialism by depriving it of two fundamental dimensions — the rational and social dimensions."[3]

One cannot deny the existence in so-called practical philosophy and especially in Fichtean ethics of ideas, which were interesting in their time, on the predetermined nature of human actions, and on freedom and necessity. But why should Marxists of our day have to turn to the idealist Fichte for understanding the real interrelations between society and social consciousness? Does not the scientific solution of these questions constitute an outstanding service rendered by Marxist theory, by Marxist philosophy? But the whole point is that Garaudy, carried away by the principle of subjectivity, of activity, which he has elevated into an absolute, displays a heightened interest in the Fichtean glorification of the supercreative Ego. It seems to him that the revival of some of Fichte's ideas could facilitate contact with contemporary idealist trends, in particular with the philosophy of Sartre which a few years ago, prior to the publication of *Marxism in the 20th Century*, Garaudy rejected. Today, however, Garaudy,

[2] J. G. Fichte, *Characteristics of the Present Age*, 1906, p. 128 (in Russian).
[3] R. Garaudy, *Marxisme du XX^e siècle*, Paris, 1966, p. 95.

through the agency of Fichte, seeks to enrich Marxist philosophy with the philosophy of Sartre. Garaudy writes: "Cannot we, Marxists, inspired by Fichte's efforts to keep hold of both ends of the chain [society and morality.— *Kh. M.*] integrate the demand of Sartre and turn it into an element of our own thought."[4] Sartre's demand means the recognition of the subjectively active nature of the individual, his calling to model himself, to make himself the measure of all things.

Let us now sum up the first results of what has been said. In *Marxism in the 20th Century, Towards a French Model of Socialism* and in his other works, Garaudy with sufficient frankness steers clear of the antithesis of materialism and idealism and is engaged in "enriching" Marxist philosophy with ideas of the idealist brand.

It is interesting to note that in his attempts to analyse 20th-century Marxism, Garaudy ignores the crucial problems in the ideological struggle of our time. One may think that the struggle between the antagonistic classes and political parties is a thing of the past, that the frenzied attacks by the imperialist bourgeoisie, its philosophers, sociologists, economists, and politicians on communism and its philosophy have been stopped. If anyone wanted to get an idea of Marxism in the 20th century from Garaudy's book of this title he would think that militant, uncompromising revolutionary Marxism has given way to a conglomeration of amorphous ideas which seek a compromise with the reactionary conceptions of a deficient society.

Whereas in his earlier works of the "dogmatic period", as Garaudy himself calls it, he fought quite actively against neo-Thomism, existentialism and other idealist trends, against Henri Lefèvre and his supporters who had embarked on revising Marxist philosophy, today, having become a "creative" Marxist, Garaudy is obsessed by the desire to enter into "business" contacts with idealism, to engage in peaceful dialogues with the living and extinct exponents of idealist and spiritualist thought. He wants to enrich Marxist philosophy with vapid modern idealist thought. Lumpting together people of differing authority Garaudy writes: "Even the period that has brought the collapse of imperialism has witnessed the birth of important works, from which we have something to learn: our Marxism would be the poorer if we were to assume, for example, that Husserl, Heidegger, Freud, Bachlard and Lévi-Strauss had never existed".[5] Undoubtedly, it is necessary to make a critical study, for example, of Husserl in order to understand thoroughly the course of bourgeois philosophical thought in the epoch of imperialism, its tasks and its arguments directed against dialectical materialism. A knowledge of Husserlianism undoubtedly will enable us to understand better the genesis and development of German existentialism. All this is so. But why Marxism would be the *poorer* without Husserl, without his "pure consciousness" and "pure essences", without many of his ideas borrowed from the immamentist Schuppe? Garaudy does not tell us, because it is impossible to do so, exactly what scientific, progressive and promising ideas are

[4] R. Garaudy, *Marxisme du XX^e siècle*, p. 91.
[5] Ibid., p. 208.

to be found in Husserlianism? What purpose, in that case, can be served by this unnecessary flirting with "pure idealism"?

In his book *The Great Turning-Point of Socialism* Garaudy defends the principle of epistemological pluralism and regards it as the principle of mutual enrichment. Together with other revisionists Garaudy calls for a tolerant Marxism capable supposedly of taking a broad view of things and free from a "narrowly class" and "narrowly partisan" position, a Marxism capable of absorbing all the truths obtained by other, non-Marxist doctrines. We have already had occasion to note the simple and irrefutable truth that Marxism has always developed by enriching itself with all the fundamental truths, discovered by the human intellect and tested by practice; all truths, except those which are not actually truth but are only pictured as truth. It is to these quasi-truths, not to speak of downright lies, that Marxism tightly shuts its doors. Can one complain against such a closed system of knowledge?

The idea of the multiplicity of truth, which has now been accepted by Garaudy and declared by him to be a "necessary consequence of the new concept of reality", has also been borrowed from bourgeois ideology. This new understanding of reality rules out the monistic view of the world, undermines the dialectical unity of the diversity of phenomena and allows for the coexistence of incompatible fundamental propositions. This pluralism sees the world as the sum total of equivalent isolated substances, most often of spiritual substances which cannot be reduced to a single principle. Brushing aside the question of ontological pluralism, Garaudy gravitates more towards epistemological pluralism, a plurality of hypotheses with an equal right to existence until the conflict between them ends in the victorious hypothesis engulfing all its less successful rivals. The latter do not disappear, but become partial elements of the hypothesis which has gained the upper hand. Garaudy does not specify his concept of a hypothesis, does not formulate a criterion which would make it possible to differentiate a scientific hypothesis from an unscientific or even simply an anti-scientific one. We particularly emphasise this point because Garaudy advocates the idea that the conflict of hypotheses invariably ends in the victorious hypothesis incorporating the hypotheses which have not justified themselves. In order not to distort unwittingly Garaudy's thought, let us quote his own statements on the question of interest to us. Dialectics, he writes, "implying the need for a critical assimilation, the integration of all the partial truths discovered thanks to the pluralism of hypotheses, calls for overcoming them; moreover, ultimately the truest hypothesis will be the one which will be capable of absorbing all the others."[6]

The history of science knows many instances when a confirmed scientific hypothesis did in fact, to use Garaudy's expression, absorb partial truths contained in the rejected hypotheses. But the correctness of one or another hypothesis can hardly be measured by its ability to absorb all the other hypotheses opposed to it. Most often the

[6] R. Garaudy, *Marxisme du XX^e siècle*, p. 52.

victory of one or another hypothesis is due to the disclosure of the unscientific or anti-scientific nature of all or many other hypotheses. The very concept "the revolution of Copernicus" in science is associated with the flat negation of the earlier explanation or explanations of one and the same phenomenon. The doctrine of the rotation of the Earth around the Sun in no way absorbed, nor preserved even in sublated form, the false idea of the Sun rotating around the Earth. The materialist interpretation of history acted the same way with the idealist theory of social development.

While we reject Garaudy's conception, we, of course, do not reject dialectical negation, the assimilation (in a critically revised way) of the earlier progressive ideas even if they were contained in a distorted way in idealist conceptions of the past. The idea of reconciliation of opposites is not a Marxist but a Hegelian idea. As for the "absorption theory", that is a kind of synthesis of the victorious idea with the defeated ideas, it has nothing in common with Marxist dialectics.

The idea of a drawing together of materialism and idealism, and the rejection of the principle of partisanship in philosophy was most outspokenly expressed by Garaudy in his book *The Great Turning-Point of Socialism*. He wrote: "If the Party wants to become the leaven for all the forces which are striving to build socialism in France, and not a doctrinaire sect, it cannot afford to have an 'official philosophy', nor can it be in principle either idealist, materialist, religious or atheistic."[7] It is not surprising that Garaudy has been subjected to sharp criticism by many Marxists, in the first place by French Marxists, for his attempt to de-ideologise the Communist Party, to impose on it a neutral attitude to both materialism and idealism, as well as to religion and atheism. Realising how imprudently he disclosed his true desire to deprive philosophy of party commitment and the Party of philosophy, Garaudy began to beat a noisy retreat and even justify himself by accusing his critics of underhand methods. He wrote: "They picked out and quoted out of context one sentence on page 284 of my book *The Great Turning-Point of Socialism*. I wrote that if our Party was to become not a doctrinaire sect, but rather the leaven for all the forces who wish to build socialism in France it could not afford to have an 'official philosophy'". Trying to wriggle out of the awkward situation, Garaudy referred to the definition of the word "official" in the Larousse Dictionary: "Used of everything that is announced, declared and ordained by a recognised authority; of that which emanates from the Government, from the administration."[8]

It may seem to Garaudy that he has managed, with the help of the dictionary, to beat off his critics. But he forgets that in his text the words "official philosophy" are explained so clearly that there is no need for consulting Larousse. "The Party," Garaudy writes, "cannot be in principle either idealist, materialist, religious or atheistic". In other

[7] R. Garaudy, *Le grand tournant du socialisme*, Paris, 1969, p. 284.
[8] R. Garaudy, *Toute la vérité*, Paris, 1970, p. 192.

words, the Party is indifferent as to what philosophical doctrine forms the basis of its programme, strategy and tactics, what philosophical views are professed by members of the Communist Party of France, by the leaders of its press, publishing houses, research centres, and so on. Garaudy's "refutation" would have some sort of sense if he, having denounced "official philosophy", had stated clearly what sort of philosophy the Party must have. He does not do so. He takes refuge in a blatantly opportunist line of argument, namely, that the existence of a materialist or atheist philosophy supposedly prevents the Party from going along with the social strata and parties which deny both materialism and idealism. But in that case is there any point in the Party talking about its goal, its maximum programme, the communist remaking of society, bearing in mind that such a programme at the present stage might not be understood at all or only partially understood by the non-proletarian strata?

To make the programme more acceptable to the largest possible number of non-proletarian elements, Garaudy is prepared, as we can see, to delete from the Party programme, from its ideological conception anything that may seem "unattractive" to the petty bourgeoisie, the "middle classes", the non-monopoly bourgeoisie. The policy of renouncing principles supposedly for the sake of winning broad and diverse sections of the electorate over to socialism was already employed in the past by the opportunist leaders of the Second International. The results of this experiment are well known. It is likewise known that "ideological neutrality", this false slogan, is used by the Right-wing leaders of the modern reformist parties, affiliated with the Socialist International.

Garaudy's recent writing is full of attempts to get rid of fixed opinions and judgements which might seem to be too partisan, insufficiently flexible, and so on. He is busy reappraising socialism and Marxist philosophy, imparting to them a content and appearance that would charm "sensitive minds", would take into account their dislike for "partiality", one-sidedness and for excessively categorical assertions and established truths. In conceding to these attitudes, Garaudy is taking a big step towards revising the dialectic of objective, relative and absolute truth. He needs such an interpretation of truth as would justify the pluralism of hypotheses, a conciliatory attitude in philosophy and the theoretical substantiation of the need to reject the principle of partisanship in philosophy.

RELATIVISM DIRECTED AGAINST ADEQUATE KNOWLEDGE

In his *Marxism in the 20th Century*, Garaudy more than once returns to the dogmatic mistakes made in theory and points out that most often they were connected with the distortion of the dialectic of absolute and relative truth. There can be no doubt that Garaudy's own mistakes stem from the distortion of this dialectic, although in a different way: by absolutising the relative and removing from the process of cognition the established truths confirmed by practice.

In combating real or imaginary dogmatic statements Garaudy often blurs out distinctions between dialectics and relativism. He presents the matter as if *all* scientific truths are eventually discarded and replaced by new scientific truths which, in their turn, give way to new ones and so *ad infinitum*. "...Dialectical materialism," Garaudy writes, "recognises that reality is inexhaustible, is irreducible to our knowledge of it, and that every scientific conception is always only a provisional construction pending the appearance of richer, more effective, truer constructions".[9] This idea is correct in itself, but taken without reservation and amplification becomes meaningless. Do the scientific discoveries of past centuries or decades necessarily lose their scientific nature and are they ejected from the body of scientific knowledge? Do they turn from truths into falsehoods? To insist on this proposition is tantamount to saying that the process of cognition is merely the replacement of one seeming truth by another seeming truth. With such a view of things relative *truths* actually become relative *delusions*. According to this wretched dialectics every new truth has its genesis in the total negation of what was considered to be true. Every new truth, in its turn, shares the same tragic fate as its predecessor, and as a result (Garaudy avoids this point) there can be no cumulative process in the sphere of knowledge.

The real cognitive process is quite a different one. Some propositions which were accepted as true ones are discarded with time as being false; at the same time, ideas which were considered false turn out to be true; some relative truths give way to other, more profound ones, which mark a more serious advance towards cognising absolute truth; scientific assumptions, hypotheses turn into proved truths or, on the contrary, are refuted and discarded.

Garaudy replaces this multiple movement towards truth by his far-fetched scheme of the substitution, at best, of one relative truth by another relative truth without the accumulation of the particles of absolute truth. It should be pointed out that Garaudy regards *scientific generalisations* merely as *hypotheses*. In reality, however, a hypothesis is an assumption which has some scientific grounding: confirmed by experience, by practice, it becomes a scientific proposition. The reduction of scientific propositions to hypotheses fully meets Garaudy's desire to avoid any stable knowledge and to emphasise the pronounced relative, fluctuating and flimsy nature of people's knowledge about the world and themselves. It goes without saying that our objection does not refer to dialectical change, the development and enrichment of scientific knowledge, the replacement of obsolete scientific concepts by new ones. We object to something else, namely, the statement that all truth is temporary. Can the law of gravitation cease to be true? Even Garaudy himself notes that the doctrine of the primacy of matter and the secondary nature of consciousness cannot turn into its opposite.

It is interesting that Garaudy, occasionally forgetting his categoric judgements to the effect that the emergence of new knowledge can-

[9] R. Garaudy, *Marxisme du XX^e siècle*, pp. 45-46.

cels earlier knowledge and that the growth of knowledge "proceeds not by mechanical addition, but by an organic development which at each stage presupposes a global reorganisation of concepts",[10] expresses ideas of a different order two or three pages later. We learn with surprise that the new truth includes, assimilates the superseded truth as a particular case. In the writings of Garaudy's we find two conceptions which coexist eclectically in his understanding of the fate of superseded truths: the conception of their "complete revision" and the conception of the "assimilation", the "absorption" of the old truth by the new one. This pluralist interpretation of the problem provides Garaudy with greater flexibility in assessing this or that doctrine of the past or the present. Thus, the old materialism of Spinoza, Diderot, Holbach and Feuerbach, which comes in for all manner of criticism from Garaudy, is placed among the doctrines which are subject to "complete revision". A different fate is in store for German *idealism*. "Marxism," Garaudy writes, "has inherited the great bourgeois humanism, and particularly, the classical philosophy of the German idealists: Kant, Fichte, Hegel...".[11] Nevertheless, the conception of "complete revision of old truths" obviously prevails over the conception of the "assimilation of old truths by new ones". This is understandable. Otherwise how could Garaudy get rid of many truths of Marxism on the pretext of fighting dogmatism, "Stalinism", and so forth?

By excessively extending the scope of extreme relativism, Garaudy interprets in a very peculiar way the dialectic of relative and absolute truth. In place of the generally accepted Marxist definition, according to which all truth contains a particle of absolute truth, that is, of knowledge which cannot be changed or discarded during the further expansion or deepening of scientific information, Garaudy offers a different formula: "For a Marxist every truth is at the same time a relative and an absolute truth."[12] One could have ignored this inaccuracy which could lead to an excessive convergence and identification of relative and absolute truth, were it not for one important circumstance. In defining the concept "absolute truth" Garaudy proposes, alongside the generally accepted Marxist definitions, formulations which, in our opinion, deprive absolute truth of its absolute nature, and convert it into a variant of relative truth. He defines absolute truth in the following terms: "To assume that it is possible once and for all to master a concept, to master fundamental, immutable and complete principles and after this advance from concept to concept would mean to place oneself outside the real development of the natural sciences. There exists a kernel of absolute truth won by a science, which cannot be challenged; but this kernel of absolute truth (that is, the sum total of real possibilities which we possess, and the resemblance which that entails between reality and the scientific models we have constructed), first, is never complete, second, is a

[10] R. Garaudy, *Marxisme du XX^e siècle*, p. 48.
[11] R. Garaudy, *Pour un modèle française du socialisme*, Paris, 1968, p. 85.
[12] R. Garaudy, *Marxisme du XX^e siècle*, p. 46.

component part of the constantly revised, always relative concepts, theories and models."[13]

It is not difficult to see that whereas in the first part of the quotation Garaudy is exaggerating the idea of firm, fundamental principles and extending the sphere of extreme relativism, in the second, he gives a definition of absolute truth which simply does not make sense. Indeed, what kind of kernel of absolute truth is it that can be reduced to the sum total of "real possibilities which we possess and resemblance which that entails between reality and the scientific models we have constructed?"

The main definition of the kernel of absolute truth deprives it of all absolute nature and reduces it to relative truth. Indeed, what sort of kernel of absolute truth is it that is "never complete", while its growth presupposes a "full revision of concepts at every stage"?

Individual correct formulations which Garaudy includes in the interpretation of the dialectic of absolute and relative truth should not mislead anyone. There is no reason for absolutising relative truths just as there is no justification for attempts to turn absolute truth into relative. If the conversion of relative truths into ossified dogmas destroys science and turns it into something akin to clericalism, to religion and deprives it of the possibility to cognise and transform reality, is thoughtless relativism any better? What sort of science can be built on it if there is nothing stable, permanent, reliable in our knowledge of the world? Is it not clear that relativism is inseparable from subjectivism in cognition? "To make relativism the basis of the theory of knowledge," Lenin pointed out, "is inevitably to condemn oneself either to absolute scepticism, agnosticism and sophistry, or to subjectivism."[14]

In his latest works Garaudy poses as an exponent of authentic dialectical materialism and what is more as a man who wants to creatively develop and enrich Marxist philosophy, deliver it from dogmatic ossification. But are renunciation of the principle of partisanship, flirting with idealism, fundamental concessions to it and the mastery of the relativist jargon compatible with dialectical materialism? This path leads to the gradual sliding down to idealist, subjectivist positions which, in turn, may serve as the methodological basis for revising the economic and socio-political conceptions of Marxism-Leninism.

THE THEORY OF REFLECTION AS VIEWED BY GARAUDY

So far we have examined Garaudy's deviations from Marxist dialectics to eclecticism and relativism. But it is impossible to revise the Marxist philosophical method without encroaching simultaneously on important principles of the materialist theory. The history of the

[13] R. Garaudy, *Marxisme du XX^e siècle*, pp. 47-48
[14] V. I. Lenin, *Collected Works*, Vol. 14, p. 137.

revision of Marxist philosophy, beginning with Bernstein, fully corroborates this point.

Garaudy refrains from *open, direct* attacks on Marxist materialism. On the contrary, he assures the reader that he sees his task in freeing Marxism from oversimplification and vulgarisation, from survivals of metaphysical and mechanistic materialism. But under the guise of fighting old materialism he attacks ideas without which there is not and cannot be any materialist philosophy, either old or new. We shall try to prove this by quoting Garaudy's interpretation of the principle of reflection, which is the core of the theory of knowledge of dialectical materialism.

Garaudy reproduces some Marxist propositions on the activity of human thought, that reflection is not a passive, mirror-like reflection and is not reduced to a single photographic reproduction of reality. It cannot be said that Garaudy flatly rejects the concept of reflection but he gives it a meaning different from the Marxist one.

Noting that our thoughts reflect objective reality, Marxism emphasises two closely interconnected ideas: first, the idea of the primacy of the object and the secondary nature of its image in human consciousness; second, the idea that the image, the concept of the thing or phenomenon, reproduces this thing or phenomenon, their essence, with greater or lesser accuracy. While the first part of the definition is spearheaded against the idealist distortion of the question, the second part excludes the agnostic gap between the object and the possibility of adequate knowledge of it. Indeed, if our notions and concepts are unable to recreate the object accurately in thoughts, to reproduce its real aspect, its characteristic features and its essence in the *process* of cognition, the external world remains merely an unknowable "thing-in-itself", while humanity, its very existence and progress ought to be explained as a sort of miracle. After all it is clear: if mankind is unable to gain a more or less true picture of the external world, its properties and qualities, if in the process of its labour activity it does not discover the necessary connections and relations, the laws governing the objective world, it cannot either adapt itself to this world or transform it, or even survive in it.

Analysing the concept of reflection, Garaudy proceeds from the premise that reflection is the reproduction in human consciousness of real things and relations, but he does not admit that it is a more or less accurate, more or less profound reproduction of the object as it exists in reality. Garaudy regards the actual recognition of *conformity* between the object and its reflection in human consciousness as something metaphysical, anti-dialectical. Here is one of his fundamental statements on this question. "Cognition," he writes, "is *by its nature*, a *'reflection'*, in the sense that it is cognition of reality which is not our creation and that it is at the same time, *by its method*, a *'construction'*." [15] Garaudy in no way wants to deal with the *conformity, adequacy* of the reflection of the object to the object itself. He obstinately assumes that such a presentation of the question brings us

[15] R. Garaudy, *Marxisme du XX siècle*, p. 49.

back to the theory of knowledge of metaphysical materialism. He does not even want to ponder over the fact that without this conformity and adequacy of the object's reflection to the object itself there is also no concept of truth. For in the last analysis the question of truth and delusion is a question of the adequacy or inadequacy of the reflection of the object to the object itself, which is confirmed or rejected by social practice.

Marxist philosophy, which asserts the similarity between the object and its reflection in human consciousness, regards the *attainment* of this similarity as a process. The formation of an image similar to the object is not a single act. The ability to recreate the image of a thing corresponding to the thing itself is the result of mankind's practical activity over the centuries. This ability itself, as demonstrated by science, was developed in the process of man's centuries-long struggle for his existence, in the process of his labour activity.

But, according to the simplified scheme proposed by Garaudy, on the one side there is the material world and, on the other, human consciousness, the mirror. This mirror of consciousness is capable of passively reflecting only that which faces its surface. And since the mirror reflects only the external aspect of things, the mirror of consciousness can merely reflect external phenomena. It is forever deprived of the possibility of cognising the sphere of essential relations, of internal contradictions, the law of the existence and development of things. Such a process of reflection reproduces only the existence of things, without any claim to see them in their movement, without any possibility, proceeding from real existence, to put forward new projects, new mental constructions capable of actively penetrating the essence of things, of foreseeing the future. But this type of conception has nothing in common whatsoever with the Marxist theory of knowledge.

Every educated Marxist knows that Lenin, following Engels, in his *Materialism and Empirio-Criticism* strongly rejected the attempts to present our ideas and sensations in the form of conventional symbols. In this book Lenin offered a consistent and profound critique of the idealist and agnostic interpretations of interrelations between the object and the subject, which tries to erect an impassable wall between the objective world and the world of ideas that reflect this world. Simultaneously in *Materialism and Empirio-Criticism* Lenin also rejected the naive realistic notions of the interrelation between the object and its reflection in human consciousness. Lenin's well-known formula that sensation is the *subjective* image of the *objective* world emphasises not only the objective basis of sensation but also the thought that sensation cannot *fully* coincide with its object, being its *subjective* image.

While defending the objective nature of so-called secondary qualities Lenin did not overlook the subjective aspect of the question. Outside of and independent of human consciousness and sensations there exist light waves of different length and frequency which, by acting on the retina of the normal human eye, cause various colour sensations. This means that in objective reality there is not and cannot

be "redness", "yellowness", and so forth. Without the retina no colour sensations arise, which in no way refutes the objectivity of colours, if by this we understand the light waves of a definite length and frequency. Lenin took into full account the specificity of reflection, the specificity of the *similarity* between the object and its reflection at different stages of cognition: the stages of sensation, notion, concept, inference, judgement and scientific theory.

The comprehension of truth is described by Lenin as a complex, contradictory process, as the construction of hypotheses and their testing by experience, the mental search for new approaches to the object for the purpose of its cognition, of revealing its properties and qualities, its essence, the whole hierarchy of essences, from the less profound to the more fundamental. The comprehension of truth is interpreted by Lenin as the transition from one relative truth to another which contains a greater particle of absolute truth. This process is infinite, just as the objective world itself is infinite and inexhaustible. Combating primarily the Machist variety of subjective idealism, Lenin in *Materialism and Empirio-Criticism* devoted *great* attention to the defence of the materialist principles of the theory of reflection. On the other hand, in his *Philosophical Notebooks* he further deepened the dialectical materialist explanation of the process of cognition.

When reading Garaudy's books one has the impression that he is attacking the metaphysical interpretation of the theory of reflection. But this is not the case. By his many definitions and evaluations Garaudy casts doubt on the scientific, Marxist theory of reflection, regarding it as a passed form of the theory of knowledge. Moreover, he tries to ascribe to Marx his own fabrications or, rather, what he has borrowed from idealist sources, using means which are incompatible with science. Ignoring Marx's fundamental statements on the nature and essence of human knowledge, Garaudy seeks to prove that the founders of dialectical materialism regarded consciousness not as the reflection of that which really exists, but simply as the anticipation of that which does not yet exist in reality. For the sake of accuracy let us quote Garaudy himself. He writes: "With Marx consciousness is not the reflection of something given but the anticipation of something possible."[16] It is not difficult to notice the absurdity of Garaudy's formulation of the question. The question is, how can consciousness anticipate the possible, if it does not proceed from the real, does not reproduce and study that which really exists, its inner contradictions, its essence and law of development? How could Marx substantiate the real possibility of socialism without analysing with the greatest care and depth capitalist reality, its antagonisms and its real movement? The words of Marx that "consciousness [*das Bewußtsein*] can never be anything else than conscious existence [*das bewußte Sein*], and the existence of men is their actual life-process"[17] are generally known.

[16] R. Garaudy, *Pour un modèle français du socialisme*, p. 96.

[17] K. Marx and F. Engels, *The German Ideology*, Moscow, 1968, p. 37.

Obviously foreseeing principled objections to his incorrect statement that consciousness is not the reflection of real being, but the anticipation of something which exists only as a possibility, Garaudy is compelled to modify his formulation. "Consciousness which would reflect only that which was directly given," he writes, "could not take us farther than that given. Consciousness can play an active part in formation only when — as Marx showed with regard to labour — it is the anticipation of a possibility, the knowledge of internal movement."[18] It might seem that these and some other statements by Garaudy deny, neutralise his erroneous thesis that consciousness is not the reflection of that which exists, but merely the anticipation of that which does not yet exist in reality. Actually, these more cautious formulations do not constitute a renunciation of attempts to present consciousness as a factor which deals, if not solely than predominantly, with the possible, with the future. Garaudy gives his own peculiar interpretation to Marx's well-known thought that before producing one or another thing in his labour activity man first creates its ideal image. Garaudy tries to interpret this indisputable truth in such a way as to suggest that consciousness is orientated primarily towards that which does not exist, that which is possible. From this he concludes quite wrongly that the essence of consciousness lies not in the reflection of the real but in the striving to cognise the possible. It is easy to see that Garaudy is proceeding from a distinction between the real and the possible, is circumventing the fact that the possible is determined by the real and accordingly is belittling the reflection of that which exists. Consciousness, divorced from real existence, loses the possibility not only of revealing the essence of that which is directly given, but also of being the instrument of the cognition and creation of the future. This indeterminate existence of consciousness gains unlimited freedom to predict and "substantiate" everything conceivable and inconceivable, to become a source of socio-political myth-making.

It is beyond any doubt that the super-activity of thought advocated by Garaudy cannot fit in with the materialist interpretation of thought. And he should not lull himself with the thought that his interpretation of the activity of thought does not fit into the framework of mechanistic, metaphysical materialism only. The *a priori* nature of conceptual models and constructions, their primacy with regard to the object, the belittling and ousting of the principle of reflection — they all do not fit in with any kind of materialism.

In all cases thought proceeds from reality, reproduces objective reality and only from this "launching pad" can anticipate existence, cannot only reflect, but also create the world, remake and enrich it, create a countless number of things, objects and phenomena not given ready-made to man by nature and the spontaneous course of social development.

To demonstrate his resolute break with the metaphysical interpretation of the problem, Garaudy adds to the principle of reflection the principle of construction, the principle of project. He does not reject

[18] R. Garaudy, *Pour un modèle français du socialisme*, p. 97.

reflection, but simply demotes it, as it were, by comparison with the *project*, for in Garaudy's understanding, reflection symbolises the static state of knowledge, while the project embodies the principle of change, the principle of gaining new knowledge, the principle of discreteness in cognition. Garaudy, thus, enters into a speculative argument which cannot but turn against materialism, against the scientific interpretation of the sensory and rational in cognition, against the dialectic of empirical and theoretical thought.

FROM THE PRINCIPLE OF "CONSTRUCTION" TO "NEGATIVE DIALECTICS"

"Reflection," Garaudy writes, "that is, a more or less correct representation or reproduction of what really occurs in nature, is not a point of departure (as the English empiricists or the 18th-century French materialists believed), but the fruit of lengthy work of constructing successive 'projects', 'models' and hypotheses with the help of which we actively challenge things, agreeing with what they reject and changing the initial hypothesis and completely reconstructing the body of our knowledge (as Newton did by rejecting the concepts of Ptolemy, or Einstein by rejecting Newton's physical system and even Euclid's geometry)."[19]

It is true that the search for a new or more profound truth involves the rejection of old concepts and notions which run counter to practice. It is likewise true that the search for a new truth involves the energetic, creative activity of the intellect, the construction of new models, the formulation of different hypotheses, and so on. But it would be a profound mistake to belittle the role of reflection, to ignore the accumulated knowledge and its role in the process of cognition. The history of both the natural and the social sciences demonstrates the indissoluble successive connections between new discoveries, generalisations and former knowledge with the relative truths it contains. New knowledge has never arisen as the result of some mystical intuition, without reliance on the knowledge accumulated. Neither the method of "negative dialectics", borrowed by Garaudy from Adorno and other representatives of the Frankfurt school, nor the category of the "project", taken from Sartre, are able to break the link between the present and the future, between the old and the new. Dialectically interpreted determinism preserves its full validity here as well. Every new step in science has been based directly or indirectly on the earlier accumulated knowledge. The great discoveries were made by *departing from* existing knowledge. The very words *depart from* express in this case the dialectical negation which always preserves the rational kernel in the old knowledge if it contains this kernel.

From the statement by Garaudy cited earlier we have learnt what *is not* the point of departure of cognition but have not been told with

[19] R. Garaudy, *Marxisme du XX^e siècle*, p. 58.

sufficient clarity what it *is*. Returning repeatedly to this question, Garaudy deduces the following general conclusion: "The point of thought... is never the bare statement of a prime datum. The point of departure is the act of construction of a 'model' or overall hypothesis which thereby contains part of myth. This detachment from the datum, this departure from the direct, mythically begins the movement of cognition".[20] Now the issue becomes a little clearer. What is initial for cognition is "not a more or less correct notion" of the world, not the statement of a prime datum but the act of constructing a model: the movement of cognition mythically begins by detachment from the direct.

But where do these models and overall hypotheses come from, if they are independent of the reflection of real existence? Are they the result of a sudden inspiration, the result of direct contemplation which cannot be reduced to sensuous experience and discursive logical thinking? Garaudy does not give clear answers to these questions, but there is no doubt that about it instead of a scientific, dialectical materialist epistemology the author of *Marxism in the 20th Century* is offering us theoretical cognitive views permeated with relativism and subjectivist judgements.

Proceeding from the correct idea about the contradictory nature of the development of human knowledge, Garaudy reproduces, in a fantastic way, the development of cognition where the principle of determinism, of regularity, is eroded, and what is more, also the principle of the simple succession in the ascendency from non-knowledge to knowledge, from less deep knowledge to knowledge which more adequately and profoundly reproduces the truth. The movement of human knowledge, depicted by Garaudy, is somewhat reminiscent of Cuvier's theory of catastrophes. According to Garaudy, knowledge does not develop through accumulation and a leap-like transition to new conceptions. In this movement of cognition he acknowledges only leaps without an accumulation of knowledge, without observance of the dialectical unity of the discrete and indiscrete. "Reason," Garaudy writes, "has its history. This history is not the history of successive answers given to one and the same question, but the history of upheavals introduced in the very formulation of the question."[21] This desire to exclude succession from development as completely as possible, from the formulation and solution of new problems is probably regarded by Garaudy as some kind of super-dialectics. In reality, however, there is no dialectics here at all. It has been replaced by subjectivist arbitrary action in reproducing the history of cognition. And when in the same book *Marxism in the 20th Century* the author writes that the "new hypothesis is the heir of the one it replaces and destroys", this does not answer our criticism, for Garaudy, while he readily emphasises the replacement and destruc-

[20] R. Garaudy, *Marxisme du XX^e siècle*, p. 59

[21] Ibid., p. 62.

tion of the old conception, nowhere speaks about its dialectical *sublation*.

Garaudy wants to deduce knowledge not from the process of reflection by consciousness of "prime data" or, to put it more clearly, actual reality, but from mythological thought. At some stage, according to Garaudy, scientific thought breaks with mythical thinking, but originally thought was mythical and ritual. There is a functional continuity between myth and science, Garaudy asserts, myth being the past of science.

No one would dream of denying the educational content of myths. They generalised and explained in a peculiar way natural and social phenomena at the dawn of human civilisation. The aesthetical value of many myths is also indisputable. But this should not give rise to any doubt that mythological and scientific consciousness are phenomena of a different order. Where realistic thought begins — albeit in most rudimentary form — mythological thought gradually recedes. "Every mythology overcomes, subordinates and forms the forces of nature in the imagination and with the help of the imagination; consequently, it disappears together with the advent of real domination over these forces of nature." [22]

Garaudy, however, seeks to establish, as we have seen, the functional continuity between mythology and science, forgetting or unwilling to emphasise the antithesis of the scientific and the fantastic, mythological reflection of reality. Moreover, he wants to assign a due place to the mythological element in modern scientific cognition. One could think that Garaudy, speaking about the element of myth, has in view the element of imagination, of fantasy in the process of cognition. But he does not clarify his ideas in this sense. This lack of clarity is significant, if we consider Garaudy's attempts to find points of principled contacts between materialism and idealism, between Marxism and Christianity. We, therefore, have the right to say that Garaudy belittles the realistic reflection of reality in order to exaggerate the role of one of the forms of the fantastic reflection of the world.

ONE MORE RETURN TO KANTIANISM

Let us recall that the Kantian subject of cognition is endowed with the ability to possess *a priori* forms of sensuous contemplation, *a priori* concepts of reason, and so on, with the help of which he puts in order the world of phenomena, encompasses them with categories and laws which are outside experience. Garaudy has not reached such frankly idealist positions but the desire to push in the background the theory of reflection leads him to subjectivist arguments akin to Kantian ideas.

In this context let us examine Garaudy's interpretation of the nature of scientific laws. "Scientific laws," he writes, "are not a copy of anything; they are constructions of our mind, always approximate

[22] K. Marx and F. Engels, *Works*, 2nd edition, Vol. 12, p. 737 (in Russian).

and temporary, enabling us to take hold of a reality which we have not created and of which only practice, methodological experimentation can guarantee us that our models correspond to a certain extent to its structure, that from a certain viewpoint they are at least 'isomorphous'." [23]

Right and wrong ideas are mixed up in this sentence. Although he stresses the objective nature of reality and allows that, "from a certain viewpoint", our models and the structure of reality are "at least" of an isomorphous nature, Garaudy is nevertheless carried away by another idea. We again see an attempt of an *a priori* construction of the laws of cognition, which then undergo the test of practice. Garaudy — to give him his due — obstinately avoids the question, on what basis these mental constructions are erected, where do they come from — from the mind or from objective reality. The second answer would bring Garaudy to the "traditional" materialist theory of reflection, which precisely explains the source of our thoughts and the nature of their conformity to their material prototypes. But if Garaudy chooses the first answer, he naturally cannot avoid accusations of subjectivism and *a priorism* of the Kantian brand.

Casting doubt on the empirical sources of the origin of human ideas and belittling the role and importance of the reflective ability of human consciousness, Garaudy with some reservations seeks to impose on us the same Kantian ideas about encompassing reality with concepts, models, hypotheses, etc., taken from goodness knows where. "In cognition," Garaudy writes, "we confront reality with our hypotheses." He formulates the task in the same Kantian jargon: "To grasp the real and give it meaning." [24]

Garaudy proclaims the striving to penetrate the essence of things as dogmatism. He urges scientists to be true to the critical traditions in philosophy and to refrain from such strivings. Let us quote these strange arguments of a man who considers himself a Marxist. "Marxism," Garaudy writes, "is not a pre-critical dogmatic philosophy. Historically, in philosophy dogmatism is the antithesis of critique in the sense which Kant first gave to this word, although he did it in a perspective outside of history. To put it more simply, the critical viewpoint in philosophy is the awareness of the fact that whatever we say about reality is of a subjective nature. Dogmatism, on the contrary, is the illusion of penetrating the essence of things or the claim of such penetration and the pronouncement of absolute definitive truth about them." [25]

The first thing that strikes one is the attempt to bring closer together Marxist philosophy and Kantianism as two similar critical philosophical doctrines. Let us recall that Kant, employing the term "criticism", pursued the task of reducing philosophy to the criticism of man's cognitive abilities and proving that the human intellect cannot penetrate "things-in-themselves" and cognise them. Kant's criticism,

[23] R. Garaudy, *Marxisme du XX^e siècle*, pp. 67 68.
[24] Ibid., pp. 107-174.
[25] Ibid., pp. 43-44.

in substance, coalesced, merged with agnosticism. Is there any need to prove that the critical nature of Marxist philosophy is revealed most fully in the principle of dialectical negation and has nothing in common with the aims of Kantian criticism, nor can it have anything in common?

In the same way the concept of subjectivity has a fundamentally different meaning in Marxist philosophy than it has in idealist doctrines, specifically in Kantianism. While Marxism understands subjectivity as the activity of the subject in its interrelation with the object, in its absolute recognition of the primacy of the object, its independence of the cognising subject, this is by no means the case in idealism. Subjectivity, the activity of the subject is hypertrophied, and the object becomes the creation of the subject, vanishing as an independent, primary element. Garaudy is consumed with the desire to obliterate the impassable barriers between the Marxist and Kantian understanding of subjectivity. His assertion that our knowledge of reality is subjective could be regarded simply as an unhappy and ambiguous one. But knowing with what zeal he is now mastering Fichteanism and Kantianism in order to "save" Marxism, how he is losing sight of the distinctions between subjectivity and subjectivism, and treating hypotheses, models and other conceptual constructions as *a priori* elements, in order to "encompass", to "cognise" the real, we have every reason to interpret Garaudy's sentence as he wrote it: our cognition is subjective, i. e., it is not the reflection of objective reality.

Now some remarks about his strange definition of dogmatism, in which one finds two different concepts given equal weight a) the possibility of penetrating the essence of things; b) the pronouncement of definitive truth about them. The second definition really has a bearing on dogmatism. But it is impossible to understand why recognition of the possibility of cognising the essence of things should be dogmatism, unless we remember Garaudy's obsession with Kant. From the viewpoint of Kantian criticism, the admission of the possibility of cognising the world of "things-in-themselves" is dogmatism of the worst kind. This is so from the viewpoint of Kantianism, but not of Marxist philosophy.

In his revision of the Marxist doctrine about the adequacy of the reflection of reality in human consciousness and nullification of the principle of reflection, Garaudy, carried away by the counterposing of "reflection" and "project", naturally strives to side-step the proposition of objective truth. He avoids emphasising clearly that the *content* of one or another truth is objective, that it does not depend on the cognising subject.

That the truth as a cognitive "image" is subjective in form, but objective in content is beyond doubt. Truths tested in practice reflect, generalise and adequately reproduce definite connections and necessary relations which exist independently of human consciousness. Only recognition and clear emphasis of these statements enable us to say that there is no truth without the subject, in the sense that the reflected *image* is inconceivable without consciousness.

As for Garaudy, all his dubious and wrong arguments about relative and absolute truth are divorced from the problem of *objective* truth. Garaudy's endless and boring repetition of the principle of the subjective nature of cognition, the presentation of truth as the fruit of conceptual constructions, models, projects, and so on, is accompanied by slurring over the other side of the question—the objective nature of the content of truth, the fact that all models and hypotheses are means of cognising objective truth.

NEW "UNDERSTANDING OF REALITY"—NEW SURRENDER TO AGNOSTICISM

As we know, Garaudy has solemnly renounced his works of the early 1950s on epistemological questions, specifically his doctoral thesis where the theory of reflection held a very big place. Of course, in these works there were some vulgarisations of the problem, and the active nature of thought was not examined fully and comprehensively, the question of the resemblance between the object and its conceptual reflection was interpreted in a somewhat oversimplified way, and so on. Garaudy has renounced these works in order, as he states, to return to Marx, to Lenin's *Philosophical Notebooks*. But let us say outright, this is a very strange return, for it is made on the crutches of Fichtean and Kantian subjectivism and *a priorism*.

Garaudy proclaims a *new understanding of reality*. We shall have the opportunity to see that in this new understanding of reality a too "dialectical" dialectics is suspended from a very thin and weak materialist thread. It is not surprising therefore that this thread keeps breaking.

This new reality, of which Garaudy writes, is characterised by the fact that it is largely the product of man himself, of his constructive labour, his creative intellect. This statement undoubtedly contains a big share of truth and it is expressed and substantiated in many Marxist works.

The contemporary epoch is marked by the tremendously increased part played by spiritual elements in social development. The role of consciousness, volition and organisation is gaining in size and strength in the struggle to consolidate the new socio-economic formation. Today when the objective conditions for the global collapse of the capitalist system have matured, revolutionary consciousness and initiative are becoming a decisive factor in society's advance towards new forms of human society. Pondering over the problem of the object and the subject in history, we must consider fully the philosophical significance of the fact that science is turning into a direct productive force, one of the essential factors of society's material basis. Man, the decisive element of the material productive forces, is now participating in the production process, equipped with the greatest achievements of the 20th-century scientific and technological revolution. This fact reveals with especial clarity the close intertwining of the object and the subject, and the enhanced role of the latter in the historical process. What we call the objective and prime

element in social life is increasingly including materialised spiritual phenomena, the results of mental labour. This objective element retains its primacy in all conditions, but we cannot fail to notice how its structure is considerably changing, how its power is increasing thanks to the direct or indirect influence of the spiritual, scientific and cultural accomplishments of our age.

Were Garaudy's arguments to remain within these bounds, we would have no reason to doubt the true essence of his "new reality" concept. But the absolutisation of the active nature of consciousness in his interpretation is liable to present consciousness more in the Kantian and Fichtean sense than in the Marxist understanding. Thus, in arguments about reason and "things-in-themselves" Garaudy resorts to very risky definitions. He writes that dialectical reason supposedly "understands the 'thing-in-itself' as the horizon of my aspirations and constructions".[26] How strange: the "thing-in-itself", which even in the case of Kant appears as existing outside us and acting on our sense-organs (although essentially it is unknowable), turns from objective reality into merely the horizon of human aspirations and conceptual constructions. Let us recall that here Garaudy is simply repeating the neo-Kantians who, wishing to free their teacher's philosophy from all materialist admixtures, declared the "thing-in-itself" was nothing more than the *limit* of human cognition. These and similar arguments about thought and being cannot but make a Marxist extremely critical of the understanding of the new reality, advocated by Garaudy.

Garaudy's works also contain other forms and aspects of bringing closer together Marxist philosophy and Kantian and Fichtean idealist propositions. Thus, Garaudy sees the common element between Marxism and the philosophical doctrines of Kant and Fichte in that they are all philosophies of act and not of being. Garaudy states: "It is only beginning with Kant and Fichte that the philosophy of act becomes the rival of the philosophy of being."[27] Assessing very highly the fact that Kant and Fichte discarded the philosophy of being for the sake of the philosophy of act, Garaudy says nothing about the nature of this "philosophy of act", its extremely timid and half-hearted political substance, its total rejection of revolutionary action in practice.

We have not the slightest desire to belittle the dialectical thought of Kant and Fichte, but it is impossible to agree with Garaudy when he hopelessly attempts to bring closer together Marxist philosophy and German idealism, for their active substance, avoiding the fact that Marxist philosophy arose out of the dialectical negation of 19th-century classical German philosophy. Garaudy persistently brings us back to questions settled long ago, apparently assuming that thereby he is taking a step towards a philosophical interpretation of our age.

Garaudy writes without any substantial, serious reservations about the "absorption" by Marxism of the active essence of German idealism, its critical, anti-dogmatic essence. "A Marxism," Garaudy writes, "which forgets neither Kant nor Fichte, that is a Marxism which also

[26] R. Garaudy, *Marxisme du XX^e siècle*, p. 68.
[27] Ibid., p. 71.

forgets neither Marx nor Lenin, is a critical and non-dogmatic philosophy in the sense above all that it has made *practice* the source and the criterion of every truth and every value."[28] In this oddly constructed sentence, Marxism which wishes to remain Marxism must, according to Garaudy, first remember Kant and Fichte, and then *also* Marx and Lenin. It turns out that Kant and Fichte, rejecting the "philosophy of being" and upholding the "philosophy of act", in some important respects stand on positions similar to Marxism, because Marxism, too, "is not a philosophy of being" but only a "philosophy of act".

Now a few words about being and act, the terms which Garaudy employs, saying nothing about the point that Marxism interprets being as the existence of the objective world. In this understanding being cannot be contraposed to act. There can be no scientific philosophy that is not at the same time both a philosophy of being and a philosophy of act which transforms being. Only idealism rejects the scientific concept of being and operates with the concept of act, which, as a rule, means abstract mental activity, and nothing more.

To justify his disdainful attitude towards being and the "philosophy of being", Garaudy launches into lengthy perorations to the effect that the time of the Parmenides' understanding of being and its metaphysical interpretation by old materialism has long since passed. Being as a passive state, according to Garaudy, is being ousted by act, the concept of structure, interaction, and so on. One might almost think that the change of human notions of being, the deepening and enrichment of these notions could cast doubt on the reality of being and its significance. Garaudy repeats the mistake of those who have confused the philosophical and natural scientific interpretation of matter and in view of the discrediting of the old notions of matter have arrived at the conclusion that "matter has disappeared". The disappearance of the historically limited, metaphysical notions of being offers no grounds for rejecting the "philosophy of being" and seeking salvation in the "philosophy of act". Marxist philosophy cannot separate and counterpose the concepts of being and act to each other. Everything material, everything existing, exists in action, in change, in transformation. The active principle is the form of existence of being. The arbitrary interpretation of the concept of being can produce nothing but idealist muddle.

In his *Marxism in the 20th Century* Garaudy set out to develop a critical philosophy which would not be idealist, to develop the Marxist theory of subjectivity which would not be subjective. Garaudy has not lived up to his promises. His "criticism" has assumed obvious forms of surrender to Kantian *a priorism*, has led to fundamental concessions to agnosticism. His disparaging attitude to the theory of reflection could not but turn against materialism and clear the way to idealist philosophy. Similarly, his overemphasis on the so-called "theory of subjectivity" and almost total disregard for objective processes and objective laws leads him directly to subjectivism.

[28] R. Garaudy, *Marxisme du XX^e siècle*, pp. 91-92.

Garaudy has extended the distortion of materialism and dialectics in his writings also to the materialist understanding of history. He rejects all stable laws and categories in the sphere of understanding social life as well. He seeks to reduce the materialist theory of social development entirely to the method, to be more exact, to the sum total of subjectively interpreted dialectical principles. The ignoring of the objective laws and categories of historical materialism under the guise of struggle against "institutional Marxism", rejection of the dialectic of relative and absolute truth, denial of stable, practice-tested truths, glorification of relativism and pluralism are used by Garaudy and Co. to distort completely the theory and practice of the revolutionary struggle against capitalism, the theory and practice of building socialism and communism.

BOOK REVIEWS

Л. И. БРЕЖНЕВ. *КПСС в борьбе за единство всех революционных и миролюбивых сил.* М., Изд-во «Мысль», 1972, 304 стр.

L. I. BREZHNEV. *CPSU in Struggle for Unity of All Revolutionary and Peaceloving Forces,* Moscow, Mysl Publishers, 1972, 304 pp.

The book is the first in a new series called "Library of the Working-Class Movement", which is being published by the Institute of the International Working-Class Movement of the USSR Academy of Sciences and by Mysl Publishers.

The Communist Party of the Soviet Union has always given much attention to the creative elaboration of important problems in the theory and practice of scientific communism, including questions of the class struggle in the world arena. The past few years have been especially fruitful in this respect, as the Communist Party of the Soviet Union solved many important problems of present-day social development. The Leninist Central Committee, the Politburo of the CPSU Central Committee, and Leonid Brezhnev, General Secretary of the CPSU Central Committee, have played an active part in formulating and solving these problems.

L. Brezhnev's reports, speeches and articles show the Leninist Party's consistent struggle for greater unity of the international communist and working-class movement, for cohesion of all the anti-imperialist forces, for world peace and socialism.

These works contain a profound analysis of the problems of world socialism, which is a powerful accelerator of historical progress. The world of socialism, with its successes and prospects, with its problems, it was said at the 24th Congress of the CPSU, is still a young and growing social organism in which far from everything has yet been settled and much still bears the imprint of past historical epoch. It is in constant movement and is being ceaselessly improved and developed. Its development, quite naturally, runs through the struggle between the new and the old, through the resolution of contradictions. Past experience helps to effect correct and timely resolution of its contradictions and confidently to advance along the path indicated by Marx, Engels and Lenin, the great teachers of the proletariat.

The CPSU considers its internationalist duty to promote in every way the further growth of the world socialist system. L. Brezhnev says: "We want to see every fraternal country a flourishing state, harmoniously combining rapid economic, scientific and technical growth with a flowering of socialist culture and rising living standards for the working people. We want the world socialist system to be a well-knit family of nations, building and defending the new society together, and mutually enriching each other with experience and knowledge, a family, strong and united, which the people of the world

Editorial article in the newspaper *Pravda*, December 9, 1972.

would regard as the prototype of the future world community of free nations."

The book brings out every aspect of the main line along which real socialism exerts its influence on the worldwide revolutionary process. The power of example, the great successes in building the new society in the USSR and other countries of the socialist community exert a profound influence on the course of world history and have a primary role to play in spreading the ideas of scientific communism on every continent.

The fundamental problems of the world communist, working-class and national-liberation movement have been given a profound Marxist-Leninist analysis. The book contains a consideration of the pressing questions in the struggle between the two systems, the specific features of present-day state-monopoly capitalism, the condition and struggle of the working people in the imperialist countries, and analysis of the social moves by the leading circles of the imperialist powers. Much importance attaches to Leonid Brezhnev's indication that it is inadmissible both to underestimate and overestimate the potentialities of imperialism and that none of the attempts by imperialism to adapt itself to the altered balance of forces in the world have done anything to change its substance, or are capable of preventing the further deepening of the general crisis of the capitalist system.

One of the central problems considered in the book is a comprehensive analysis of the importance of the working class as the chief and strongest adversary of monopoly power, as the centre of attraction for all the anti-monopoly forces. Bourgeois ideologists, seeking to undermine the leading role of the working class, have declared that the scientific and technological revolution allegedly leads to a shrinking of its boundaries, to a reduction in its numerical strength and ultimately to its disappearance. Their "last word" is capitalism without the proletariat. Having a mortal fear of the growing numbers and organisation of the working class, they have not managed to do better than to change the designation of a sizable section of the workers as a "new middle class".

"The ranks of the international working class, the most advanced revolutionary class of our time, and its role as the main productive and socio-political force in the world will continue to grow in the future," L. Brezhnev emphasises. "In spite of all the fashionable anti-Marxist theories that scientific and technological revolution leads to a shrinking of the boundaries of the working class, and even to its liquidation, the real facts provide evidence of quite the contrary: scientific and technological progress leads everywhere to the growth of the working class, including the new professions, born of modern production."

This conclusion applies especially to the working class of socialist countries. Its role as the leading socio-political and economic force of society has increased. In Soviet years, the numerical strength of the working class has increased six-fold, to 66 million men and women. It is now the largest class in the Soviet Union.

Exposing the anti-Marxist, vulgarising conceptions, denying the leading role of the working class in the social structure of modern society and in the revolutionary movement of our day, Leonid Brezhnev orients Marxist theoretical cadres to further creative elaboration of this exceptionally important scientific and ideological-political problem.

The working-class movement in the industrialised capitalist countries, expressing the fundamental socio-economic and political interests of the working class and acquiring fresh experience, has been steadily gaining in strength. The present stage of the class struggle in the capitalist world is characterised by growing activity, persistence, organisation and consciousness of the working class

and all the other working people in the struggle for their vital interests. In the class battles that have started, L. Brezhnev stresses, there is an ever more pronounced tendency to which the Communists have drawn timely attention, namely, the growth of the economic struggle into action against the whole system of state-monopoly domination.

At the same time, the book says, the split in the ranks of the working class has been and remains the main obstacle in the way to its victory. The experience of the proletariat's class struggle, the experience of the working-class movement provides convincing evidence that it is a vital necessity to overcome this split. More favourable conditions are now being created for an extension of contacts with the Social-Democratic movement for the purposes of joint struggle by the Communists and the Social-Democrats against the division of Europe into military blocs, and for peace and social progress. Leonid Brezhnev says: "The CPSU is prepared to develop contacts with Social-Democratic parties desirous of going along with us in the struggle against aggressors, and for peace and security of the peoples of Europe." Political developments in the recent period have provided convincing confirmation that this line is realistic and looks well into the future. There is good reason why public opinion in a number of West European countries (for instance, the FRG) has been giving an ever broader support to Social-Democratic leaders showing their willingness to join in the search for constructive solutions in strengthening peace and security in Europe.

An important aspect of the works of the General Secretary of the CPSU Central Committee is assessment of new phenomena in the modern national-liberation movement. As he says in his book, the main thing is that the struggle for national liberation in many countries has, for all practical purposes, been developing into a struggle against exploitative relations, both feudal and capitalist. Success in the fight against imperialism and neocolonialism, and for social progress in the young national states can be secured only on the basis of close interaction between the national-liberation movement and all the revolutionary forces of our day, the world socialist system in the first place. One of the most characteristic features of our epoch is the great alliance between the socialist countries and the young progressive states, which have thrown off the fetters of colonial oppression.

The book shows the need to strengthen the unity of the main streams of the world revolutionary process, brings out the anti-proletarian substance of the line pursued by the Maoists, who have rejected Lenin's principles of internationalism, and shows the harm that this line has been doing to the international communist movement. At the same time it stresses that an improvement of relations between the USSR and the People's Republic of China would meet the fundamental, long-term interests of both countries, the interests of socialism, the freedom of nations and stronger peace.

The book convincingly shows the unceasing and great concern displayed by the CPSU and other fraternal parties in strengthening on the basis of Marxism-Leninism, the ideological-political cohesion of the Communist movement, the militant vanguard and experienced leader of the international working class. In defining the main lines of more vigorous struggle to strengthen this unity, L. Brezhnev points to the need to concentrate the Communists' practical efforts above all on everything that brings them closer together; in every way to extend the ties and contacts between the fraternal parties; to generalise the parties' theoretical work, to develop Marxist-Leninist theory on that basis, to defend and creatively develop its principles and fundamental ideas; and to

intensify the struggle against imperialist ideology, and against Right and "Left" revisionism. In implementing the joint line worked out by the 1969 Meeting, the CPSU has been consistently working to strengthen the unity of the international Communist and working-class movement on the basis of Marxism-Leninism and proletarian internationalism.

Millions of working people, the democratic and peaceloving forces wholeheartedly approve and support the Soviet foreign policy of peace, freedom and social progress, because this active policy meets the vital interests of the peoples of the world. The CPSU's struggle to strengthen world peace, to bring about a relaxation of international tensions and the security of nations has hamstrung the most aggressive, reactionary forces of imperialism, has made it harder for them to resort to extreme forms of violence aimed against the working class and its Communist vanguard, and creates objective conditions favouring the struggle of the working class and all the working people for the satisfaction of their vital economic and social demands. It promotes the further growth of the prestige of the USSR and the fraternal socialist countries.

In implementing the Peace Programme, put forward by the 24th Congress of the CPSU, the Soviet Union has consistently and firmly stood for the interests of socialism and the freedom of nations and has displayed a high vigilance. It has extended allround assistance to the heroic people of Vietnam who has scored a historic victory in its struggle against the imperialist aggression, for its freedom and independence, it has supported and continues to support the Arab peoples' just struggle to eliminate the consequences of Israeli aggression. Together with the fraternal socialist countries and the peaceloving forces, the Soviet Union has been doing its utmost to deepen the process of international détente, working persistently to strengthen peace and security in Europe. The Soviet Union's constructive approach to pressing international problems has gone hand in hand with firm rebuff to the aggressive encroachments of imperialism, and its readiness to develop mutually advantageous relations with states belonging to the opposite social system, with an implacable stand in the ideological struggle.

The propositions put forward by L. Brezhnev are based on the solid foundation of Marxism-Leninism, the ever-living and creative revolutionary doctrine.

At the present stage in the development of the world revolutionary process it is more important than ever before creatively to develop Marxist-Leninist thinking through international efforts, to improve the methods in exchanging experience in the work of the fraternal parties and mutual study of their experience.

The publication of the book by Leonid Brezhnev is a big contribution to the fulfilment of these tasks and the development of the theory and practice of the modern world revolutionary movement.

Д. ТОМАШЕВСКИЙ. *Ленинские идеи и современные международные отношения*. М., Политиздат, 1971, 280 стр.

D. TOMASHEVSKY, *Lenin's Ideas and Present-Day International Relations*, Moscow, Politizdat Publishers, 1971, 280 pp.

The monograph under review examines some of the most general laws and categories of international relations. The dynamics of change in the modern world, the place of international relations in public life, the correlation of forces in world politics, questions of war and peace and the principles of peaceful coexistence

of states with different social systems, the system of relations within the socialist community and between capitalist states, the role of the young states which have embarked on the road of independence — these are the questions which in their sum total constitute the fabric of the monograph's theoretical study of international relations.

The author of the book, drawing on the major achievements of Soviet historical science in studying Lenin's legacy in Soviet foreign policy, has successfully coped with the task of systematising and revealing the fundamental tenets of the *Leninist theory of international relations*. He shows that this legacy is extensive and many-sided.

Lenin's deep interest in international issues sprang from the profoundly international essence of the Marxist ideology. He theoretically revealed and indicated the practical ways of building a new society, free from exploitation. The Leninist foreign policy programme was based on a truly scientific analysis of objective reality, a profound knowledge and understanding of the laws of social development, and due regard for the alignment of class forces in the world arena. Lenin stressed that "we must seek new ways of solving our international problems" [1] and gave brilliant examples of how this was to be achieved in practice. The monograph traces in detail the Leninist principles underlying any analysis of international relations: an allround dialectical approach, a historico-materialistic interpretation of reality, a class and Party approach.

The author devotes much attention to defining and assessing, in the light of Lenin's ideas, the place of international relations in public life. These now extend to many scores of nations and states, alliances and unions of states, to national and international organisations. They include political, economic, military, cultural and many other ties intertwining in various combinations and proportions.

Taking into account this growing complexity the author particularly stresses the leading role international political relations play — convincing confirmation of the Leninist propositions that politics is a concentrated expression of economics. He quotes Lenin that politics "have their own objective logic, irrespective of what persons or parties plan in advance". [2] It is precisely the objective logic of contemporary international relations, stemming from the main contradiction of our epoch — the contradiction between socialism and imperialism — that has made relations between the states of the two world systems a central, pivotal issue.

Tomashevsky carefully examines besides the political, also other aspects of international relations. A particularly important factor here is the socio-economic consequences of the scientific and technological revolution which, as rightly stressed in the book, lead to new forms of the internationalisation of economic life, noted by Lenin in his time.

In the light of the aforesaid it is understandable that the author should dwell at length on such a question as the alignment of forces in the international arena. Taking issue with the bourgeois concepts that the growth of the military-economic potential automatically leads to the growth of political influence and that force is absolute, the author shows the utter fallacy of considering the military-economic factor as something apart from the moral-political factor.

Marxism-Leninism gave a fundamentally new theoretical interpretation of the factor of force in world politics, and victorious socialism in its international activity irrefutably proved the correctness of this interpretation. The author quotes in this connection Lenin's weighty words: "A nation in which the major-

[1] V. I. Lenin, *Collected Works*, Moscow, Vol. 30, p. 302.

[2] Ibid., Vol. 11, p. 379.

ity of the workers and peasants realise, feel and see that they are fighting for... the rule of the working people, for the cause whose victory will ensure them and their children all the benefits of culture, of all that has been created by human labour — such a nation can never be vanquished".[3]

Much space is devoted in the monograph to questions that are of vital importance in international relations today — those of war and peace. The endless and ineffectual attempts by bourgeois scientists to find ways of solving this problem simply highlight, accentuate the merits of Marxism in this sphere and especially the significance of Lenin's works today. Lenin elaborated the general methodology of analysing wars, the doctrine of the peaceful coexistence of states with different social systems. The Programme of the CPSU states that one of the basic aims of the historic mission of communism is to end wars for all time and establish eternal peace on earth. The book rightly underscores that one of the greatest advantages Marxist-Leninists have over bourgeois and petty-bourgeois pacifists is that they do not just condemn wars between nations, but show the ways and forms of struggle to prevent wars, to stop them.

One of the chapters treats of the problems of peaceful coexistence of socialist and capitalist states, gives a theoretical appraisal of this specific form of class struggle in the international arena. In our times peaceful coexistence is the alternative to world war which, if it is not averted, will imperil the very existence of entire countries and nations. The policy of peaceful coexistence of states with different social systems calls for a realistic perception of reality by both socialist and capitalist states. Such a policy is objectively conditioned by the growing might of world socialism and also by the fact that it corresponds to the vital interests of all nations.

The author shows that the very possibility of compelling imperialism to accept a policy based on the principle of peaceful coexistence is secured by the successes of socialism, by the achievements of all the forces of the world revolutionary process, that such a policy is an effective instrument in the hands of the revolutionary, anti-imperialist forces, that the peaceful coexistence of states with different social systems opens up new possibilities for the development of the world revolutionary process.

In his analysis of international relations within the framework of each of the large groups of states — imperialist, socialist and newly-free countries — the author devotes a special chapter to the relations between imperialist states, to the dialectics of their futile attempts to achieve unity and the bitter contradictions rending their alliances.

The reader will also find a chapter on the position of the emergent national states in the international arena. In it the author discusses a number of common and specific features which determine their role in world politics, the prospects of their development, the difficulties they have to contend with as they overcome the legacy of centuries of capitalist oppression. He gives a graphic picture of imperialism's attempts to halt the social process of the young states, particularly those of a socialist orientation, to turn the zone of the national-liberation movement into a zone of military conflicts thus jeopardising world peace and social progress.

In the closing chapter Tomashevsky analyses a new type of international relations — the relations between the socialist countries. The chapter contains a number of interesting propositions and, in our view, a successful attempt to estimate, theoretically, the new phenomena that have appeared with the formation of the world socialist system, the role of the relations between the socialist countries in world politics. The author shows in this connection the importance of their unity for historical progress. Likewise interesting from the theoretical point of view is the author's attempt to show the typical features of international cooperation engendered by historical conditions, within the framework of the socialist community, features which make it the prototype of a future international community of nations.

Based on extensive factual material, D. Tomashevsky's monograph closes with an analysis of the 24th CPSU Congress's conclusions regarding international relations.

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[3] V. I. Lenin, *Collected Works*, Vol. 29, p. 319.

B. АФАНАСЬЕВ. *Научно-техническая революция, управление, образование.* М., Политиздат, 1972, 430 стр.

V. AFANASIEV, *The Scientific and Technological Revolution, Management and Education.* Moscow, Politizdat Publishers, 1972, 430 pp.

The book under review evokes interest by its analysis of the essence and the main trends of the current scientific and technological revolution in socialist society.

The book pays special attention to the intensive conversion of science into a direct productive force as a result of the increased interconnection between science and production and the accelerated materialisation of scientific knowledge in technology. The scientific and technological revolution has raised the unity of science and technology to a new stage.

Formerly, an analysis of this problem tended to oppose to each other two processes, namely, the "estrangement" of science from direct material production (as manifested in fundamental pure research) and its approximation to production (as expressed in applied research and development). As the author correctly points out, it is important to see not only the difference between these two processes, but also their intrinsic dialectical interconnection. While the applied sciences directly meet the requirements of production, the fundamental sciences are "estranged" from production even today. The fundamental sciences are connected with production more indirectly, the remote connection being maintained through the system of the applied sciences.

As emphasised by the author, the distinction between the fundamental and applied sciences is relative and should not be absolutised, nor lead to their opposition. The organic link between them is one of the factors of scientific progress and it increases the efficiency of science in communist construction. Fundamental research serves as a theoretical basis of the applied sciences.

The 24th Congress of the CPSU made it clear that the responsible tasks of Soviet science are to increase its effectiveness, develop fundamental research, concentrate on the more important and prospective trends of scientific and technological progress, and to find ways for a rapid formulation of scientific and technical decisions and their implementation in production. In this respect, special attention, in our opinion, should be devoted to the author's analysis of progressive organisational forms of combining science with production and stimulating technological progress.

A significant characteristic of the scientific and technological revolution, as shown in Afanasiev's monograph, is the change in the correlation of material and personal elements of the productive forces, of objective

and subjective factors of production. The accelerated introduction of scientific and technological achievements in production, management and education, and the resultant development and utilisation of modern automatic systems, lead to a redistribution of the functions fulfilled by man and those performed by his instruments of labour in the production process. The study of man's changing place and functions in production processes today has shown that living human labour has been and remains the basis of productive collective activity.

Afanasiev's study devotes a great deal of attention to the impact of the scientific and technological revolution on the formation of the human personality, on the changing spiritual world of man, on his advancing education and qualification. In analysing this process, the author proceeds from the fact that the conversion of science into a direct productive force is characterised by its embodiment in the material (technical) as well as in the personal elements (improvement of man's knowledge and habits, education, culture, professional skill, etc.). Under socialism, the scientific and technological revolution does not belittle the role of man nor leads to "dehumanisation", as claimed by bourgeois ideologues; on the contrary, it makes new, higher demands upon the level of his development. Furthermore, man's specialised knowledge, high professional training and general culture are an indispensable requisite for the scientific and technological revolution.

The implementation in the USSR of the socio-economic measures outlined by the 24th Congress of the Communist Party, the development and improvement of socialist democracy, the growth of public activity and civic responsibility depend largely on the effectiveness of education, the increment of knowledge and general cultural growth. The point is to make maximum use of the intellectual potential endowed by knowledge and culture in order to accelerate the progress of Soviet society.

In this connection new tasks arise in the sphere of education and the training of personnel. Basing himself on special, including psychological research, the author asserts that under present-day conditions what is important is not to accumulate knowledge and obtain as much information as possible, but to be able to orient oneself in the rapidly changing scientific picture of the world and to put the human knowledge to effective use.

Much space in the book is devoted to the place and role of dialectical materialism and Marxist-Leninist teachings in the development of contemporary scientific knowledge. Modern science is a single complex of knowledge in the natural, social and philosophical sciences. Scientific and technological progress is ensured by the comprehensive development of all these sciences. Any attempt to oppose these spheres of knowledge to one another can only impair the creative cooperation of scientists. The union between Marxist-Leninist philosophy and the specialised branches of knowledge, between the social and natural sciences, is an indispensable requisite for their mutual enrichment, for raising the effectiveness and general standards of theoretical thinking.

In his monograph Afanasiev deals at length with the impact of the scientific and technological revolution on management. He shows that the management of society is a comprehensive problem that has its own economic, philosophical, political, sociological, socio-psychological, legal, ethical and many other aspects, and that its solution, therefore, requires the joint effort by social scientists and practical workers.

Considerable changes in the sphere of administration and its increased effectiveness are now associated with the rapid computerisation, with the utilisation of economico-mathematical

simulation, systems analysis, and so on.

The author examines and sums up the experience of automated production management in the USSR, the ways and means of developing and efficient functioning of automated control systems, the establishment of a nationwide automated system of collecting and processing information for calculating, planning and managing the national economy. At the same time, he warns against the absolutisation of the role of technical means of management, and makes his conclusion that the social sciences are of decisive importance for scientific management.

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Б. РЫБАКОВ. *«Слово о полку Игореве» и его современники.* М., Изд-во «Наука», 1971, 296 стр.

B. RYBAKOV, *"The Lay of Igor's Campaign" and Its Times*, Moscow, Nauka Publishers, 1971, 296 pp.

A great deal of literature and literary research in many languages is dedicated to *The Lay of Igor's Campaign*, and in the recent period the epic has also become a subject of historical research.

In his book Academician B. Rybakov seeks to give the reader a comprehensive account of his research in the historical interpretation of all sources on the men and events celebrated in the immortal poem. Events of 1185, naturally, occupy a special place in the monograph. But, unlike many other authors, Rybakov also explores previous decades of political history and the activity of Russian princes and traces the impact of the poem in subsequent periods.

The book has four parts. The first, entitled "The Poem and the Age", is concerned with *The Lay of Igor's Campaign* in the chronicles of the late 12th and early 13th century; an attempt is made to establish the original order of the various parts of the work. Works by A. Sobolevsky, V. Peretz, N. Gudziy and other authors, as well as his own research lead Rybakov to believe that copyists and binders of the 14th and 16th centuries are responsible for rearrangements in the text, in the form in which it has reached contemporary scholars that is recognised as classic. These transpositions have affected the structure of the poem both from the point of view of grammar and meaning. Rybakov proposes a rearrangement of the classic text. He suggests a plan for rearranging passages from the poem and gives the text (in translation) which he believes reproduces the text in its original form. The author regards his rearrangement of the confused pages and the establishment of their correct order as a working hypothesis, and invites criticism and discussion. He believes that certain pages, devoted to Vladimir Monomakh depicted in the poem as the main positive character of Russian history, are missing.

Rybakov attempts to reveal the topical nature (for the period and the retrospective part of the poem) of the historical parallels drawn by the author of the poem, who is convinced that reminders of ancestral glory will help bring about victory. The historian believes the chronological pattern of the poem to be approximately as follows: The Troyan age — 98-375, the Yaroslav age — 1019-1054, Oleg's wars — 1078-1096.

The author makes valuable observations pertaining to the drawings in the Radzivill Chronicle devoted to Igor's crusade of 1185.

Details appear here, which are not taken from the chronicle, but from some additional source and which do not fully correspond to the text of

the chronicle. Rybakov believes the artist could only have drawn this additional information from images in the *Lay*. He supports V. Danilov's view that *The Lay of the Fall of Russian Land* is connected with the feuds between the sons of Vsevolod Big Nest, and considers that the poem of Igor's crusade also influenced this work, and served as its model. Rybakov traces the "life of the poem from generation to generation", and points to its special influence at the time of the Kulikovo battle, which ended in the Mamai massacre, fatal for the Tatars. Sixteenth-century works also point to the fact that the *Lay* was known at that time, Kurbsky's *The History of Grand Prince of Moscow* being one of them. Rybakov puts forward an attractive supposition to the effect that Kurbsky could have been shown the poem by the monks of the Pskovo-Pechersky Monastery. It did have a large library in the 16th century, but only some of its manuscripts are established (mostly by name only).

The second part of the book is called "The Characters of *The Lay of Igor's Campaign*" and abounds in interesting detail on the participants of the events. Taking as his basis the material formed in the chronicles the author traces their lives over the decades and refers to the activity of their elder contemporaries. A table of "The Main Genealogical Links of the Russian Princes (10th-12th cent.)" provides a substantial aid for appreciation of the extensive factual material. The names of the great princes of Kiev are picked out in special print and the names of all the princes mentioned in the poem are underlined.

Some very apt and vivid portrayals of princes have been given by the author (Vsevolod Olgovich, Svyatoslav Vsevolodovich, Igor Svyatoslavich, Fierce Aurochs Vsevolod). The chapter brings the reader much more than even the most elaborate of commentaries on *The Lay of Igor's Campaign*. It is, in fact, an evaluation of the major events in the political history of Eastern Europe of the second half of the 12th century, events which were considered of secondary importance. When dealing with the second half of the 12th century and the beginning of the 13th century attention (at any rate in works of a general nature and textbooks) was centred on events in the history of Novgorod, Galicia-Volhyn Rus and especially the princedoms of Vladimir and Suzdal, where the nucleus of the future united Russian state were already taking shape.

Rybakov has, in many respects, rediscovered the historic significance of the activity of the South Russian princes and brought out their characteristics as statesmen and individuals which were not always attractive. Convincing evidence is presented by the author that Svyatoslav Vsevolodovich was a powerful ruler. It explains why the author of the poem sets his hopes on the efforts of this prince in the struggle with the Polovtsy.

Rybakov makes an important conclusion which refutes the traditional concept of the political decline of Kiev after 1169 when the town was ravaged by the joint armies of the Russian princes. However, the essentially negative portrayal of Andrei Bogolyubsky can hardly be accepted. It seems this ruler was not an unsuccessful tyrant but rather a statesman, who was ahead of his times. He was a figure who planned imaginatively (although many of his plans were not realised), who had a broad understanding of social and historical issues and whose fate was a truly tragic one. Indeed his brutal assassination can well be viewed as one of the first manifestations of aristocratic opposition to the emergent autocracy.

The third part, "Chronicle Sources on Igor's Crusade in 1185", consists largely of an analysis of the narrative on the crusade included in the Ipatyevsky Chronicle. In the collection of chronicles this narrative is second in volume only to the tale of Bogolyubsky's assassination, and, according to Rybakov, its style shows that the author was familiar with *The Lay of Igor's Campaign*. In this chapter Rybakov outlines his ideas regarding the composition of the Kiev collection of chronicles of 1198, and the relationship between the *Lay* and the chronicles, treated with more detail in his book *Russian Chroniclers and the Author of the "Lay of Igor's Campaign"*.

The fourth part is entitled "The Events of 1184-1185 Celebrated in the *Lay*". The author makes a critical analysis of all the existing interpretations of Igor's crusade and attempts to reconstruct the sequence of events, the nature of the crusade, and the sites of the battles with the Polovtsy.

He considers all the successive stages of Igor's crusade in detail and takes into account the dates of events, drawing on a wide range of cartographic and scientific material. Rybakov is inclined to think that the battle took place at the river Siurliy near Samara River. The book contains maps: "Igor's Route from April 13 to May 10, 1185", "Igor's Route from the Salnitsa River to the Siurliy River, May 9-10, 1185", "Crusades of the Polovtsy Khans After the Defeat of Igor's Armies" (May-June 1185). Since the 1930s Rybakov has been devoting considerable attention to historical maps, which the scholar does not regard as "reference" material but as the means to a historico-geographical method, to a form of analysis. In keeping with this approach, apart from the maps listed above, the work carries a map diagram, "The method of locating the field of Igor's battle with the Polovtsy, May 10-12, 1185".

Rybakov believes that the main part of the poem the "Golden Word" was probably composed at Svyatoslav's court in Kiev and recited at the reception given by the prince in honour of Igor, his guest and petitioner. This part is a diplomatic appeal for the prince to assist Igor. Elsewhere, the author describes *The Lay of Igor's Campaign* as a progressive political treatise in support of Svyatoslav's policy. It is possible that some of its contemporaries did see the political appeal of the poem in this light, but it would seem Rybakov is nearer the truth in his introduction, when he says that the author of the poem "stood above all feudal barriers, beyond royal family feuds and petty grievances". The emotional impact of the poem was so great that even then it could well have rung with the voice of all the people. The poet himself was evidently aware of its power, when he recalled in the presence of Svyatoslav and Igor the wicked actions of their grandfather Oleg Gorislavich. The author's appeal for unity was not confined to remote princes; he allowed himself to state with sufficient frankness that unity was indispensable also among princes, who were close relatives (the Olgoviches).

Rybakov's new book, like his other publications, is a thought-provoking work of a scholar passionately interested in his subject. It provides interesting food for thought and suggests major lines and approaches for further research. Scientific research and popularisation interact closely in his work and serve to characterise his creative activity. This is not only because of his literary and artistic talent but because in this way Rybakov pursues the finest traditions of Russian scholarship, and in his research regards it as his duty always to address his ideas directly to his readers.

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Европа в средние века: экономика, политика, культура. Сборник статей. К 80-летию академика Сергея Даниловича Сказкина. М., Изд-во «Наука», 1972, 441 стр.

Europe in the Middle Ages: Economy, Politics, Culture. A collection of articles published to mark the 80th anniversary of the birth of Academician S. Skazkin, Moscow, Nauka Publishers, 1972, 441 pp.

This book may be said to be a report of Soviet mediaevalists to one of their teachers, Academician Sergei Skazkin, who died a year after it was published.

In the course of fifty years of pedagogical and scientific activity Hero of Socialist Labour, Sergei Skazkin, trained hundreds of Soviet historians. Many other historians have in one way or another felt his influence. Naturally, many of the contributors to this collection are his pupils or the pupils of his pupils; the rest were his colleagues. However, the link of this book with Skazkin's work is not confined purely to the successiveness of generations. Skazkin had made a considerable contribution to the elaboration of many cardinal problems of mediaeval history. To this day his books on absolutism, the agrarian problem, the history of mediaeval heresies, and the Renaissance form the foundation of Soviet historical science in this field. It is not accidental, therefore, that the papers on this subject receive prominence in this collection. Onethird of it is devoted to mediaeval culture and the Renaissance; more than half of the papers are on the history of France, Italy and Spain, countries that had been studied by Skazkin.

The subtitle *Economy, Politics, Culture* quite fully mirrors the collections contents, which, nonetheless, are more diversified: there are papers on historiography, the study of sources, the study of archives, anthroponymy and cryptography. The geographical range of the papers is likewise broad — in addition to Britain, France, Italy, Spain and Germany they deal with Sweden and Ireland. The subject-matter likewise frequently ranges beyond the traditional areas of historical research and touches on questions like the organisation of fishing, village crafts, the formation of the salt market, the level of education, and so on. Most of the papers in the collection represent original research, and together they cover almost all the problems dealt with by Soviet mediaevalistics. Many highlight either new original aspects in the approach to the studied problems, or the utilisation of the most up-to-date statistical methods, or a critical interpretation of the major achievements of foreign historiography. However, some traditional subjects of Soviet mediaevalistics that had been studied for a long time and have deep-going roots, have received less attention than might have been expected. Problems of the class struggle, for instance, are analysed in only one paper. Inadequate attention has also been given to agrarian history and the history of the peasantry as a whole.

Of the papers dealing with the agrarian theme mention must be made first of the paper by M. Abramson, who describes peasant associations in the commune: these associations were widespread in Europe but they have been scantily studied. In an interesting paper Y. Bessmertny suggests a method of determining grain yields with the aid of indirect data, notably the size of the share rent paid by the peasants. On the basis of his own computations he comes to the conclusion that there might have been an intensification of farming in the Rhineland in the 12th-13th century.

A much larger number of papers deal with the history of towns and crafts. A paper by the late Y. Levitsky examines the early development of cloth-making in England in the 12th-13th century and criticises the theories of British and American historians that weaving developed chiefly in rural localities. Cloth-making and the policy of towns towards it are dealt also by L. Kotelnikova, who suggests that scattered cloth-making sprang up in the Toscany countryside in the 13th-14th century but had little prospects for development because it was confined to guilds. The struggle between the burghers and the local count for the salt market in Toulouse in the 11th-12th century is described in a paper by S. Stam. A. Svanidze examines the social aspects of the organisation of fishing in Sweden in the 15th century. T. Osipova traces the development of crafts in Irish towns in the 13th-15th century. An economic problem is dealt with also by A. Shevelenko, who discusses the process of feudalisation in Brittany, where the first phases of the rise of feudal property were strongly influenced by the Catholic Church.

Four papers are devoted to the history of the state. Two of them examine the problem of estate representation in France and Spain. N. Denisova-Khachaturyan traces the rise of general assemblies as the result of the actions of the social forces of the epoch — the clergy, nobility and burghers, who sought to consolidate their privileges, and the throne which defended its sovereign interests. I. Pichugina takes a close look at peasant participation in the Castilian Cortes in the 13th-14th century and takes issue with bourgeois historiography, which assumes that there was democratic estate representation in Spain. N. Basovskaya writes of the policies pursued at the close of the 13th and early 14th centuries by the British authorities in Gascony, where they combined a striving for centralisation with encouragement for the local separatism of the feudal lords.

The views on the state held by Patrizi, Piccolomini, Machiavelli, Guicciardini and other Italian feudal lords of the 15th-16th century are scrutinised by V. Rutenburg. These views, which in many ways anticipated the theory and policy of absolutist states, are analysed from the angle that the Italian feudal domains of that epoch were (as, in the author's opinion, were the German principalities of the second half of the 16th century) a form of "regional-absolutist states". However, we feel that this thesis requires additional proof.

Problems of the class struggle are dealt with by M. Smirin, who shows (on the example of actions by the miners of Slovakia in 1525) what happens to workers' movements when they are not supported by a powerful anti-feudal peasant movement or by a more or less influential opposition of rich entrepreneurs of the capitalist type. A. Chistozvonov considers some features of the Netherlands revolution of the 16th century against the background of the rise of capitalism in Europe and the formation of a world market.

Many of the papers are on the history of culture, reflecting the large interest shown by Soviet mediaevalistics in this intricate but topical problem. A wide range of subjects are covered in these papers: ideology in the Middle Ages and the Renaissance, culture in the Middle Ages, the history of social thought. The ethical and aesthetic views of cultural leaders of the Middle Ages and the Renaissance are discussed by V. Ukolova (Boethius), L. Bragina (Alberti) and N. Revyakina (Vergerio). The political ideas propounded by Thomas Moore are analysed by I. Osinovsky. This collection includes an extremely interesting but uncompleted paper by G. Shevkina (death cut short the work of this young researcher) on Averroism in 13th-century Paris. A kindred subject is dealt with by V. Kerov, who writes of the struggle waged against the Papacy by the spiritualists led by Olivi. Two papers are on mediaeval Enlightenment: V. Romanova — on French

13th-14th century manuscripts; and N. Bogodarova — on the level of education in England in the 14th-15th century. Some papers review various aspects of the history of social thought: ideas on equality and common property in 16th-century English literature (Y. Saprykin), the 16th-century Spanish economist Mercado (E. Litavrina), the codifier of the "second edition" of serfdom Husanus (M. Barga). The latter paper touches on the problem of the international consolidation of the nobility of different countries.

There are some outstanding papers on various aspects of the study of sources. These include "A Discussion of the Edict of Theodoric" by A. Korsunsky, and papers by Z. Udaltsova, A. Kazhdan and A. Gorfunkel. In her paper on the views of Byzantine historians of the 6th-7th century, Z. Udaltsova goes beyond the study of sources, vividly showing the cultural background of that epoch. A. Kazhdan's short study raises the big problem of an author's dependence on the realities of his age (including the overall psychological background of his country and epoch). A. Gorfunkel writes of a copy of Tommaso Campanella's *Kingdom of the Messiah* found by him in the library of the Institute of Marxism-Leninism of the CC CPSU. This copy was published in Campanella's life-time and contains a large insertion written in the hand of the author. This discovery gives a deeper insight into the history of the writing of one of the great Utopian's principal treatises.

Mention must also be made of two other interesting papers: "Synthesis in the History of Law and the State in French Mediaevalistics of the Second Half of the 19th Century" by E. Gutnova and "Some Questions of the Study of French Mediaeval Anthroponymy (Historiography and Method)" by A. Kaplan.

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A. ШАРКОВ. *Япония и США (Анализ современных экономических отношений)*. М., Изд-во «Мысль», 1971, 406 стр.

A. SHARKOV, *Japan and the United States (Analysis of Present-Day Economic Relations)*, Moscow, Mysl Publishers, 1971, 406 pp.

The book under review covers a wide range of subjects: the significance of foreign trade in the economy of Japan and the United States, the scale of trade ties, the Japanese liberalisation policy and the penetration of Japan by American capital, scientific and technological progress and its importance in Japanese-American relations. In the concluding chapter the author analyses a highly significant aspect of the problem — the competitive position of Japanese and American goods.

One of the major distinctions of the monograph is that the author analyses Japanese-American relations not statically but historically, revealing their evolution. His attention is focused on economic questions but, considering the great complexity of the closely intertwined economic and political processes, they are examined in their interconnection, in a comprehensive way.

As a result of the essential shifts in the 25 years after surrender Japan, remaining a military and political ally of the United States, is becoming its strongest trade rival. Sharkov rightly notes that the essence of the changes consists in that the relationship of forces between the USA and Japan is altering in favour of the latter. In the 1970s Japanese-American relations entered a new phase: Japan is behaving more and more independently, her economic expansion is acquiring quite an active nature and her foreign

policy is becoming much more independent.

A distinctive feature of Sharkov's method of research is the desire to bring out the economic foundations which underlie the processes in foreign policy, to show them, as it were, from within. Thus, taking up the problem of the competitiveness of Japanese and American goods, the author, as it were, divides it into its component parts. He analyses the wages of workers, labour productivity, the expenditure of the manufacturer on manpower (per unit of output) and the role of raw materials in production costs. An examination of these initial elements makes the author's conclusion scientifically grounded and hence more convincing. His calculations prove (in the case of Japan and the United States) the following proposition: "The higher the organic composition of capital, the more modest the importance of wages in costs, and vice versa."

Considerable space is given to a comparison of labour productivity levels in Japan and the United States. These indices help to evaluate the degree of intensification of labour in Japan and in other capitalist countries. It is important to take into account the point whether Japan will be able to preserve for a long time the high growth rate of labour productivity and maintain superiority over the United States in this respect. If she is able to do so, the other imperialist countries, the United States in the first place, will have to wage an economic struggle against Japan much more energetically than until now. Hence the conclusion concerning the growing exacerbation of Japan's contradictions not only with the United States but also on a broader international front.

The book has no special chapter dealing with the monopolies but their influence on the development of external economic ties commands the author's attention. The reader will find much data concerning the battle of monopoly giants of the two leading countries in the capitalist world, the forms and methods of struggle by the Japanese monopolies for winning the most advantageous positions in new markets.

In view of Japan's line of intensified militarisation the question of a new type of Japanese exports, trade in armaments, acquires great interest. Sharkov notes the political importance of this new tendency which already within the near future may become an important factor in increasing Japan's influence in developing countries, particularly in South Asia and in Africa.

Special attention is paid to analysing the mechanism of external economic relations and the specific features of the American and Japanese trade systems.

Examining a wide range of questions connected with the development of Japanese-American relations, the author draws the reader's attention to the fact that the weakening of Japan's economic dependence on the United States has been proceeding for a long time unevenly, with fluctuations, a clash of interests and mounting contradictions. The latter are steadily increasing as the economic pattern of Japan and the United States draw closer along the lines of further industrialisation and the vigorous development of progressive sectors in industry.

A new front of struggle between Japanese and American production lines of almost the same type has been opened because goods not of the light but of the heavy industry are becoming the basis of Japanese exports.

Outwardly, a rather paradoxical situation is emerging: in the era of the contemporary scientific and technological revolution Japanese-American trade is becoming vested, as it were, in a "colonial form" — Japan is exporting to the United States manufactured goods and is buying in the American market raw materials (metal scrap, copper, coal, oil products, timber and various ag-

ricultural commodities). The result is a financial benefit for Japan, in other words, a favourable balance of trade. But even as a raw material supplier the United States is losing its attractiveness for Japan because of the high prices and the freight rates for long-distance shipments.

Sharkov in no way overestimates the contradictions between Japan and the United States, showing the community of interests still preserved, but he emphasises that "before us is a striking case of the development of inter-imperialist contradictions within the bounds of a military-political alliance".

The problem of the scientific and technological progress commands an exceedingly big place in the monograph, and the author analyses its influence on Japan's economic development along many lines. In present-day conditions scientific and technological progress is exerting a tremendous impact on the entire system of American-Japanese economic relations. It is almost impossible already to examine the old aspects of these relations (trade, the export of capital, business activity, and others) without analysing the new ones. Japan has elevated to the rank of state economic policy the importation of the results of "brain activity".

From the beginning of 1946 and up to mid-1971 Japan imported about 13,000 patents and licences. These gave her access to the latest technology and provided the basis for restructuring her economy. This made it possible to create favourable conditions for the organisation of national research and development from new advanced positions, to save resources and win time in the struggle for the second place in the capitalist world.

In the literature on Japan hasty conclusions are at times drawn as though the borrowing of foreign know-how as a factor of economic development has become exhausted on the whole by 1970 in Japan. Yet the main line in the development of Japan's scientific and technological progress is a combination of her own research and development work with the steady use of advanced foreign equipment, technology and know-how.

The United States regarded the penetration of its scientific and technological achievements in Japan as a means of increasing the profits and consolidating the positions of the American monopolies, of tying the Japanese monopolies to the American military-industrial complex. But the greater influence of science on production has resulted in that goods of the new type are becoming the object of keen competitive struggle between the US and Japanese monopolies.

The struggle on these fronts is becoming ever more obstinate because its participants are gigantic companies which enjoy the support of the state and are able extensively to finance scientific and technological progress.

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M. СЛАДКОВСКИЙ. *Китай и Япония*. М., Изд-во «Наука», 1971, 335 стр.

M. SLADKOVSKY, *China and Japan*, Moscow, Nauka Publishers, 1971, 335 pp.

The work is the first monographic study attempted in Soviet science on the relations between two big states in the Far East. The purpose of this study, the author notes, is to "examine the main historical facts and events characterising both countries at all stages of their development and determining their role in this region and the relations between them". The historical problems of China and Japan, their home and foreign policies are studied in close interconnection and interdependence.

Sladkovsky begins with ancient times and describes the initial and subsequent stages in the shaping of the state relations between China and Japan and also the historical conditions of their development. This has enabled the author to give a clear picture of these relations over the many centuries of their existence and to explain many complicated phenomena in the public, political and cultural life of China and Japan. Chief among these are the causes and consequences of the "isolation policy" pursued by the Chinese and Japanese ruling classes in different historical periods, the theory of the so called common destiny of the two countries now popular in Peking (the theory was repeatedly used in the past by Japanese imperialists to substantiate their "right" to penetrate into China), and the strong anti-Japanese sentiments of the Chinese people.

The author focuses attention on the major processes and events in the more recent history of both countries. He traces the penetration of Japan and other imperialist powers into China, her division and colonisation. He also shows the growth of inter-imperialist contradictions caused by the aggression in China and her exploitation, and the Chinese people's growing struggle against imperialism.

Sladkovsky shows the policy of the collusion of the imperialist powers with Japan against China, the cowardly, conciliatory line of Chinese vested interests, which betrayed the vital interests of the people. He also pinpoints the frustration of the hopes of China's nationalist circles of cooperating with the USA and other Western states "in the name of progress" and the loss of their faith in Japan, a country "kindred in race and culture", whose ruling circles acted as the most dangerous and vicious enemy of China's independence.

These were the conditions in which the Chinese people were to find other ways and means of freeing itself from imperialism, feudalism, compradore capital and militarism and to build a people's democracy. The liberation movement was growing apace and the Great October Revolution had an enormous impact on it. The first socialist state in the world that came into existence to the north of China based its relations with China on complete equality. This weakened the positions of imperialism in China and opened up real prospects for restoring her national independence.

The anti-imperialist movement in China was led by the young Communist Party and the Left patriots headed by Sun Yat-sen. The author analyses the course of the anti-imperialist struggle which was to expel the Japanese troops, free the country from foreign dominance in the national economy and politics, and turn China into a free democratic state.

The entire period from the thirties to the end of the Second World War, was marked by armed Japanese aggression in China. In his analysis of the war and of the postwar period the author shows the impact of the Soviet victories over Hitlerite Germany and militarist Japan for the liberation of China, and cites extensive material on Soviet aid to the Chinese patriots in defeating the reactionary forces, in securing the victory of the people's revolution and in the establishment of the People's Republic of China.

The chapters on the economic and political development of China in the postwar years are of great interest. Sladkovsky traces the beginning of the process uniting China into a single socialist state and shows her substantial achievements in the early period of economic development, the growth of her prestige and influence on the international scene, her role as an equal member in the socialist community of states, the significance of the help of the USSR and other socialist countries in China's progress.

The situation in the country changed completely after the Maoist leadership adopted its nationalist, anti-Soviet political line. The book describes the historical background of Maoism as a political trend, the content and consequences of the so called cultural revolution and other pertinent issues.

The author analyses the development of imperialist Japan in the postwar years, the US policy of occupation, directed at restoring and preserving Japan's military and economic potential and at strengthening her monopolies. He shows the natural interest of the Chinese and Japanese peoples in commercial and cultural exchanges, in good-neighbourly relations. At the same time certain influential nationalist circles in Japan and the Maoist leadership of China are attempting to use the basis of "pan-Asiatism" and racialism.

He believes that the chauvinist, nationalist line of the Maoist leadership, the greater influence of major Japanese monopolies and their expansionism are the main obstacles on the way to real and stable normalisation of relations between China and Japan.

Sladkovsky is quite right in concluding that the relations between China and Japan will, in the final analysis, depend upon the balance of forces between world socialism and imperialism in this region. But in the first place these relations will depend upon the social forces that will determine the policy of both countries and the degree to which this policy will reflect the vital interests of their peoples.

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Cand. Sc. (Hist.)

A. СИЗОНЕНКО. *Очерки истории советско-латиноамериканских отношений (1924-1970 гг.).* М., Изд-во «Наука», 1971, 204 стр.

A. SIZONENKO, *History of Soviet-Latin American Relations (1924-1970). Essays*, Moscow, Nauka Publishers, 1971, 204 pp.

The Soviet Union's relations with the countries of Latin America constitute an important component of its foreign policy today. The Soviet Union has always advocated equal, mutually advantageous ties with these countries, has always supported their political and economic independence. The interest in the history and present stage of these relations which have always greatly benefited both sides is therefore quite understandable.

The *Essays* are devoted to the capitalist countries of the continent; socialist Cuba is not discussed in this context. The work is based on extensive factual material much of which is put into scientific "circulation" for the first time. The author divides the history of Soviet-Latin American relations into three periods, each characterised by its own distinctive features.

A feature of the first, prewar period was the enthusiasm with which the working masses of Latin America hailed the Great October Socialist Revolution and demonstrated their solidarity with it, a fact which undoubtedly contributed to the process of recognition of the USSR by a number of countries of the continent. It is noteworthy, and the author shows this graphically, that the first socialist state in the world displayed the initiative in establishing normal political and economic relations with Latin America. Already in 1920 Lenin stressed the need to normalise trade relations with Mexico. The Soviet Union's foreign policy was clearly expressed in a statement made in 1924 by Chicherin, People's Commissar for Foreign Affairs, that

the USSR would welcome the initiative of any one of the countries of the continent to establish relations with the USSR. A concrete expression of this policy was the establishment of diplomatic relations with Mexico and Uruguay.

The monograph devotes much space to the activities of Yuzhamtorg, the Soviet-Latin American joint stock company (1927-1936), which played the main role in promoting trade and business cooperation between the USSR and the countries of the continent on principles of equality and mutual benefit. However, as the author notes, the continent's dependence in the prewar years on the imperialist powers was so great that the movement of its working masses and business quarters favouring expansion of relations with the USSR encountered serious difficulties.

During the Second World War, when the heroic struggle of the Soviet Union against fascist Germany won the Soviet people the sympathy of democratic forces all over the world, it was no longer possible to prevent the expansion of contacts between the countries and peoples of Latin America and the USSR. Thirteen countries of the continent expressed their readiness to normalise their relations with the Soviet Union. The author rightly makes the point in this connection that this tendency was based on the fact that the peoples of the USSR and Latin America pursued the same aims in the struggle against fascism and for peace, freedom and democracy. In the years under review the foundation of mutually advantageous cooperation between the USSR and the continent's countries was greatly expanded.

Half of the monograph treats of the postwar period, the third stage in Soviet-Latin American relations. The author writes that the cold war policy pursued by US imperialist circles adversely affected the Soviet Union's relations with some of the region's countries although, as is repeatedly underscored in the monograph, postwar conditions objectively favoured their development. The reactionary regimes in Chile, Brazil, Columbia and in several other countries even went so far as to break off diplomatic relations with the USSR. However, beginning with the 60s the situation changed. The failure of the cold war policy was due in large measure, as the author points out, to the fact that it was totally at variance with the vital interests of the peoples of the continent. By the beginning of 1971 the Soviet Union maintained diplomatic relations with 16 (of the 24) Latin American states which occupy 93 per cent of the continent's territory and in which 97 per cent of its population live.

Sizonenko discusses the Soviet Union's expanding contacts with the continent in the trade and economic sphere, in the spheres of culture and science and also partly interparliamentary exchange. Highly interesting is the chapter "The USSR and the National Interests of the Peoples of Latin America" which shows the Soviet Union's role as a staunch supporter of the independence of these peoples, its firm stand against the encroachments of the imperialists on the sovereignty and freedom of the peoples of Nicaragua (1927), Guatemala (1954), Panama (1964) and the Dominican Republic (1965). The Soviet Union repeatedly came out in support of the Latin American countries in the United Nations, at the UN Conferences on Trade and Development in Geneva (1964), New Delhi (1968). The author draws the conclusion that ever broader circles of Latin America highly appreciate the fact that the socialist community, and the Soviet Union in the first place, champion the national interests of the developing countries. As before, the Leninist policy, the monograph stressed, underlies the Soviet Union's relations with the Latin American countries today. This was also reaffirmed in the decisions of the 24th Congress of the CPSU.

Being the first study of its kind on the subject the monograph has attracted the attention of Soviet and foreign readers. In 1972 Progress Publishers (Moscow) put it out in Spanish under the title *URSS y Latinoamérica. Ayer y hoy.*

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Cand. Sc. (Econ.)

О. ТЕРНОВОЙ. *Философия Кубы (1790-1878).* Минск, Изд-во Белорусского Государственного Университета им. В. И. Ленина, 1972 г., 340 стр.

O. TERNOVOY, *Philosophy in Cuba (1790-1878),* Minsk, Byelorussian V. I. Lenin State University Publishers, 1972, 340 pp.

Explaining why the period from 1790 to 1878 was specifically chosen the author writes that it was a significant one in the history of Cuba. It was the first (Creole) stage of the liberation movement, the forerunner of the Cuban revolution. The progressive philosophy of the Creole Enlightenment became its ideological banner. Although the idea is advanced in the book that the genesis of Cuban philosophy is rooted in the Creole period it would probably be more correct to say that this period saw the emergence of a progressive, anti-scholastic philosophy.

Notwithstanding the fact that the colonial regime hampered the spread of science and enlightenment in Cuba, the natural sciences, in the first place physics, zoology and botany, began to advance with the development of industry and agriculture. Also literature and art, nourished by patriotic ideas, began to burgeon.

It was the period when the crisis of Spanish colonial rule, impeding the formation of capitalist relations in Cuba, became increasingly evident. This crisis also led to the degradation of the official religious and scholastic ideology in the struggle against which there was born a progressive philosophy in Cuba which, in turn, exerted a tremendous influence on the formation of the national culture and patriotic consciousness of the future nation. Ternovoy considers the progressive and even revolutionary character of the class of Creole planters to be the distinctive feature of this period.

Following the Leninist methodology of classifying the history of ideas in Russia according to periods the author proposes the following one with respect to the history of ideas and the liberation movement in Cuba: 1. The Creole period (1790-1878); 2. The bourgeois-democratic period (1878-1902); 3. The proletarian period — beginning with 1902. These periods coincide with the main stages in the history of economy in Cuba. Ternovoy perceives in the organic link of the progressive ideology and philosophy with politics and the revolutionary struggle the characteristic feature of the liberation movement in Cuba. Thus at every one of the stages the revolutionary storm is preceded by periods of "thought and reason", that is, by ideological preparation. These stages are: Creolism and revolution in the period between 1868 and 1878; the revolutionary and democratic ideology of José Marti and the revolution of 1895-1898; Marxism-Leninism and the revolution of 1953-1959.

At the cradle of the philosophy of the Cuban Enlightenment stood José Agustino Caballero (1762-1835), humanist and enlightener, and author of *Philosophía Eléctiva*. This work, the first major philosophical work in Cuba, laid the foundation of the liberation of social thought from the scholastic yoke.

Philosophía Eléctiva and the philosophical articles of Caballero contain a criticism of the ergotism

and metaphysics of scholastics, expound the ideas of the foremost thinkers of Europe.

An important place in Caballero's philosophy is held by his teaching on "prejudices" in which he included everything "that fettered free thought and the social activity of the individual". He gave much attention to defining "real philosophy" and its relationship to other sciences. For Caballero philosophy was a discipline, which had its own subject of research, independent of theology.

Ternovoy sees as the main thing in Caballero's teaching his affirmation of the organic unity of philosophy and science. At the same time his concessions to theology are evident. He maintained, for example, that a "healthy and serene theology" had the right to exist alongside philosophy, that in the quest for truth the coincidence of faith and knowledge was possible. Assessing his writings Ternovoy writes that in his philosophy "Caballero was not consistent to the end, he side-stepped controversial issues, shunned materialism and atheism...". This notwithstanding Caballero can be considered the father of modern Cuban philosophy and science.

The philosopher who finally freed Cuban philosophy from theology and scholasticism was Félix Varela y Morales (1787-1853). The book shows on extensive material Varela's contribution to overthrowing scholasticism in Cuba. By invalidating the dogma about the superiority of faith over reason Varela theoretically substantiated the need to revise the former notions regarding the correlation of the authority of faith and reason. In the philosophy study course he included instruction in the theories of Locke and Candillac whose teachings were progressive for those times. He acquainted his pupils with the latest advances in the natural sciences, replaced instruction in Latin with instruction in Spanish.

Varela wrote several major works: *Instituciones de la Filosofía Eclécti-va,* (1812), *Miscelánea Filosófica* (first edition in 1819), *Lecciones de Filosofía,* in three volumes (first edition in 1818). Through him Cuba came to know of the latest achivements in the natural sciences. His instructive activity exerted a strong influence on the formation of progressive philosophical and political views among his contemporaries.

In his definition of the component parts of philosophy Varela followed, on the whole, the same pattern as Caballero: logics, ethics, metaphysics and physics. Although he did not single physics out of philosophy, in physics he completely broke with Aristotle and adhered to the new notions about the physical picture of the world, based on Newton's atomism and mechanics. The teaching on matter occupies a central place in Varela's natural philosophy. The Cuban philosopher recognised matter, motion, time and space as objective reality. In his conception of sensationalism Varela in a number of instances disagreed with his teachers — Locke and Candillac. He particularly sharply opposed the thesis "idea is sensation", but in this negation he went to another extreme — to a depreciation of the epistemological role of sensations.

Varela also tried to interpret in his own way the origin and nature of universals. Ternovoy points to a contradictory character of his views on this question. "Justified criticism of the metaphysical doubling of things, of essence divorcing from phenomenon is followed by a converse, empirico-phenomenalistic mistake, that of identifying essence and phenomenon, which led to an underestimation of the category of substance as the essence of things."

In his teaching on logics Varela, unlike Caballero, gave preference to the sensationalists rather than to the rationalists. The author shows Varela's specific attitude to the definition of concepts. According to him definition is the result of analysis, it only briefly expresses what we have

learned in the process of analysis and synthesis and cannot, therefore, be complete. Another important proposition Ternovoy notes is Varela's idea that some things cannot be defined.

Discussing an assessment of Varela's philosophical ideas the author believes that it cannot be reduced to just a matter of rationalism, or sensationalism and empiricism. Two sides need to be distinguished in the creative and practical activity of the philosopher — the destructive and the constructive.

Writing about the philosophical views of José de la Luz y Caballero (1800-1862), Ternovoy notes that they were a development of the views of Caballero and Varela.

Luz expressed his philosophical credo in the *Carraguao's Synopses* (1835), the main content of which was determined by the materialistic ideas of Bacon and Locke, and in numerous polemical articles. He particularly took issue with the estimation of Cousin's philosophy.

The underlying principle of Luz's methodology was recognition of the primacy of nature, observation and experience. He proceeded from recognition of the unity of all sciences, assigning the natural sciences, however, a special place. He considered recognition of the priority of the natural sciences an indispensable condition to the progress of all sciences in general.

The book devotes a whole chapter to Luz y Caballero's criticism of the eclectic philosophy of Cousin. In Cuba this philosophy was popularised by the brothers José and Manuel del Valle. Luz believed that eclecticism in philosophy as a consistent principle was utterly impossible, that it revived spiritualism. He was able to discern the reactionary meaning of eclectics also in politics where it served as the ideological substantiation for the immutability of existing systems.

The book closes with the chapter "Polemics and Conclusions" in which the author notes that one of the most fundamental issues in the history of Cuban philosophy in the period under review is its general estimation, that is, definition of the character of the philosophical line of Caballero-Varela-Luz. In Cuban bourgeois literature on the subject wide currency was given to the view that Creole philosophy was imitative and eclectic. Ternovoy emphatically counters this interpretation and shows that the term "eclectic" was used by the said philosophers in its formal sense and that in essence and in content their philosophy was anti-eclectic.

In Cuban philosophy materialism appeared only as a trend, but "the old philosophical question of the two trends, or rather of the two possible deductions from the premises of empiricism and sensationalism",[1] the Creole philosophers decided, in the main, in favour of materialism.

The book shows the continuity between the Creole philosophy and the subsequent stages in the progressive ideology of the revolutionary movement in Cuba.

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[1] V. I. Lenin, *Collected Works*, Moscow, Vol. 14, p. 127.

Энгельс и языкознание. М., Изд-во «Наука», 1972, 311 стр.

Engels and Linguistics, Nauka Publishers, Moscow, 1972, 311 pp.

Dedicated to the 150th anniversary of the birth of Frederick Engels, this collective work is on several counts a notable contribution to Soviet linguistic studies. The result of a team effort by a large group of authors who all proceed from the same frame of reference (although occasional differences do occur, of which more below), the book covers several "Engelsian themes", i. e., *concrete aspects of the Marxist concept of language*. It is a sequel to the series of theoretical studies brought out by the

USSR Academy of Sciences' Institute of Linguistics, in particular, the book, *Leninism and Theoretical Problems of Linguistics* (Moscow, 1970) and the collective monograph, *General Linguistics* (Vol. 1, Moscow, 1970, Vol. 2, Moscow, 1972, and Vol. 3 in print).

Four articles in the work deal with Engels's *concrete views on the problem of "language and society"*. These are: *F. Engels and Some Problems of Linguistics* by R. Budagov, *F. Engels On the Social Nature of Language* by N. Chemodanov; *F. Engels and the Historical Study of the Dutch Language* by S. Mironov, and *Questions of Comparative Studies in the Works of Engels* by G. Klimov. The concept of language as a product of social development has been Marxism's main contribution to linguistic theory. Linked with this concept is the new understanding of man's essence as a sum of all social relations, i. e., as a social essence, and the materialist approach to the individual's speech activities. These propositions, which underlie Engels's concrete linguistic studies, are discussed by R. Budagov in connection with the following set of questions: a) the link between matter (substance) and relation, b) the relation between system and development, and c) the interaction between language and thought. N. Chemodanov shows the inner link between the above philosophical theses and Engels's series of works on ethnogeny and glottogeny, crowned by his *Frankian Dialect*. S. Mironov shows the significance of this latter work to present-day Dutch studies. G. Klimov discusses in great detail Engels's attitude towards comparative historical linguistics. The subsequent development of linguistic science has, of course, led to substantial changes in some of that discipline's propositions, which were also held by Engels. However, his views reflected the progressive thinking of the time, as in this concrete area of linguistics, too, Engels championed the socio-historical approach to the study of language.

Herein lies the main conclusion to be drawn from the whole of this section: *the Marxist approach to language demands that present-day linguistic problems should be tackled in the same way as Karl Marx and Frederick Engels solved linguistic problems of their day.*

A distinctive feature of Marx's and Engels's approach was their proceeding from clear-cut philosophical premises, which they applied to concrete language studies. Thus, between their general philosophical theses and their concrete linguistic solutions there was always a medial link, which can be described as the *Marxist "philosophy of language"*. The inclusion, in this collection, of a series of articles dealing with this precisely particular theme does, therefore, meet a very definite research need. Three articles comprise the section: G. Kolshansky's *The Problem of Contradictions in Language Structure*, T. Lomtev's *Internal Contradictions as a Source of Historical Language Structure Development*, and V. Solntsev's *Abstractions and the Problem of Abstract Entities in Linguistics*.

One has to admit, however, that this section is the most open to criticism, although it is true that most of its shortcomings stem from the authors treading a relatively uncharted area of the Marxist theory of language.

Kolshansky identifies the "global contradiction in language" as a contradiction between form and content, the former understood as "the material being of language", i. e., its realisation in sound and graphic signs, and the latter "man's thought activities (concepts, judgements, inferences, etc.)". Thus, the present article analyses, not language, but a complex "language-thinking" object which is apparently viewed as a kind of independent system. From this it logically follows that "the motive source of these contradictions transcends the limits of an immanent system and lies outside the sphere of

language proper. Let us define that sphere as that of cognitive thinking".

In Lomtev's article the "basic internal contradiction" is proclaimed to be that "between the available resources of a given language and the growing needs of an exchange of thoughts". However, as one reads the article, one discovers that the category of contradiction coincides with the category of opposition in language. As a description of oppositions and correlations in the Eastern Slavic case-system and its development, Lomtev's article is undoubtedly one of the best works in the field. One wonders, however, if his identifying dialectical contradiction in language with language opposition is a satisfactory solution.

Both Kolshansky and Lomtev seem to have taken insufficient account of the present-day concept of dialectical contradiction, which holds that the latter "does not level itself to immediate consideration in the basis of being, i. e., by building an ontological theory", and can only be stated in the form of "scientifically substantiated antinomy which, being objective, cannot be eliminated by any degree of sophistication in rigorous discourse within the bounds of available knowledge".[1] On this basis, the most suitable form of establishing dialectical contradiction in language is provided by the antinomies of "signified and signifier", "code and text" (corresponding to paradigmatics and syntagmatics), "identity and difference" (corresponding to synonymy and homonymy), "synchrony and diachrony", etc., which have emerged as a result of painstaking research over the past decades.[2]

Solntsev's article is built around the striking and frequently observed analogies between various types of definitions of the phoneme, on the one hand, and such historico-philosophical categories as "nominalism", "realism", etc., on the other (although the latter are not named in the article). The author sets forth his views on the subject, and has some interesting things to say on the relationship between invariants and variants, the mode of naming of abstract linguistic entities, etc.

On the whole, this section of the book reveals a tendency to find a short cut from general philosophical notions to linguistic categories, bypassing the special intermediate area of the "philosophy of language", which has already come in for some scholarly attention and produced results.

The next section contains articles by V. Panfilov, *Categories of Thought and Language. The Emergence and Development of the Category of Quantity in Language*, A. Leontyev, *The Problem of Glottogenesis in Contemporary Science* and V. Abayev, *On Ossetic Family Relationships and Kinship Terms*. Each article is a complete study though small in volume and the entire section deals with the problem of *glottogenesis and the formation of inherent language categories*. Besides, these articles fill in some of the gaps in the preceding section.

A. Leontyev points out, quite correctly in our view, that Marx's and Engels's philosophical approach to glottogenesis was marked by a "unity of three aspects: the specifics of activities (the relationship to Nature); the specifics of communication (the relations to one another), and the specifics of the consciousness". The relation to the latter, and, more narrowly, to thinking, is thus only one of the three aspects of the problem of language development. This statement rectifies the exaggeration of the consciousness aspect to be seen in some of the preceding articles. Leontyev shows that "primitive man's mental development should by no

[1] See *Philosophical Encyclopaedia*, Vol. 4, Moscow, 1967, p. 404 (in Russian).

[2] Cf. E. Benveniste, "Saussure après un demi-siècle", *The Russian Language and the Soviet Society. A Socio-Linguistic Study. The Vocabulary of Modern Russian Literary Language*, Moscow, 1968, pp. 23-24 (in Russian).

means be identified with the development of 'thinking". Language is, above all, a form of activity and communication, which makes language a specific semiotic system in its own right, i. e., it is language that forms an autonomous system, and not the "language-thinking" complex, although the intimate link with thought is indubitable. Panfilov gives a detailed study of the laws and stages of development of the category of number, one of the most abstract categories of thinking. The data provided by the history of numerals and the categories of grammatical number in languages of different types, as well as those provided by ethnography and child psychology, corroborate Engels's proposition that the ability to abstract oneself in considering objects to be counted, from all properties except number is the result of long historical development and experience. The sensual-visual mode of reflection of the quantitative characteristics of concrete sets of objects is viewed by the author not as an initial stage in the development of that mental faculty but as a historical prerequisite for its appearance. The considerable and variegated language material cited by the author confirms the proposition that the category of number is one of abstract generalised thinking, represented in language as a classifying category similar to those of nominal classes. In this respect, the system of numerals in the Nivkh language is particularly instructive. Thus, Panfilov's investigation which is of considerable independent value is convincing confirmation of the thesis that language is a relatively independent system, though its close connection with thinking cannot be doubted.

In his brief but articulate contribution, V. Abayev uses the material of the Ossetian language, folklore and ethnography to trace archaic social features which have long receded into the past. Osset material is shown to bear out the thesis that language and folklore can preserve traces of very old social structures and thus serve as a valuable historical source. It is noteworthy that, in this respect, Osset folklore and ethnography reveal a striking typological resemblance to the language, folklore and ethnography of neighbouring peoples, in particular Kabardinian, Abkhasian and Adyghian. The section of the article dealing with Osset kinship terms meets an urgent need, in present-day linguistics, for a social investigation into vocabulary, and is a substantial addition to the corresponding section of E. Benveniste's work.[3]

The articles by Panfilov and Abayev happily complement the collection on yet another count. Let us recall, in this connection, the following observation by Academician Konrad: "In our study of Oriental philosophy, we apply designations established in philosophical science here in Europe, e. g., materialism, idealism, rationalism, intuitivism, and so forth, without bothering to think whether these designations at all fit what we want to denote by them; is it not better to turn to designations and descriptions developed by Oriental thought and to ascertain whether these designations correspond to the nature and content of the phenomena they describe... It is work in this direction that I call the overcoming of Europe-centrism in science, which I believe to be one of the major challenges faced by the science of man and society today".[4] *Mutatis mutandis*, these remarks by Konrad also apply to linguistics, especially its philosophical department. The collection would indeed have been marked by a Europe-centrist bias without the materials in the said two articles.

The fourth section is devoted to the category of dialect in various his-

[3] E. Benveniste, "Le vocabulaire des institutions indo-européennes", Vol. 1, *Economie, parenté, société*. Paris, 1970, pp. 203-276.

[4] N. I. Konrad, *West and East*, Moscow, 1966, pp. 29-30 (in Russian).

torical context, and includes the articles: *On Language Relations in Tribal Society* by A. Desnitskaya, *The Relationship Between Territorial Dialects in Various Historical Conditions* by V. Yartseva, and *The Interaction of Dialect Areas and the Development of Supra-Dialectal Forms in the Pre-National Period* (based on Germanic materials) by M. Gukhman. Despite some divergences of opinion on details, these articles form a coherent whole, and succeed in breaking some new ground in the Marxist historical sociology of language. In the most general terms, their message can be formulated as follows: *dialect* is the main form of the existence of language from the primitive tribal to the national stage, a form characterised by *two sets of relations: territorial ("horizontal") and socio-hierarchic ("vertical")*, with the relationship between these two sets varying through history.

Basing herself on the works of Engels, A. Desnitskaya considers language processes and the types of language relations characteristic of the tribal system. The author correctly thinks that the further development of the theory of generalised language variants which emerged in tribal society paves the way for the study of many questions of language history, namely, the character of the parent languages and parental language conditions, a more accurate definition of the "common and single language of a nationality", etc. Of special interest is Desnitskaya's theory of two levels in speech — the upper, embodying the unity of a tribal dialect as a system, and the lower, at which variation appeared and spread.

V. Yartseva's article uses the material of the English and the Celtic dialects of the British isles and concerns itself with a unique and intriguing aspect of dialect variation, viz., the development of territorial and temporal dialect differences into normative-hierarchic ones. The article, especially its Celtic part, furnishes much material that is little known here, and presents an independent piece of research. M. Gukhman's article covers a wide range of questions connected with the above general theme. The author gives greater precision to definitions of the concepts of "dialect" and "supra-dialectal forms of language" because the two terms are often used indiscriminately in respect of different phenomena, and of language relations in different conditions; she singles out three historical types of dialect: dialect in tribal society, dialect in the epoch of the emergence of ancient and mediaeval states, and dialect in the period when national entities were formed. The emergence and development of supra-dialectal forms in the pre-national period comes in for special attention. The material cited in the article shows that the ways in which supra-national speech types are formed may vary, not only between different languages but also at different periods in the history of one and the same language. Of great interest is M. Gukhman's discussion of the double status of literary Gothic as a medium of inter-tribal communication ("horizontally") and a "special religious Koine of the Germanic world" ("vertically").

The concluding section consists of two articles: *The Method of Systemic Reconstruction and Internal Chronology of Historico-Linguistic Facts* by S. Katsnelson, and *Relationship Between Genetic and Typological Criteria in Establishing Language Affinity* by E. Makayev. Addressing himself to well-known attempts to substitute the concept of typological and areal convergence (N. Trubetskoy, V. Pisani, *et al.*), for the genetic affinity of languages, Makayev formulates the proposition that "typological criteria can neither replace nor cancel genetic criteria in establishing affinity between languages; the latter have always had and will continue to have the decisive say in this matter". The author links this assertion with Engels's theory of the historical development of languages.

Katsnelson's article considers examples of systemic linguistic reconstruction as opposed to the atomistic, and in this sense non-systemic reconstructions of the Neo-Grammarians. In this connection, the author makes some interesting points. He suggests, for instance, that since in systemic reconstruction the investigator proceeds from contemporary facts and goes back retrospectively into pre-history, the greater or lesser absolute age of the recorded facts ceases to be relevant.

On the whole, as we have sought to show in this brief survey, the differences of view on individual questions and certain errors or omission are far outweighed by the basic unity of this genuinely Engelsian collection. By the same token, the book helps identify the main challenges that must be met in order to promote still further the dialectical materialist approach to language.

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SCIENTIFIC LIFE

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THE DEVELOPMENT OF THE SOCIAL SCIENCES IN THE KIRGHIZ SOVIET SOCIALIST REPUBLIC

The Kirghiz people is one of the most ancient peoples of Central Asia. Its centuries-old history is a chronicle of heroic struggle against foreign invaders, for freedom and independence, a struggle to preserve its ethnic integrity. A nomadic way of life, the constant danger of possible attack by powerful neighbours, unceasing inter-tribal feuds—all this laid its imprint on the economy, culture and life of the Kirghiz.

Their main economic activity was nomadic livestock raising, although agriculture was not unknown to them. Social relations were of a patriarchal-feudal character, and were rooted in a complex system of tribal divisions. Absolute power was virtually held by the representatives of the local feudal and tribal aristocracy, the *bais*, who possessed great herds of cattle and vast pastures.

In the second half of the 19th century Kirghizia became a part of Russia. This was an event of great political significance for objectively, despite tsarism's colonialist policy, the advanced culture of the Russian people was brought within the reach of the Kirghiz people, and the poorest sections of their peasantry were drawn into the orbit of the political struggle of the Russian proletariat for social emancipation.

Outstanding Russian scholars who explored Kirghizia in the second half of the 19th century, among them P. Semyonov-Tienshansky, V. Barthold, N. Aristov and V. Radlov, made a major contribution to the study of its natural resources, of the language, history and folklore of its people. They were the first not only as eminent scientists but also as representatives of progressive Russian intelligentsia to give the world an objective picture of Kirghizstan and its people. They had a warm sympathy for the local population, and did everything that depended upon them to cement friendly relations between the Kirghiz and Russian peoples.

However despite the considerable results achieved by Russian scholars in Kirghizia the Government of tsarist Russia was not interested in promoting research there. Prior to the October Revolution there was not a single research institution on the territory of Kirghizia and its natural resources were practically not exploited.

Tsarism's colonial policy deprived the Kirghiz people of the elementary blessings of civilisation, and of all civil rights, they had no national written language and were kept apart territorially and economically.

The national rebirth of the Kirghiz people like that of the other peoples of Central Asia and Kazakhstan, their economic, socio-political and cultural progress is connected with the victory of the Great October Revolution, the realisation in practice of its ideals, the strict observance of the Leninist nationalities policy which has established real freedom, the equality, friendship and brotherhood of peoples in our country.

* * *

In Kirghizia studies in the sphere of the social sciences first came into being and developed after the victory of the Great October Socialist Revolution. In our Republic, just as in the other former colonial outlying districts of tsarist Russia all the conditions were then created for the spread of a cultural revolution unparalleled in its extent and aims.

The creation of a national written language and the eradication of the almost complete illiteracy of the population were the tasks of the socialist changes in the field of culture in Kirghizia. In 1924, the People's Commissariat for Education of the Turkestan Autonomous Soviet Socialist Republic set up a Kirghiz Scientific Commission which did a great deal in creating a Kirghiz written language and collecting folklore and ethnographic material.

After the national state demarcation of Central Asia and the formation of the Kirghiz Autonomous Region scientific research in general, including the social sciences, was considerably extended. An academic centre was set up in December 1924 to guide research work in Kirghizia. A year later it was reconstituted into the Scientific Commission in the Kirghiz Regional Department of Education. The Commission was charged with coordinating scientific studies and also with compiling and publishing textbooks and study aids in the Kirghiz language.

After the formation of the Kirghiz Autonomous Republic in 1926 a Central Museum of Kirghizstan was set up in Frunze. In 1927 it sent a comprehensive expedition to conduct economic, ethnographic, linguistic and other studies in regions of the Altai mountain range inhabited by the Kirghiz people. These studies provided the basis for the first serious attempts to sum up the available historical material scientifically. Academician V. Barthold, an eminent Russian orientalist, on the assignment of the Academic Centre of the People's Commissariat of Education of the Kirghiz Autonomous Republic wrote the first historical essay *The Kirghiz*, making extensive use of Russian, Persian, Arabic and Turkic sources. As a fundamental compendium of material, Barthold's work has not lost its significance to this day.

The 1920s were a period of intensive work linked with the creation of our national written language, the reform of the alphabet, and the elaboration of scientific, socio-political and other terminology in the Kirghiz language. The work accomplished by social scientists in the 1920s represented an important stage in the cultural development of our Republic and largely determined the further progress of the respective sciences. This was greatly facilitated by the assistance and guidance in research given by the Academy of Sciences of the USSR.

During the prewar five-year plans, besides the economic progress of our Republic and the advance in the material and cultural standards of the people, studies in the social sciences were further extended. The Kirghiz Ethnographic Research Institute was set up in 1928 with three departments, including a department of social studies, which in 1930 served as the basis for founding the Institute of Cultural Development.

The first institution of higher learning, the Kirghiz State Pedagogical Institute, was opened in Frunze in 1932, and it became the major training ground of the national intelligentsia.

The reconstitution of the Kirghiz Autonomous Republic into a Union Republic created even more favourable opportunities for the further expansion of research in the social sciences. A Committee on Science of the Council of People's Commissars of the Kirghiz Republic was set up in 1936 to organise planned and coordinated research work. Its tasks included coordina-

tion of scientific studies, establishment and consolidation of ties with scientific institutions in the USSR, selection and appointment of research workers, and so on. In the same year the Cultural Development Institute was replenished with personnel and, in accordance with the trend of its activities, was renamed the Research Institute of Language and Literature. In 1940, expansion of the range of studies led to its being renamed the Research Institute of History, Language and Literature. Before the Great Patriotic War, definite work in the social sciences was also carried out by social science departments in the Republic's six higher educational establishments. Many leading social scientists in our Republic studied at universities and institutes in Moscow and Leningrad and received a good training in research there.

A new scientific centre, the Kirghiz Branch of the Academy of Sciences of the USSR, was opened in our Republic on August 13, 1943, and it greatly contributed to the further advance of the science and the culture of the Kirghiz people. Within the framework of this organisation an Institute of Language, Literature and History was set up which coordinated the main research undertaken in the social sciences in Kirghizia. Here work was started on a two-volume *History of Kirghizia* and the first *Kirghiz-Russian Dictionary* was published. The latter played an important part in further enriching and developing the Kirghiz language, and it became valuable instrument in making the wealth of Russian and world culture available to our people.

Eminent scientists who came to our Republic during the war continued to work successfully on solutions to problems in the social sciences during the postwar period, and the training of highly competent specialists from among the local nationalities assumed a wide scale. In 1951, a state University was set up on the basis of the Pedagogical Institute, and it became a major centre for the development of the Kirghiz intelligentsia.

In 1954, an Academy of Sciences of the Kirghiz Soviet Socialist Republic was set up in Frunze on the basis of the Kirghiz Branch of the USSR Academy of Sciences. One of its departments was the Department of the Social Sciences which united two institutes and a number of sections. At present the Institute of History, the Institute of Philosophy and Law, the Institute of Economics, the Institute of Language and Literature, the Section of General Turkic and Dungan Studies and a Terminological Commission are participating in the work of this Department. In addition to academic institutions, a great deal of work in the social sciences is being carried out by the Institute of the History of the Party (at the Central Committee of the Communist Party of Kirghizia) and by the social sciences departments of the Republic's higher educational establishments.

Studies in the historical sciences are aimed at ascertaining the origin of class relations in Kirghizia, the genesis, development and succession of socio-economic formations and at studying the social, political and ethnic history of its peoples. The source of information are ancient and mediaeval written memorials and archives and also the archaeological and ethnographic material systematically collected by special expeditions. Scientists analyse the history of the Great October Socialist Revolution and our Republic's half-century development after the revolution; they sum up the wealth of experience in socialist construction accumulated by the Kirghiz people who bypassed the capitalist stage of development.

A two-volume *History of the Kirghiz Soviet Socialist Republic* is the main result of the work done by the Republic s historians. (The first edition was published in 1956, the second, in 1963 and the third, in 1967-1968.) Its authors were awarded the State Prize of the Kirghiz SSR. This is a fundamental study by a large group of scientists who, on the basis of Marxist-Leninist methodology and extensive factual material, present the age-long history of our people.

It covers a long historical period stretching from the time man appeared in the area which is now Kirghizia up to the present day. It incorporates the experience and achievements of our national Soviet historiography during the half-century of its existence. Throughout this work the historical process is for the first time scientifically divided into periods; it covers in detail and from every angle the ethnogenesis of the Kirghiz, reveals the wealth of the ancient and original culture of our people and sums up the experience of the Communist Party and the Russian working class in guiding the local national-liberation movement prior to the October Revolution and the process of enlisting the peasant masses in the struggle for the victory of the socialist revolution. The second volume examines the experience of the Communist Party in guiding the transition of the Kirghiz people to socialism bypassing the capitalist stage of development. It reveals the role of the fraternal cooperation of the Soviet peoples in the economic and cultural advance of our Republic and describes its diverse ties with the other Union Republics.

A vast amount of factual material on archaeology, ethnography, anthropology, history and linguistics has been collected by a special archaeological and ethnographic expedition in the course of studying the formation of the Kirghiz nationality. The published *Works of the Kirghiz Archaeological and Ethnographic Expedition* (Volumes I-V, Moscow, Academy of Sciences Publishers, 1956-1968) have made a great contribution to the study of the ethnogenesis of the Kirghiz people.

A number of fundamental monographs on the history of the pre-Soviet period has been written by members of the Academy of Sciences of Kirghizia: B. Jamgerchinov *(The Voluntary Accession of Kirghizia to Russia* and *Essays on the Political History of Kirghizia in the 19th century* in two volumes), S. Ilyasov (*Land Relations in Kirghizia at the End of the 19th and Early 20th Centuries),* K. Usenbayev (*The Accession of South Kirghizia to Russia* and *The 1916 Revolt in Kirghizia),* D. Aitmambetov *(The Culture of the Kirghiz People in the Second Half of the 19th and Early 20th Centuries),* and many others.

The monographs and collective works on the history of the Soviet period are not only of scientific value; they are also of great political significance for in them is generalised the rich experience of the Kirghiz people who made the transition from pre-capitalist relations to socialism without passing through the capitalist stage of development. These works include *The Victory of the October Revolution in Kirghizia, The Soviets in Kirghizia in the Period of the Building of a Socialist Society, The History of the Soviet Working Class in Kirghizstàn, Advancing Along the Leninist Path to Socialism and Communism, From the History of Cultural Development in Kirghizstan, Lenin and the Peasantry of the Soviet East, Lenin and Socialist Construction in Soviet Kirghizstan.*

The Republic's nationalities policy and state organisation are a central theme in studies by historians. Of considerable interest in this respect are the works *Forty Years of the Kirghiz SSR, Realisation of the Leninist Theory and Programme on the National Question in Kirghizia, The Marxist-Leninist Solution of the National Question,* and others.

Extensive work is being done by the Institute of the History of the Party at the Central Committee of the Communist Party of Kirghizia. The works of Marx, Engels and Lenin, a biography of Lenin, *The History of the Communist Party of the Soviet Union, The CPSU in Resolutions and Decisions of Congresses, Conferences and Plenary Meetings of the Central Committee* have been issued in Kirghiz. A large group of authors has published *Essays on the History of the Communist Party of Kirghizia* and symposiums *Problems of the History of the Communist Party of Kirghizia* are printed annually.

Historians in our Republic are also taking part in generalising works of an all-Union and regional significance like *The History of the Communist Organisations of Central Asia, The History of the Civil War in Central Asia and Kazakhstan, The Cultural Revolution in the USSR, Lenin and Contemporary Science*, and others.

Research in the economic sphere markedly increased during the 1950s, particularly after the formation in 1956 of the Institute of Economics, Academy of Sciences of the Kirghiz Republic, which now coordinates the research of the Republic's economists. These studies are marked by a close link with production, with the practical needs of communist construction: economists are studying the development of the productive forces, the rise in the efficiency of social production, the use of fixed assets, capital investments and new technology, labour resources and ways of utilising them rationally. Considerable attention is being given to raising profitability and extending reproduction, intensifying agriculture, improving the labour remuneration of collective farmers, to ascertaining the optimal size of agricultural enterprises, reducing the cost of produce, and to studying questions of economic accountability and incentives.

Scientists are taking part in formulating national economic plans and elaborating measures for raising labour productivity in industry. Jointly with the Ministry of Agriculture of the Kirghiz Republic scientists have done a great deal in devising rational systems of farming and in determining the trend of development of agriculture in separate regions of the Republic. Of great practical significance is the evaluation of economic possibilities of the land in different districts, the results of which are passed on to the appropriate agencies, collective farms and state farms for the planning of agricultural production.

Economists together with research and design institutions have drawn up recommendations for the long-range development and distribution of the productive forces of the Kirghiz SSR. These recommendations contain a number of valuable proposals covering the main directions of the development and distribution of the major branches of industry and agriculture, the main directions of the rational employment of labour resources in town and countryside, of the development of the Republic's transport and economic ties, and putting its natural resources into "economic circulation" as speedily as possible.

Naturally, research in the economic sphere not only results in practical recommendations, but also serves as a basis for monographs and collective works. Outstanding among them are *The Problems of Economics of Collective Farms in the Tien-Shan Region, The Development of the Economy of Kirghizia, Fixed Assets and Opportunities for Expanding Production, The Economic Efficiency of Agricultural Production*, and *The Efficiency of Social Production in Kirghiz SSR*.

Studies in philosophy and law actually began in the 1950s and have been carried out systematically since the formation of a Department of Philosophy and Law in the Republican Academy of Sciences (1959) and later on of the Institute of Philosophy and Law (1964). Research in higher educational establishments and the Republican Academy encompasses a wide range of problems concerning dialectical and historical materialism, the history of philosophy, Marxist-Leninist aesthetics and art studies, scientific atheism, state and law.

Of particular interest in the sphere of dialectical materialism is the elaboration of some philosophical questions pertaining to the psychology of thought. Closely connected with this is the research into the logical and emotional factors of communication and also the diversity of forms of information.

Particularly important are studies of the interconnection of psychological and biological factors in the process of communication.

In the sphere of historical materialism our philosophers mainly concentrate their attention on two problems — the dialectical interconnection of the national and the international in the life of peoples and the development of the psychology of society under socialism. As regards the first problem, works have been issued on phenomena in the way of life, society and culture as factors which draw nations together, and also on the categories of nation and national culture. The second problem is studied from the point of view of the distinctions in the psychology of Soviet society's different sections, the ascertainment of the place and role of traditions, and also summing up evolutionary processes in the sphere of emotional and intellectual culture. A major place is held by an analysis of the influence exerted by the Marxist-Leninist world outlook on different aspects of social psychology. Closely linked with these problems are works on scientific atheism. For a number of years philosophers have studied the objective and subjective reasons for the preservation of the survivals of Islam, and the role of ideological and psychological factors in eliminating religious prejudices.

Philosophers have contributed quite substantial collective works, for instance, *Ideology and Social Psychology, Problems of Modelling in Philosophy and Natural Science, Consciousness and Communication, The Philosophico-Psychological Problems of Communication, Religion and Religious Survivals, Religion, Free Thinking and Atheism, The Psychology of the Individual and Religious Superstitions*.

Research in problems of aesthetics is generally linked with the psychology of thinking. Some questions pertaining to the psychology of aesthetic education have been elucidated, and a study of the unity of the psychological and the social in the artistic image has commenced. Among the works on aesthetics, we should mention *Essays on the History of Kirghiz Art. The Aesthetic Nature of Artistic Conventionality, The Artistic Image as a Form of Cognition of the World* and *Historical Conditions and the Personality of the Artist*.

In the history of philosophy attention is concentrated on presenting the role of Leninism in the spiritual life of the Kirghiz people. Here mention should be made of the monographs, *The Struggle of the CPSU for the Propagation and Triumph of the Ideas of Marxism-Leninism in Kirghizia* and *Lenin and the Propaganda of Marxism in Kirghizia*. A detailed analysis of the development of the philosophical and socio-political ideas of our people from ancient times up to the present day is given in *Essays on the History of the Socio-Political Thought of the Kirghiz People*. A central place in the book *The Socio-Political and Philosophical Ideas of Toktogul and Togolok Moldo* is held by the characteristic of the world outlook of the democratic *akyns* (folk bards) and illustrations of the fruitful influence exerted by advanced Russian culture on the awakening and growth of class consciousness among the working masses.

Of great interest are works in the sphere of law: *Creation and Development of the Constitution of the Kirghiz Republic, The Development of Democratic Forms of Activity of the Supreme Soviet of the Kirghiz Republic in the Contemporary Period*, and *The Emergence and Development of the Sovereign Soviet Socialist State of the Kirghiz People, The Participation of the Public in Administering Justice*, and others.

Linguists and literary scholars are studying the crystallisation and development of the Kirghiz language, the history of Kirghiz Soviet literature, its interconnection and interaction with the literature of other Soviet peoples and problems of oral, poetic lore. They also publish works on folklore.

The Kirghiz language and literature became the subject of special study only after the Great October Socialist Revolution. One of the primary tasks was to elaborate a national written language. Scientists took an active part in transferring the Kirghiz language from the reformed Arabic alphabet introduced in 1924 to a new alphabet, originally based on the Latin (1927) and then on the Russian alphabet (1941). They participated in compiling the first school textbooks in the Kirghiz language, in collecting folklore and recording the monumental epic poem *Manas*. Then they began to tackle more complicated tasks. Specifically monographs were written describing all the parts of speech of the contemporary Kirghiz language and textbooks for higher educational establishments on the morphology of the Kirghiz language were prepared characterising in detail the lexico-semantic significance and grammatic categories of the parts of speech. Scientists are now working on an important subject, the formation and development of the Kirghiz literary language.

Questions of dialectology hold an important place in linguistic research. Systematic surveys of Kirghiz dialects by expeditions have made it possible to study them both within our Republic and beyond it and describe them in a series of monographs. The next stage in the activity of dialectologists is the compilation of an *Atlas of Kirghiz Dialects*.

Definite progress has been made in Kirghiz lexicography. The first important work was the *Kirghiz-Russian Dictionary* (1940) compiled by K. Yudakhin which was reprinted in 1965 after being considerably supplemented and revised. Worthy of attention is the *Russian-Kirghiz Dictionary* compiled by Kh. Karasayev, J. Shukurov and K. Yudakhin, issued in 1944 and reissued with large supplements in 1957. These dictionaries provided the basis for an *Explanatory Dictionary of the Modern Kirghiz Language* which covers the main generally used lexicon of the contemporary language and the most used phraseological combinations; it reflects the shifts in the wordstock of the language in Soviet times and offers standards of usage and the correct spelling of words in the contemporary language.

Considerable results have also been achieved in the study of Kirghiz Soviet literature and folklore. During their long history our people have created many long oral works; an outstanding place among them is held by the monumental epic poem, the *Manas* trilogy. Created by many generations of folk bards, it has been passed on by word of mouth for many centuries. Only when a Kirghiz national written language was created did it become possible to start the systematic recording of the numerous versions of this unique memorial of our culture. At present more than 40 versions have been recorded. The most complete text, totalling about 500,000 lines of verse, is that of the folk bard Sayakbai Karalayev. In 1958-1960 a composite version of *Manas* (in four volumes) was printed in the Kirghiz language and in 1960 part of the epic poem was published in Russian. The most complete edition is now being prepared for the press in the series "Epic Poems of the Peoples of the USSR." In addition to work linked with the publication of the epic poem, *Manas* has of late been studied as a valuable source of research into the language, style and poetry, history, ethnography and culture of the Kirghiz people.

To make the epic works of our people available to a wide readership, a series of "smaller-size" poems has been published, and monographs analysing them have been written. The accumulated material and also a number of works on folklore have provided the basis for *Essays on the History of the Oral Poetry of the Kirghiz People*. This work traces the development of Kirghiz folklore in the pre-revolutionary and Soviet periods, characterises almost all types and genres of our heritage in this sphere, and the ideological and artistic features of our folklore.

Our *akyns* have played a tremendous part in moulding and developing Kirghiz Soviet literature, and hence the great interest of literary scholars in their creative works. Prior to the revolution only a few *akyns* who were literate committed their works to writing, while others only composed their poems orally. Literary scholars have invested a great deal of effort in collecting and recording their poetry. Collections of poems written by *akyns* have been published: two volumes of the works of Togolok Moldo, a collection of Barpy Alykulov and three editions of the works of Toktogul Satylganov. There are more than ten monographs analysing the works of these and other *akyns*.

A Kirghiz written literature has come into being and developed in Soviet times, and national literary studies began at the same time. At first the efforts of philologists were aimed at bringing out the distinctions in the development of our national literature and its genres, at studying the works of individual writers which were reflected in a number of monographs.

Essays on the History of Kirghiz Soviet Literature sum up the development of our literature over more than 40 years. These essays have provided the groundwork for the *History of Kirghiz Soviet Literature* prepared jointly with the Institute of World Literature, USSR Academy of Sciences. Many monographs have been issued dealing with the emergence of socialist realism, traditions and innovation in our national literature, the shaping and development of Kirghiz literature for children, the interconnection and interaction of our literature with the literatures of the other fraternal Soviet peoples and also the influence of folklore on the development of poetry.

Definite traditions have formed in our Republican Academy of Sciences in working on the historico-sociological and philological problems of Turkology, comprehensive questions of Dungan studies (history, culture, language, literature and the way of life of the Dungan nationality) and on sources of information.

In general work on Turkology mainly consists of finding and studying memorials of ancient Turkic writing of the 7th-10th centuries in Talass and Central Asia (Tuva, Khakassia, and the Mountainous Altai). New memorials of ancient Turkic writing have been found in Talass, deciphered and published. The Tuva Research Institute of Language, Literature and History, the Kyzyl Pedagogical Institute and the Sayan Tuva Archaeological and the Ethnographic Expedition of the USSR Academy of Sciences have found a number of new memorials. Three publications in the series "Memorials of the Ancient Turkic Writing of Tuva" have been issued. A monograph *Contemporary and Ancient Yenisei Studies* (I. Batmanov, Z. Aragachi and G. Babushkin) traces the development of a number of Turkic languages (Kirghiz, Tuvinian, Shorian and Khakassian) over the centuries. Several memorials have also been discovered in the Altai. At present study of these written memorials is concentrated chiefly in Kirghizia and is done jointly with Tuvinian scientific institutions. This work is of importance for establishing the history of part of the Turkic language. It shows their enrichment after the October Revolution and offers data for the history of the material culture of the Kirghiz and other peoples. Besides the study of written memorials of the Orkhon-Yenisei-Talass types work is also being conducted to find other materials on the paleography of Kirghizia. It has resulted in the publication of *The Epigraphy of Kirghizia* (1963) and *The Language of Siro-Turkic Memorials of Kirghizia* (1971), both written by Ch. Ojumagulov. Mention should also be made of the textbook for institutes in the Kirghiz language on a comparative grammar of the Turkic languages (K. Sartbayev); study of the Lobnor language which contains many features of the Kirghiz language (U. Asanaliyev); the language of *Kutadgu Bilik*, an 11th-century literary memorial (U. Asanaliyev and K. Ashiraliyev); a

description of the vocabulary used in Yenisei memorials as compared with part of the modern living languages (K. Ashiraliyev). A collective work *Sources of the Formation of the Turkic Languages of Central Asia and South Siberia* has come off the press and a study of ancient Turkic dialects and their reflection in modern languages has been completed. Over the last few years Turkologists have gone over to the next stage of research—historical ethnography: they are working jointly with museums in Siberia and the Institute of History of the Kirghiz Academy of Sciences.

Dungan studies are also being conducted by historians, ethnographers and philologists. Among the published works are *The Dungans of Semirechye* and *The Dungan Revolt in the Second Half of the 19th Century in North-West China and the Role of Bai Yan-Hu*; *The Participation of the Dungans in the Struggle for the Power of the Soviets in Semirechye* and *Cooperation Among Dungans in Kirghizia and Kazakhstan*; *The Migration of the Dungans to Kirghizia and Kazakhstan*. A big collective work *Essays on the History of the Soviet Dungans* has been issued in cooperation with the Institutes of Ethnography and World Literature of the USSR Academy of Sciences. A collection of documents and materials on the participation of the Dungans in the struggle for Soviet power has been published. Other publications include a *Russian-Dungan Dictionary*, *Examples of Dungan Folklore*, *Soviet Dungan Literature*, *Questions of Dungan Orphography* and a *Concise Grammar of the Dungan Language*. Linguists and literary scholars are now compiling a large *Russian-Dungan Dictionary*.

The research of social scientists in Kirghizia has noticeably advanced over the last few years. Local scientific personnel have made great advances. The subject-matter of studies has been extended and the number of works published has increased. The importance attached to studies in the social sciences for the communist education of the people and for the further development of the economy and culture of Soviet Kirghizia is an earnest of their continued fruitful progress.

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THE SOCIAL SCIENCES IN SOVIET MOLDAVIA

The Moldavian people have traversed a difficult path in their historical development. The entire history of Moldavia is a history of struggle for social and national liberation.

At the beginning of the 16th century the Moldavian state lost its independence and for more than three hundred years was mercilessly plundered and oppressed by the Turkish conquerors. The Moldavian people who were linked with the Russian and Ukrainian peoples by long-standing ties of friendship saw that their only possibility of liberation lay in an alliance with Russia. At the end of the 18th century the areas east of the Dniester of what is today the Moldavian SSR were incorporated in Russia. In 1812, after bloody battles with the Turks, which sealed in blood the brotherhood of the Russian, Ukrainian and Moldavian peoples, the Moldavian lands between the Dniester, Prut and Danube became a part of Russia. This had a progressive impact for Russia was economically more developed; it hastened the process of the disintegration of feudal-serf relations and the development of capitalism in these parts.

The working people, however, continued to suffer great hardships. There was no industry to speak of, the land was for the most part in the hands of landowners and monasteries. Each landowner had as much land as 110-120 peasants combined.

The Great October Socialist Revolution which fundamentally changed the life of all the peoples of Russia, brought freedom and independence also to the Moldavian people. At the beginning of 1918 the working people of Moldavia, under the leadership of the Bolsheviks and with the active help of the soldiers of the Rumanian front, established Soviet power. But not the entire people were able to avail themselves of the great victories of the revolution for in January-February of the same year bourgeois-landlord Rumania forcibly wrested Bessarabia (as the Moldavian lands between the Dniester and the Prut were called) from the young Soviet state.

The working people of the areas east of the Dniester who won their freedom began to build a new society. On October 12, 1924, the Moldavian Autonomous Soviet Socialist Republic was formed as part of the Ukrainian SSR.

The formation of the Moldavian socialist nation had its specific features. As a result of the boyar-Rumanian occupation of Bessarabia the Moldavian people were divided into two parts each of which up to 1940 developed in different socio-economic and political conditions. On June 28, 1940, Bessarabia was reunited with the socialist Motherland and on August 2 the Moldavian Soviet Socialist Republic was formed. This still further cemented the ties of friendship and economic cooperation between the Moldavian and other peoples of the Soviet Union, changed the spiritual make-up of the Moldavian nation, accelerated the process of their transformation into a socialist nation which today consists of friendly classes and groups of working people united by common economic, socio-political and ideological interests, by their deep interest in building communism.

Moldavia's biography in the years since the establishment of Soviet power is a living chronicle of the implementation of the Leninist nationalities policy, of the enduring friendship of the Soviet peoples. The Moldavian SSR, one of the youngest republics in the country, has effected socio-economic and cultural changes which in their significance and magnitude are equal to a whole historical epoch. From a backward agrarian region Moldavia became in a short span of time a flourishing republic with a highly developed industry, an intensive agriculture and an advanced socialist culture and science.

Today Moldavia produces machines of high precision, machine tools, computer technology, tractors, electric engines, precision instruments, various kinds of building materials, pumps, washing machines, refrigerators, and a variety of consumer goods.

Compared with 1940 the volume of the Republic's gross output has increased 24-fold. Moldavia exports its industrial goods to 50 countries of the world.

Agriculture too has registered substantial successes. It has become a mixed agriculture run on a collective, profitable basis. In many kinds of farm products and their yield the Republic has become one of the leading republics in the country. Agrarian-industrial amalgamations have been formed where agricultural production organically fuses with the industrial processing of its produce.

As Moldavia's economy was taking shape and developing, close economic ties were established with all the other republics of the country whose incalculable help made possible the Moldavian people's successes in socialist construction.

In the years since the establishment of Soviet power a real cultural revolution has been carried out in the Republic. Illiteracy, a grim legacy of the past, has been wiped out. This was one of the first tasks that had to be tackled especially considering that as late as 1944 the percentage of illiterates among men in the Moldavian regions west of the Dniester was 65 and among women, 85. Today Moldavia boasts its own national intelligentsia. The many thousands of engineers, technicians, teachers, agronomists and doctors who have been trained in the Republic's educational establishments and in those of other Republics are fruitfully working in their respective spheres.

Books, magazines, newspapers, radio, television and the cinema have become a customary thing in the life of the people both in town and country. A big achievement of the cultural revolution is the translation into Moldavian of the works of Marx, Engels and Lenin and their publication in mass editions.

In the conditions of communist construction the drawing closer together of national cultures, the exchange of ideas, of aesthetic experience are a requisite for enriching our cultural heritage. The best works of Russian literature, of writers of the fraternal republics are read by the Moldavian people in their native tongue.

A certain drawing together of national cultures and their mutual enrichment began still in the pre-socialist period. Moldavian culture and science developed in close, beneficial association with the science and culture of the Russian, Ukrainian and other peoples of our country.

In the 17th century the Kiev Academy played a big part in the development of printing and education in Moldavia. All the necessary equipment for the first Moldavian printing works opened in 1641 was received from Moscow, Kiev and Lvov.

Among the prominent political figures who promoted the establishment of closer cultural ties between Moldavia and Russia was the Moldavian *hospodar* and eminent scholar Dmitri Kantemir. A friend of Peter I whose views he shared, he moved to Russia after the Prut campaign where he wrote most of his works which brought him world fame.

The Russian scholar V. Dokuchayev, Professor I. Sintsov, and Academician L. Berg did much to further nature and soil studies of Moldavia. Russian science in general exerted a considerable influence on the development of education, culture and science in Moldavia.

Despite the heavy odds scientific development had to contend with in Moldavia, then one of the most backward outlying districts of tsarist Russia, it produced not a few talented scientists. Still, prior to the Great October Socialist Revolution research was sporadic for it had no state support. It can therefore be said with good reason that science in Soviet Moldavia is the creation of the October Revolution.

At present the role and significance of scientific institutions in the Union Republics in tackling major problems in the natural and social sciences have increased. The national Academies of Sciences established in the respective Republics have become leading research centres which further the advance of national culture, the exploitation of natural resources, in a word, greatly contribute to the progress of Soviet science. The successes of Soviet Moldavia's scientists graphically bear this out.

In the training of scientific personnel for Moldavia a big part was played by the universities and scientific institutions of Moscow, Leningrad, Kiev, Kharkov, Odessa and other cities of the Soviet Union. The friendly ties between scientists of the fraternal republics are ever expanding in the interests of Soviet science. The Republic's scientists who began their first systematic research in 1926 as a small Scientific Committee now have 70 research

institutions with close to six thousand research workers, two thousand of whom have scientific degrees.

The Republic's main scientific centre is the Academy of Sciences of the Moldavian SSR, founded in 1961 and which has already won well-deserved academic authority. The Academy now counts 19 scientific establishments with 700 researchers. Research is headed by 17 Members and 19 Corresponding Members of the Academy. Two of them are the USSR State Prize winners.

The growth of the Republic's scientific potential has contributed to the solution of major theoretical and economic problems. Just as in the other Union Republics the main trends of research in Moldavia are determined by the vital requirements of the country's economy.

It should be noted that the social sciences crystallised ahead of other sciences in Moldavia. This is explained by the need to tackle tasks connected with the affirmation of the Marxist-Leninist ideology, socialist social relations, the development of Moldavian culture.

Both the fundamental and the applied sciences are now widely represented in the Republic. They cover the main branches of knowledge and greatly further the advance of the Republic's economy. Fruitful research is conducted in theoretical and applied mathematics, in current problems of modern physics, organic and inorganic chemistry, industrial cybernetics, biological and agricultural sciences, medicine, geophysics and geology, and in the engineering sciences. The works of Moldavian scientists in algebra, functional analysis, differential equations and mathematical logics have been highly appraised not only in the Soviet Union but also abroad, at many international forums. Many works by Moldavian mathematicians have been published in the United States, Canada, France and Japan.

In recent years research is being conducted in working out economico-mathematical methods of optimal planning and management of the economy. Moldavia has eight computer centres equipped with fourteen electronic computers of different systems. Intensive research is under way to create new powerful means of automatic programming which will make it possible to increase the productivity of labour of programmers by 2-3 times.

In communist construction an important part is played by the social sciences which ascertain the objective laws of new social phenomena, study the conflicts in the modern world. These sciences help to guide the development of socialist society, are a powerful weapon in the revolutionary remaking of the world.

The social sciences study and generalise the experience of struggle of the working people for their national and social emancipation and, following from this, elaborate scientifically substantiated principles and methods of guiding Soviet society's advance towards communism.

Guided by the Marxist-Leninist understanding of politics as the concentrated expression of economics the Communist Party of the Soviet Union pays great attention to the socio-economic problems connected with the creation of the material and technical basis of communism. The historic decisions of the 24th Congress of the CPSU graphically show this.

Economists have a big part to play in the scientific substantiation of the Party's economic policy. Their efforts are concentrated on creatively developing the political economy of socialism, of developed socialist society and on this theoretical basis, on studying the fundamental economic problems of communist construction; on arming cadres with a knowledge of the essence, the scale and conditions in which objective economic laws operate, the forms in which they appear and how to make the fullest use of them in the interests of communist construction; on systematically improving the methods of scien-

tific forecasting in the national economy and in its various branches, changes in its proportions and structure.

Moldavia's economists are focusing attention on problems connected with raising the efficiency of social production. To this end they are tackling problems concerning the operation of enterprises on a fully self-supporting basis: economic accounting relations between the enterprise processing agricultural raw materials and its supplier; improvement of the system of organisation and payment of labour in collective farms, and other related problems.

Moldavia's economists are making a thorough study of the Republic's labour resources and have already arrived at some important scientific conclusions and submitted practical recommendations. They are investigating the problem of the rational organisation of labour, the use of work time in industry and agriculture. Methodological questions on the planning of the social development of production collectives have been elaborated. All these are important factors in further raising the productivity of labour and in the allround development of the individual.

A big achievement registered by our economists is the elaboration by the Institute of Economics of the Academy of Sciences of the Moldavian SSR jointly with the State Planning Committee of the Moldavian SSR of a general plan of development and distribution of the Republic's productive forces up to 1980. Also comprehensive study for planning the social development of rural areas has been completed.

Historical science is acquiring great significance in present conditions. At a time when the ideological struggle is intensifying the Republic's historians see as their main task to make a creative and allround study from Marxist-Leninist positions of the historical path traversed by the Moldavian people and in this way help towards the moulding of the scientific world outlook of Soviet people.

The works of historians recreate vivid pages from the history of Moldavia, subject to well-reasoned criticism the bourgeois concepts falsifying the history of our Republic and denying the Moldavian people the right to statehood.

The Republic's historians also deal with cardinal aspects of Moldavian history, such as the development of the feudal state, the national-liberation and class struggle of the Moldavian people, their friendly ties with the Russian and Ukrainian peoples, the participation of the Moldavian working people in the three Russian revolutions.

Considerable attention is given to the history of Moldavia of Soviet times: the struggle of the working people for Soviet power and against the interventionists and internal counter-revolution, the struggle of the working people of occupied Bessarabia for reunification with the USSR. Our historians are generalising the experience of socialist and communist construction in the concrete conditions of the Republic, are elucidating the objective laws of development and specific features of the socialist transformations in Moldavia, are showing the leading role of the Party in socialist construction.

The Republic's historians have also come to the forefront in recent years for their Balkan studies, their studies in the history of Rumania, Russian-Rumanian and Soviet-Rumanian relations. They have written a number of fundamental works among them *The History of the Moldavian SSR* (Vols. I and II, second edition); *Essays on the History of the Communist Party of Moldavia* (second edition); *The Peasants of Bessarabia (1812-1861); The State Countryside in Bessarabia in the 19th Century (1812-1870); The Towns of Bessarabia in 1812-1861; Moldavia of the Epoch of Feudalism; The Socio-Political Movement in Bessarabia in the Post-Reform Period.*

A new trend has been started in the historiography of Moldavia — research

into the history of the national economy. Several works have appeared on the subject: *Essays on the History of the National Economy of Bessarabia (1812-1861); Essays on the History of the National Economy of Bessarabia (1861-1905); The History of Rumania (1848-1917); The History of Rumania (1918-1970)* (both prepared and put out together with the Institute of Slavonic and Balkan Studies, USSR Academy of Sciences); the monograph *Reforms in the Danube Principalities and Russia (20s-30s of the 19th Century); Russian-Rumanian Relations in 1859-1863.* An important step has been made for further studies of sources of the history of Moldavia: *A History of Moldavia. Documents and Materials* has been published in four volumes, and three volumes of documents *The Historical Ties of the Peoples of the USSR and Rumania in the 15th-beginning of the 18th Century*, prepared and published together with the Institute of History, USSR Academy of Sciences and the Institute of History, Academy of Sciences of the Socialist Republic of Rumania.

Among recent works by our historians are *The Moldavian SSR in the Great Patriotic War, Industrial Development and the Working Class of the Moldavian SSR, The Formation and Development of the Collective-Farm System in the Moldavian SSR, Soviet-Rumanian Relations in 1929-1934, Essays on the Foreign Policy of the Rumanian People's Republic, International Support of the Struggle of the Working People of Bessarabia for Reunification with the Soviet Motherland in 1918-1940, Studies in the History of Feudalism in Moldavia.* All these works have added to the development of historiography.

The Republic's archaeologists too have substantial successes to their credit. A short thirty years ago our territory was totally unexplored in this respect. Not so today. With the active participation of the eminent scholars B. Rybakov, T. Passek and G. Fedorov a large part of the memorials of the Paleolithic and Neolithic ages has been explored as also Scythian-Sarmatian and Goth memorials, Chernyakhov and ancient Slav culture, and memorials of mediaeval Wallachia-Moldavia. This has made it possible to determine the specific features of the local versions of these cultures, their interaction with neighbouring elements and peoples, helped our historians to trace the origin of the population of Moldavia in antiquity.

The works of our linguists have advanced Moldavia as one of the leading centres in the field of Romance philology, especially as regards the Eastern-Romance languages.

Philologists are studying the historical evolution of the Moldavian language, its present development, mutual enrichment through language contacts, and other related subjects. They have published a number of monographs, among them a university course of the modern Moldavian literary language, and a historical grammar. Also dictionaries, including a number of terminological ones, have been compiled. *The Moldavian Linguistic Atlas* is the fruit of a study of Moldavian dialects. *The Atlas* is of great scientific and theoretical value not only for Romance, but also for Slavonic and Balkan dialectology.

The Republic's literary critics have published a number of works which treat, from Marxist-Leninist positions, of different aspects of the national literary process from its inception up to the October Revolution. They are also making a study of Moldavian-Russian-Ukrainian literary ties and their fruitful influences.

A special subject of research is the development of Moldavian literature in the Soviet epoch, the affirmation of the method of socialist realism, the burgeoning of Moldavian literature in the close-knit family of fraternal literatures. Of the major works published in this field mention should be made of

Essays on the History of Soviet Moldavian Literature prepared jointly with the Gorky Institute of World Literature, USSR Academy of Sciences.

There have been fruitful studies in recent years in the history of philosophy and sociology in Moldavia, with the emphasis on concrete sociological research. Other subjects of research are the development of Moldavian culture, its interconnection with the cultures of the fraternal peoples, people's and modern art.

The Directives of the 24th Congress of the CPSU for the new five-year plan noted the ever growing role of science in communist construction. This places higher demands on scientists in accomplishing the pressing tasks of building the material and technical basis of communism. The Congress set before Soviet science the task of further expanding fundamental and applied research and making fuller use of the achievements of science in the acceleration of technological progress.

Science's contribution to the national economy has substantially grown. Calculations show that the overall effect from the scientific results introduced in the Republic's economy overtops considerably the actual investments in science.

Science is cementing its creative ties with production by expanding the scale of research in scientific institutions and universities on a contractual basis with ministries, departments and enterprises.

The broad development of research would be impossible without a highly skilled scientific personnel. The training of young scientists has always been in the centre of attention of Party and government bodies and of the Academy. As regards the qualitative changes in the training of scientific personnel it should be noted that we are now training scientists in such vital branches of knowledge as industrial cybernetics, biophysics, the physics of semiconductors, molecular biophysics, automation of production processes, the use of electronic computers in the economy and in research, the scientific organisation of labour, the application of mathematical methods in the economy, etc.

Soviet Moldavia's scientists are indebted to the fraternal assistance of their colleagues in our multinational state for their achievements. Constant creative contacts with the leading institutes of the country and, in the first place, with the USSR Academy of Sciences greatly help to raise the level of our research.

Our creative contacts take many forms: joint investigations, the training of personnel, mutual consultations and the coordination of research. Our scientists maintain close ties with their colleagues in the fraternal republics also in the sphere of the organisation of joint sessions, meetings and conferences. In the past year alone more than a hundred of the Academy's researchers delivered reports at various all-Union sessions and conferences. Many of these are held in the capital and in other cities of Moldavia.

Also the international cooperation of scientists is expanding, thanks, in large measure, to the Republic's scientific achievements which have put it in the international arena.

Scientists of the fraternal socialist countries exchange publications, their experience of research with their Moldavian colleagues, actively participate in scientific forums. In the past five years the Academy of Sciences of the Moldavian SSR has held 85 conferences which were attended by scholars from many countries.

Moldavia's scientists are doing much to popularise the achievements of Soviet science, to diffuse knowledge among the working people. This is being done in a variety of forms such as "Science Days", thematic telecasts

"Scientists at the Round Table", scientific-theoretical conferences, public lecture centres.

The successes scored by science in Soviet Moldavia are before all else the result of the wise Leninist nationalities policy of the Communist Party and the Soviet Government which promote the development of the individual national cultures of the peoples of the Soviet Union.

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SOVIET ENCYCLOPAEDIA PUBLISHING HOUSE PUBLICATIONS

The initiative to publish Soviet encyclopaedias belongs to V. I. Lenin. In pursuance of a government decision of February 13, 1925 preparations were begun to this end and a year later Vol. 1 of the *Great Soviet Encyclopaedia* appeared. Academician O. Schmidt was Editor-in-Chief of the first edition.

Since then the Soviet Encyclopaedia Publishing House has prepared and published two editions of the Encyclopaedia: the first (1926-1947) in 65 volumes and the second (1949-1957) in 51 volumes. Academician S. Vavilov, President of the USSR Academy of Sciences, was Editor-in-Chief of the second edition.

In 1967, in accordance with a government decision, preparations began on a third, 30-volume edition. To date 12 volumes have been put out. Academician A. Prokhorov is Editor-in-Chief of the new edition.

All three editions of the *Great Soviet Encyclopaedia*, all-embracing in their range of subjects, are universal editions. About 50 per cent of the material included in them cover the social sciences. The number of terms given has increased from edition to edition: in the first one there were 65,000, in the second about 96,000; in the third there will be close to 100,000. Also the number of copies since the first edition has increased substantially.

The services of eminent Soviet scholars and also of scholars of many other countries are enlisted as authors, reviewers, and consulting editors; about 16,000 authors collaborated, for example, in the preparation of the second edition of the Encyclopaedia.

The third edition is being printed in type specially designed for it. The edition is richly supplied with geographical and historical maps and illustrations.

The *Small Soviet Encyclopaedia* which saw three editions between 1928 and 1960, the first and third in 10 volumes each, the second in 11 volumes, is directly related to the *Great Soviet Encyclopaedia*.

The *Great Soviet Encyclopaedia Yearbook*, a universal reference book, has been appearing since 1957. Each volume contains a fund of material on major events in political life, on economic, cultural, scientific and technological progress in the Soviet Union and other countries of the world for the corresponding year. The *Yearbook* is a kind of Soviet *Who's Who*: it contains hundreds of biographical data about prominent Soviet statesmen, Party and public personalities, about scientists, prize

winners, heroes of the Soviet Union and of Socialist Labour, etc.

Mention should also be made of another comprehensive reference book, the *Encyclopaedic Dictionary*, a three-volume edition of which appeared in 1953-1955 and a two-volume edition in 1963-1964.

Of great interest to the Soviet and also the foreign reader is the encyclopaedic reference book *Union of Soviet Socialist Republics*. Three such reference books were prepared and published by the Publishing House for the 30th (1947), the 40th (1957) and the 50th anniversaries respectively of the Great October Socialist Revolution. In them the reader will find comprehensive reference material on the population of the USSR, its natural resources, state structure, history, economy, on scientific and technological progress, culture, literature, music, the theatre, art, architecture, cinema, the press, radio and television. The said reference books also contain short articles devoted to the Union and Autonomous Republics — their economy, history, culture.

Towards the end of the fifties the Publishing House began to put out a series of specialised scientific encyclopaedias. To date 20 such encyclopaedias have appeared in editions ranging from 60,000 to 100,000 copies. This series is the first of its kind to be published in the Soviet Union. The social sciences series include encyclopaedias on philosophy, history, political economy, literature, pedagogics, the art of the countries and nations of the world.

The *Philosophical Encyclopaedia*, containing 4,500 terms, appeared in 5 volumes (1960-1970). The Editor-in-Chief is Academician F. Konstantinov. It covers such subjects as dialectical and historical materialism, Russian philosophy and the socio-philosophical thinking of the other peoples of the USSR, foreign philosophy from antiquity up to the middle of the 20th century, the philosophical problems of natural science, sociology, psychology, logics, ethics, aesthetics, religion and atheism. The *Encyclopaedia* contains a scientifically-substantiated criticism of anti-communism, Right and "Left" revisionism.

To date 14 of the planned 16 volumes of the *Soviet Historical Encyclopaedia*, which will contain 25,000 terms, have appeared since publication first began in 1961. Its Editor-in-Chief is Academician E. Zhukov. The *Encyclopaedia* will have two more volumes containing a subject and a name index.

The *Encyclopaedia* examines from positions of Marxist methodology the history of all countries and nations from ancient times to our day. Naturally, considerable attention is devoted to the history of the peoples of the USSR, the history of the Russian revolutionary movement and to the Communist Party of the Soviet Union. Many articles treat of the socialist countries, the international communist, working-class and national-liberation movements. The history of the emergent countries of Asia, Africa and Latin America is given wide coverage.

Questions related to historiography, the sources studies, archaeology, ethnography, and auxiliary historical disciplines are widely represented. The *Encyclopaedia* contains a vast number of facts, chronological and statistical tables, historical maps and documentary illustrations.

In 1972, Vol. 2 of the planned four volumes (4,000 terms) of the *Encyclopaedia of Political Economy* was published. The *Encyclopaedia* whose Editor-in-Chief is Academician A. Rumyantsev, will devote much space to articles revealing the essence of the categories of Marxist-Leninist political economy, to articles treating of the basic problems of the political economy of socialism: planning, forecasting, management, economic analysis, economic efficiency of social production, finances, public consumptions, commodity turnover, money circulation, accounting, statistics, etc. Considerable attention will likewise be paid to questions related to scientific and technological progress, the productivity of labour, the development of the world socialist system, in particular, socialist integration, specialisation, cooperation, coordination of the economies of the socialist countries. The *Encyclopaedia* examines theoretical questions of the political economy of capitalism, particularly modern imperialism, the state of the world capitalist economy, critically reviews the present bourgeois schools and trends in political economy. For the first time there is shown in an edition of this kind the evolution of the economic thinking of different countries and nations.

The *Concise Literary Encyclopaedia* has, beginning with 1962, appeared in eight volumes under the editorship of A. Surkov, the poet. It will contain 15,000 terms. The *Encyclopaedia* carries information about the literature and literary processes in the different continents, about the theory of literature, and of poetry, about prosody and aesthetics. Linguistics is widely represented on its pages: the literary languages of the world, lexicographic, phonetic and grammar terms. The *Encyclopaedia* also contains biographical data on the major writers, literary critics and linguists of the countries of the world.

The four volumes of the *Pedagogical Encyclopaedia* (1964-1968; 3,500 terms), contains material on the history and theory of pedagogics, on didactics, teaching methods, child and pedagogical psychology, on the educational systems in the USSR and in other countries of the world, on higher and specialised secondary education. Prime attention is focused on education of the rising generation. The Encyclopaedia's Editors-in-Chief are I. Kairov, Member of the USSR Academy of Pedagogical Sciences and Professor F. Petrov.

To date three volumes (1962-1971) of the concise art encyclopaedia *The Art of the Countries and Nations of the World* have been published. The Encyclopaedia which will contain about 10,000 articles and terms, treats of the theory and history of painting, sculpture, drawing, architecture, town-building, and the folk art of more than two hundred countries and nations. The edition is richly illustrated.

Another concise encyclopaedia *The Great October Socialist Revolution* consists of approximately 1,000 articles and reference notes, arranged alphabetically, related to various aspects of the revolutionary events of 1917 and the beginning of 1918. Based on documentary materials, the book contains a wealth of information on the Leninist party of Bolsheviks, on the leader of the revolution, its heroes and architects, and its motive forces: the working class, toiling peasantry, revolutionary soldiers and sailors; on the course of the revolution.

Of considerable interest is the reference book *Economic Life of the USSR. A Chronicle of Events and Facts, 1917-1959*. Moscow, 1962 (the second, two-volume edition, covering the years 1917-1965, was published in 1967). It acquaints the reader with the major decisions of the CPSU and the Soviet Government on economic issues, with the materials of Party congresses and conferences and decisions of national economic importance taken by them, with the budgets of the Soviet state, its financial measures, and economic agreements concluded with other countries, informs the reader about the various big plants and power stations that have been put into operation, etc.

The two-volume encylcopaedic reference book (1962-1963) *Africa* contains a wealth of information about the continent: its natural resources, population, economy, culture, its struggle for national rebirth, etc.

The Soviet Encyclopaedia Publishing House also puts out dictionaries. S. Ozhegov's four-volume general

lexical dictionary of the Russian language (1957-1961) and one-volume dictionary of the Russian language (first edition in 1949, the last in 1972) are widely known and greatly contributed to enriching the speech of broad circles of readers. Spelling and phraseological dictionaries, and dictionaries of synonyms and proverbs of the Russian language are being published, as well as a large number of dictionaries in the languages of the peoples of the USSR and of the world.

The *Great Soviet Encyclopaedia* and the respective specialised encyclopaedias have their Central Editorial Boards which include noted Soviet scholars and specialists. In the Publishing House there are editorial boards for all the branches of knowledge.

The entire scientific, theoretical, methodological and coordination work of the Central Editorial Boards and the Soviet Encyclopaedia Publishing House comes under the Scientific and Editorial Council composed of leading scholars, statesmen and Party figures.

The Publishing House has established contacts with scientific, cultural and public institutions in about 80 countries of the world. Subscribers to the universal and specialised encyclopaedias include many foreign readers. For example, the *Great Soviet Encyclopaedia* (GSE) is mailed abroad in 23,000 copies, the *Soviet Historical Encyclopaedia* (SHE)—in 6,500 copies, the *Encyclopaedia of Political Economy*—in 4,500 copies, *Great Soviet Encyclopaedia Yearbook*—in 4,000 copies, the encyclopaedia *The Art of the Countries and Nations of the World*—in 8,000 copies.

Many articles from the GSE and the SHE have been translated and published abroad and books compiled from materials of the various Soviet encyclopaedias. For example, Volume 50 of the GSE, devoted entirely to the USSR (1917-1957) was published in German in 1960 by the Bibliographisches Institut, Leipzig, and in English in 1962 by Pergamon Press, Ltd., London.

The encyclopaedic reference book *The Union of Soviet Socialist Republics. 1917-1967*, has been translated in the GDR (Leipzig) and in Poland (Państwowe Wydawnictwo Naukowe, Warszawa). The Dietz Verlag, Berlin, has published from the SHE the article "The Communist Party of the Soviet Union". The *Small Soviet Encyclopaedia* was translated in Greece and published in 1962-1967. A special concise encyclopaedia *The Soviet Union*, prepared for the foreign reader in collaboration with the Novosti Press Agency, has been published in Finland and Japan.

The Publishing House participated in the preparation of 30 books for the *Encyclopaedia Popular* series published in Cuba. Many of these books were reprinted in other countries of Latin America (Argentina, Colombia, Venezuela).

Contacts have also been established with encyclopaedic publishing houses in Great Britain, the USA, Italy, France, the FRG, with whom the Soviet Encyclopaedia Publishing House exchanges scientific information, articles and reference material.

The Publishing House has prepared articles for the Italian encyclopaedia *Il Milione*, for *Encyclopaedia Britannica* and for the *International Yearbook* and *Statesmen Who's Who*, and also for *Focal Press Ltd.* (London) and *Worldmark Press Ltd.* (New York), as well as for many publishing houses of the socialist countries.

In 1972 Crowell Collier and Macmillan Inc. (New York) concluded an agreement with Mezhdunarodnaya Kniga to translate into English and publish in the United States a new, third edition of the *Great Soviet Encyclopaedia*.

M. Kuznetsov, Cand. Sc. (Philos.)
Deputy Chairman, Scientific and Editorial Council, Soviet Encyclopaedia Publishing House

SCIENTIFIC COLLABORATION OF SOVIET AND FRENCH HISTORIANS

The collaboration between Soviet and French historians dates back to October 1958 when they came together in Paris to familiarise themselves with the research being done in the two countries into the history of France and Russia. At this meeting the subject of discussion was the history of serfdom in Russia and France from the 11th to 16th centuries, the mediaeval town, the Great French Revolution of the 18th century, the industrial revolution and economic crises of the 19th century, Franco-Russian relations at the end of the 19th century. The Soviet delegation was headed by Academician V. Volgin, an authority on the history of France. Since then historians of the USSR and France have been meeting regularly alternately in France and in the Soviet Union, of late every two years.

The conferences are prepared and held under the auspices of the National Committees of Historians of the two countries. From 1961 to 1971 the Soviet delegations were headed by Academician A. Guber who did much to promote scientific contacts between French and Soviet historians.

Eminent scholars participate in the work of the conferences. The Soviet side has been represented by Academicians M. Nechkina, I. Mints, S. Skazkin, A. Narochnitsky, L. Cherepnin, Professors A. Manfred, V. Dalin, A. Ioannisyan, E. Zhelubovskaya, B. Porshnev, N. Sidorova, S. Schmidt, A. Ado; the French side by Academicians M. Baumont, P. Renouvin, J. Schneider, Professors F. Braudel, E. Labrousse, A. Soboul, J.-B. Duroselle, P. Mousnier, J. Le Goff, J. Godechot, R. Portal, A. Michel, M. Reinhard and others.

Besides the members of the delegations historians of the country where the colloquium is held are drawn into its work. They are experts on the history of the Middle Ages, of modern and current history and represent the country's leading scientific centres. In the Soviet Union they are scholars of the USSR Academy of Sciences' Institute of World History and Institute of the History of the USSR, historians of the Moscow and Leningrad universities as well as of higher educational institutions in other cities. In France they are scholars of the University of Paris, the Ecole pratique des Hautes Etudes (Paris) and of the scientific institutions and centres of Toulouse, Clermont-Ferrand, Nancy, Nantes and other cities.

The conferences discuss subjects of mutual interest and as a rule hear parallel reports by French and Soviet historians. Among the subjects covered were: the history of the heretical movements of the 13th-16th centuries, popular movements of the 17th century, the origin and development of national states, the Enlightenment of the 18th century, the Great French Revolution of the 18th century, the Paris Commune of 1871, Franco-Russian and Soviet-French relations. Two subjects that have become permanent items on the conference agenda are: the Great French Revolution of the 18th century and Franco-Russian and Soviet-French relations.

The reports invariably evoke lively discussion in the course of which fundamental differences of opinion are often voiced. For example, during the discussion of the serf system in the 11th-16th centuries opinions diverged over assessment of the role played by feudal-seignior relations in France in the 17th-18th centuries, and on some questions of the Great French Revolution. Different views were also expressed concerning the social roots of the heretical movements in France in the 13th-16th centuries, the character of the popular movements on the eve of and during the Fronde. But for all the differences in methodological principles

the discussions are invariably creative, friendly and fruitful. They bring out certain points of contact, coincidence or approximation of scientific conclusions. In the view of both sides the conferences are of great scientific importance.

The main purpose of these regular meetings is exchange of information and familiarisation with the latest historical researches and with archive materials. But they also greatly contribute to the elaboration of some cardinal problems of history and to historiography. Parallel studies of similar historical processes make it possible also to disclose and trace the general laws governing the development of the two countries and their specific national features. The bilateral meetings of historians help to raise and further the study of highly important and as yet little elaborated problems in Soviet and French historiography. Furthermore, they stimulate the study in France of the history of the USSR, interest in which is very great there.

A big contribution to the development of Soviet-French collaboration is made by the Institute of World History's Sector of the History of France and the *French Yearbook*, published by it (Professor A. Manfred is the head of the Sector and Editor-in-Chief of the *Yearbook*). Eminent French scientists of different trends often attend the enlarged meetings of the Sector and contribute to the *French Yearbook*: F. Braudel, President of the Maison de sciences humaines, J. Le Goff, Director of Ecole pratique des Hautes Etudes, E. Labrousse, Honorary Professor of the Sorbonne, G. Cogniot, Head of the Maurice Thorez Institute, A. Soboul, Head of the Chair of the History of the French Revolution in the Sorbonne, J. Godechot, Dean of a faculty of the University of Toulouse, Professors Guy Bessé, Cl. Willard, R. Portal (Paris), G. Bouvier (Lille), A. Olivezi (Marseille) and many others.

Besides articles specially written for it the *Yearbook* carries the reports and communications made at the conferences. Every article and communication is accompanied by a summary in French. This publication, 14 volumes of which have appeared to date, is widely known and highly appreciated by specialists.

Of great scientific and political significance were the conferences devoted to the centenary of the birth of V. I. Lenin and the centenary of the Paris Commune, sponsored by the USSR Academy of Sciences' Institute of World History, with the participation of French scholars and their colleagues from socialist countries. Besides Soviet scholars the conferences were attended by J. Duclos, member of the Political Bureau, CC French Communist Party, the historians Cl. Willard, A. Soboul, J. Bruhat and by scholars from the GDR, Poland, Hungary, Czechoslovakia and Rumania.

One of the concrete forms of scientific collaboration of Soviet and French historians was the first joint publication of two works: *The Age of Enlightenment* and *Franco-Russian Economic Ties*. These collections of articles were prepared by the Institute of World History and the Ecole pratique des Hautes Etudes and were published in French and Russian simultaneously in Moscow and Paris in 1970 for the XIII International Congress of Historical Sciences.[1] The two books were edited by F. Braudel, A. Guber, A. Manfred, R. Portal and M. Ferro. Being of mutual interest to the readers of both countries, the books acquaint French historians with the work of their Soviet colleagues and the Soviet reader with materials of French archives that are difficult of access.

There is every reason to believe, judging from the experience to date of the scientific collaboration of Soviet and French historians, that the further expansion of friendly ties will yield still more fruitful scientific results.

Z. Belousova, Cand. Sc. (Hist.)

[1] *The Age of Enlightenment, Franco-Russian Economic Ties*, Moscow-Paris, 1970, *Au siècle des Lumieres. La Russie et l'Europe, XVI^e—XX^e siècles*. Paris-Moscow, 1970.

Congresses • Conferences • Symposiums

LONG-TERM PLANNING AND FORECASTING

An International Economic Association (IEA) Conference on Long-Term Planning and Forecasting was held in Moscow in December 1972. It was attended by more than 60 prominent scholars from 16 countries at the invitation of the USSR Academy of Sciences and the Soviet Economic Association. Twenty-two reports dealing with urgent economic problems were heard.

Two major reports made at the Conference by Academician N. Fedorenko (USSR) and Professor E. Malinvaud (France) systematically examined the methodological problems of long-term planning and forecasting in countries with different social systems.

N. Fedorenko spoke about a forecasting system that includes socio-economic prognoses for specific aims, and scientific and technological prognoses that bring out the real nature of the forecasted aims of socio-economic development. He detailed these two types of prognoses, showed the relationship between the methods used and formal models, and examined the socio-economic consequences of scientific and technological progress.

The report by E. Malinvaud contained the propositions used mainly for indicative planning, which is accepted in some capitalist countries and which basically differs from planning in socialist countries.

The Conference participants who discussed these reports noted the difficulties arising in long-term planning and forecasting, especially with regard to environmental problems, the influence of structural changes and the resulting changes in prices, and the use of economico-mathematical models.

In his report H. Chenery (USA) cited the results of his extensive survey of the cumulative processes taking place in the developing countries due to foreign aid and to the mobilisation of internal resources. He criticised the policy of the developed capitalist countries seeking to limit their aid.

A lively discussion followed the report by Corresponding Member of the USSR Academy of Sciences A. Aganbegyan, in which he elucidated the comprehensive programme of research on long-term planning and forecasting, carried out by the Siberian Branch of the USSR Academy of Sciences. This programme provides for the use of various models of the determinist type as well as of macroeconomic regression models. Inter-branch optimisation models are also widely applied. The most interesting viewpoint expressed during this discussion is that the success of a forecast depends not so much on concurrence of magnitudes with the future reality as on the effect of currently-taken decisions important for the future.

A number of reports dealt with the experience of long-term planning and forecasting in socialist countries. The report by K. Rorwit (Poland) paid special attention to programmes as an important instrument for the comprehensive solution of major tasks,

and examined the problems of evaluating the effectiveness of different development patterns. The most interesting part of the report by I. Hetényi (Hungary) is the one dealing with experience in using long-term forecasts as a reference point for medium-term plans. R. Stojanović (Yugoslavia) described the process of planning in Yugoslavia with regard to the specifics of her national economy.

The report by E. Denison (USA) acquainted the participants with the US economic forecast for 1980. It gave a prognosis of potential income calculated by analysing the sources of growth as well as a prognosis of real income, which differs from the potential one by virtue of the differences in the intensiveness of utilising labour power and its supply. Denison's research is based on the concept of distributing and utilising income according to limiting factors. The shortcomings of this hypothesis have been repeatedly noted in economic literature.

G. Fels (the Federal Republic of Germany) examined the possibilities and methods of long-term forecasting as practised in the economy of his country. In his opinion, the time has come when the growth of gross national product should be regarded not as the ultimate goal, but as a means of achieving other aims of economic policy, of resolving social tasks. He maintains that in the models of growth constructed in West European countries, two important points must be taken into account: the role of the sources of raw materials and the emergence of an international labour market.

L. Kantorovich and V. Makarov (USSR) spoke about using their models of growth for analysing the prospects of forthcoming development. R. Hjerppe (Finland) cited the results of experiments in applying a simplified inter-branch balance for analysing possible changes in the branch structure.

A series of reports dealt with manpower resources and planning in the field of education (D. Bradistilov, Bulgaria; H. Maier, the German Democratic Republic; C. von Weizsäcker, the Federal Republic of Germany; E. Berković, Yugoslavia) and with the forecasting of living standards, demand and consumption (A. Deaton, Britain; G. Vangrevelinghe, France). The methods and objectives of planning in capitalist firms were also described in detail (D. Grove, USA; M. Horimoto, Japan).

On the closing day of the Conference the forecasting of scientific and technological progress was discussed (E. Mansfield, USA; H. Aujac, France). Attention was drawn to the definite successes achieved in the field of modelling scientific and technological progress, and to a certain lag in providing the necessary statistical information that would make it possible to use the given models for the purpose of forecasting.

E. Filippovsky, Cand. Sc. (Econ.)

IMPROVEMENT OF ECONOMIC STIMULATION OF PRODUCTION

An All-Union Scientific Conference on the Problems of Furthering and Consolidating Cost Accounting and Improving Economic Stimulation of Production was held in December 1972 in Moscow. Sponsored by the USSR Academy of Sciences' Scientific Council for the comprehensive problem "The Scientific Principles of Cost Accounting", the Conference was attended by some 700 scholars, specialists of ministries, governmental departments and enterprises, and teachers of higher educational establishments.

In his opening address, Corresponding Member of the USSR Academy of Sciences P. Bunich drew attention of the participants to the main issues facing the Conference:

— the theoretical principles of cost accounting at the present stage of developed socialist society;

— the summing up of the experience of the work done by ministries, associations and enterprises under the economic reform;

— the problems of extending the sphere of cost accounting methods of supervision at various levels of economic management;

— the ways of improving the economic instruments of management with emphasis on more active utilisation of the finance and credit mechanism;

— improvement of methods of economic and material stimulation for higher effectiveness of production.

The report by Corresponding Member of the USSR Academy of Sciences G. Kozlov, entitled "Cost Accounting Under Developed Socialism", stressed that with the advancement to communism, it is essential to modify the methods of management so as to make them conform more fully to the requirements of the present stage of the socialist economy. The new level of socialisation characteristic of the period of developed socialism demands the further consolidation of centralised planning, higher concentration of production and the establishment of a higher type of enterprises. This process entails a further expansion of cost accounting relations. At the present stage of developed socialism, cost accounting is becoming a major instrument for economic planning and management, and its role in intensifying production is sharply increasing.

The reports by Professors L. Abalkin, S. Dzarasov and A. Smirnov drew attention to the current transition from incomplete to complete cost accounting, marked by the extension of cost accounting relations in all basic economic spheres. These reports lay emphasis on the objective necessity to transfer all associations and economic branches of national economy to cost accounting. The far-flung possibility of employing cost accounting is due to the fact that it is a comprehensive economic category reflecting the process of interaction between production, distribution and consumption.

Great interest was aroused by the reports by K. Rudnev, Minister of the USSR for Instrument-Making, Means of Automation and Control Systems and I. Goberman, Head of the Chief Department for Motor-Vehicle Transport, Executive Committee of the Moscow City Soviet. They summed up some of the results of the performace of enterprises carrying on experiments, brought to light reserves for economic growth, and put forward proposals for further improving the cost accounting mechanism. Emphasis was laid on the necessity to streamline price formation so as to encourage enterprises and associations to renew their output and improve its quality.

In his report "On the Work of State Farms Transferred to Complete Cost Accounting and Measures to Further the Economic Reform", Deputy Minister of Agriculture of the USSR, A. Chubarov, brought out the advantages of the new system of planning and economic stimulation and emphasised that the practice of switching state farms to complete cost accounting and self-reimbursement confirmed the progressive nature of this measure. The report by R. Gumerov, Deputy Director of the Price-Formation Research Institute of the State Price Committee, USSR Council of Ministers, pointed to the importance of forming a normative base for fixing prices and establishing uniform prices for agricultural produce in the various geographical-economic zones. The Deputy Director of the Research Institute of Agricultural Economy, Professor G. Rusakov, devoted his report to the methods of appraising the results of work performed by cost accounting enterprises. The Head of the Political Economy Department of Tartu University, Professor M. Bronstein spoke about the improve-

ment of agricultural management on the cost accounting and territorial principles, about the concentration and specialisation of agricultural production.

The Conference formed three sections: "Cost Accounting and Economic Methods of Management", "Cost Accounting and Material Stimulation in Agriculture and Trade", and "Cost Accounting in Transport and Construction". The plenary meeting adopted recommendations on the further improvement of cost accounting relations at all levels of the national economy.

N. Vasilov, Cand. Sc. (Econ.)

PROBLEMS OF STATE CAPITALISM IN THE DEVELOPING COUNTRIES

A symposium on the evolution of the state-monopoly structure in the Third World countries was held in Moscow in December 1972.

It was attended by Soviet scholars and sponsored by the Institute of Oriental Studies of the USSR Academy of Sciences and by the journal *Narody Asii i Afriki* (Peoples of Asia and Africa). More than fifty reports and communications were made on a wide range of issues connected with the genesis, evolution, context of formation, social and class content of state capitalism and the state sector, with the implementation of the state economic policy, with the methods of studying it, and so on.

The main report was made by A. Levkovsky, D. Sc. (Econ.). The growing economic role of the state in the developing countries, he said, reflects the urgency for resolving the tasks of reorganising the colonial structure of the economy and accelerating social progress. The state's share in total capital investments in the economy of the Third World is continuously increasing. In the late 1960s it reached 45-55 per cent, as compared with 25-35 per cent in the early 1950s.

The building of an independent national economy capable of effecting rapid extended reproduction has brought into being the principal instrument for achieving this most difficult goal—the state sector. The degree of development of the state sector in one developing country or another, its size, and the methods and trends of its activity vary according to the social classes whose interests the state chiefly reflects. Being the practical instrument of the state economic policy, this sector is also a form of existence of state capitalism in a society with a mixed structure.

The development trend of the state capitalist structure in the countries of Asia and Africa, its efficiency and the degree of its radicalism depend not only and not so much on the general level of their socio-economic development as on the nature of their political power.

Special attention was paid at the Symposium to the development of the state sector in the socialist-oriented countries. Facts were cited showing the efficacy of the state sector for economic advance in such countries as Egypt, Algeria, Syria, Burma and Tanzania.

As emphasised by speakers at the Symposium, in countries moving along the non-capitalist path of development the state sector of the economy is neither directly nor indirectly controlled by the big or middle bourgeoisie. A specific feature of these countries is that such strata of the bourgeoisie are either non-existent there or they are losing their economic and political positions. While the petty bourgeoisie not only retains, but often strengthens its position, and its influence on state power and, accordingly, on the state sector, considerably increases. The class interests of the petty bourgeoisie create vast opportunities for the state to extend its enterprise or control to almost all types of economic activity.

With the petty bourgeoisie and the intermediate strata close to it playing a dominant role in political life, the state sector grows in a great measure, primarily by acquiring the property of the foreign and local big bourgeoisie. But what is more important is that the state economic structure becomes relatively independent of other setups; it evolves qualitatively and can no longer be called "state-capitalist" in the true sense of the word.

As noted by a number of speakers, it would be wrong to exaggerate the degree of revolutionism and radicalism of the petty-bourgeois circles. In some countries considerable sections of the petty bourgeoisie still follow the propertied classes. In others, another danger arises as socio-economic reforms are carried out: bureaucratic Leftist deviations manifested in the endeavour to "etatise" everything, even small-scale retail trade.

On the whole, the discussion on the evolution of the state-capitalist structure has once again shown the motive forces of revolutionary changes in the Third World to be quite different from those in the capitalist West. But acknowledgement of the revolutionary potential of the intermediate class forces by no means imply belittling the role of the working class. On the contrary, it reflects the increasingly diversified forms and methods of revolutionary struggle and the stepped-up social activity of all the working masses. This is a result of the victories scored by the international working-class movement and by its principal offspring—the world socialist system. The impact of these victories on socio-economic and socio-political development in the Third World countries continues to grow. The importance of this impact for the emergence of a new, socialist structure in a multi-structural society can hardly be overestimated.

I. Sanovich

THE PHILOSOPHICAL ASPECTS OF CONTEMPORARY ASTRONOMY

Astronomy ranks among the sciences that are today in the forefront of natural science. Indeed, its rapid stides have given rise to a number of fundamental problems of epistemology, methodology, and philosophy. A far-ranging discussion of these problems took place at a symposium on the philosophical problems of contemporary astronomy, held in Moscow in December 1972.

The Symposium, co-sponsored by the Council on the Philosophical Problems of Contemporary Natural Science under the Presidium of the USSR Academy of Sciences and by the Academy's Institute of Philosophy, was dedicated to the 500th birth anniversary of the great Polish scientist N. Copernicus. It was attended by 300 astronomers, physicists, philosophers, and specialists in other fields.

The Symposium heard the following papers: "Philosophical Problems in Studying the Universe" by Academician V. Ambartsumyan and V. Kazyutinsky, Cand. Sc. (Philos.); "New Physical Laws and Astrophysics" by Academician V. Ginzburg; "Problems of Contemporary Cosmology" by Academician Y. Zeldovich and I. Novikov, D. Sc. (Philos.); "Philosophical Problems of Cosmology" by Academician G. Naan, Academy of Sciences of the Estonian Republic; "The Epistemological Aspects of Cosmology" by A. Zelmanov, Cand. Sc. (Phys. & Math.); and "Philosophical Problems Concerning Intelligent Civilisations in the Universe" by I. Shklovsky, Corresponding Member of the USSR Academy of Sciences.

Much attention was given at the Symposium to analysing the methodological problems of contem-

porary astrophysics and, more specifically, the two main trends that have become established in it. The first of these is the "classical" trend followed by most astrophysicists. This trend stems, in the words of V. Ambartsumyan, from the idea that cosmic bodies and their systems arose through the condensation of rarefied matter. Basic to this trend, also, is the assumption that all the observed stages in the evolution of cosmic bodies may be interpreted within the framework of the fundamental laws of physics known today. Built up on these premises are theories of the formation of stellar systems and stars, a theory of stellar evolution, and several hypotheses concerning the origin and evolution of the solar system.

A diametrically opposite viewpoint is being evolved by V. Ambartsumyan. He considers that the theories founded on "classical" ideas are in poor agreement, if not altogether at variance, with the new discoveries in astrophysics. In his view, observations indicate that the evolutionary processes in the Universe are proceeding not from the rarefied to a denser state, but in the very opposite direction: from a superdense to a less dense state. Many stages in these processes — the active nuclei of galaxies, quasars, etc.— lend themselves very poorly, if at all, to interpretation in terms of the fundamental laws of contemporary physics. Such is the approach that forms the basis of the trend in astrophysical research that might tentatively be described as the Byurakan trend.

The Ambartsumyan and Kazyutinsky paper dealt in detail with the initial premises, hypotheses, and assumptions on which each of these trends is founded, with the criterion of practical results in astrophysics, and with the present state of the theories concerning the structure and evolution of cosmic objects. The authors of the paper explained their preference for the Byurakan trend both in terms of research principles (consistently generalised observation results) and in terms of the results obtained.

V. Ginzburg, while not denying that new fundamental physical concepts can be introduced in principle, believes that such concepts are not needed to describe the phenomena in the nuclei of galaxies and in quasars (at the present stage of their investigation).

Each of these viewpoints had both supporters and opponents at the Symposium. The methodological principles of the Byurakan trend were supported, in their various aspects, by Professor B. Vorontsov-Velyaminov (who believes, on the whole, that astrophysics will bring about a synthesis of the two trends), Professor B. Kukarkin, Professor T. Agekyan, and by V. Stepin, Cand. Sc. (Philos.). On the other hand, the "classical" trend received the backing of Professor S. Pikelner, Professor A. Masevich, Professor S. Kaplan, L. Ozernoy, D. Sc. (Phys. & Math.), Y. Efremov, Cand. Sc. (Phys. & Math.), and some other participants.

Relativistic cosmology is concerned with the Universe as a whole, an object that has not been singled out by any empirical means. Cosmological theories and models are always achieved by extrapolating certain characteristics of the observable region of the Universe.

Y. Zeldovich and I. Novikov, in their paper, examined the physical principles of cosmology, specifically, problems in the theory of the "hot Universe". The Universe in the large, in the view of the authors of the paper, is approximately homogeneous. There is no question of new laws arising with the transition from the scale of the Earth and the solar system to the scale of the Universe as a whole. The general theory of relativity is the theory applicable to the Universe as distinct from Newton's theory, which is applicable to the solar system.

E. Lifshits, Corresponding Member of the USSR Academy of Sciences, also believes that general relativity gives rise to no contradictions, whatever the physical conditions (distances, densities) to which it is applied.

A. Zelmanov, in mustering arguments in support of one of the "nonclassical" variants of relativistic cosmology, came to the conclusion that the principle of a one-sided and isotropic Universe is an extremely simplified hypothesis. Far more fruitful, in his view, is the opposite contention: that the entire diversity of conditions and phenomena permitted by fundamental physical theories can be realised in the Universe. To describe the Universe adequately it is necessary to build up a "single physical theory", which would either synthesise general relativity and relativistic quantum theory or else show such a synthesis to be impossible. And it must not be ruled out that a single physical theory may prove to be absolutely extrapolatable cosmologically.

G. Naan pointed to such features of cosmology as a substantial measure of uncertainty concerning the object, the mode of investigation, and the results. Relativistic cosmology, in his view, is most correct in its "classical" variant. The most reliable cosmological conclusions, in his view (contrary to the general opinion), are the conclusions reached within the cosmological framework; the least reliable are those borrowed from other sections of astronomy (for example, derived from observations).

There was much heated controversy over the question of the Universe as an object of cosmology. In the Ambartsumyan and Kazyutinsky paper it was suggested that certain physical system tremendous in scope, but nevertheless not all-embracing, could well serve as the Universe — an object of cosmology. This would be "everything existing" not in some absolute and final sense, but in relation to a definite stage in our learning. Further investigations will probably prompt us more than once to enlarge the totality of physical objects that we considered existing and, hence, to generalise the concept of the "Universe as a whole".

In their examination of the philosophical aspects of cosmology, the authors of the paper pointed to the fallacy of the view that the religious outlook and the scientific, materialistic outlook differ because of different pictures of the world. In actual fact, these philosophies are in conflict because of different *interpretations* of the picture of the world painted by modern science, specifically astronomy. The authors criticised the theological interpretations of relativistic cosmology: views about the world "doubling" into a material and a "transcendental" world, creationist speculation over the notion of an "initial moment of time" in cosmology, etc. In the paper it was shown that such interpretations of the conclusions of relativistic cosmology are deeply alien to the spirit of this science. At the same time the conclusions of relativistic cosmology are in agreement with the principles of materialist dialectics.

On the other hand, Zelmanov (expressing the viewpoint current among most cosmologists) considers that the Universe as an object of cosmology is a global aspect of the material world.

There was an interesting discussion on the philosophical problems related to the possible existence of extraterrestrial civilisations and the establishment of contacts with them. The present state of research in this field was reviewed by I. Shklovsky. He pointed out that whereas the problem was now quite clear, there was as yet no solution to it: we simply do not know whether extraterrestrial rational beings exist. Shklovsky then examined some features of the evolutionary process from the simple to the complex that could give rise to the emergence of life and intelligence in the Universe. He formulated some of

the philosophical problems involved in this, among them the following: is the emergence of intelligent life, civilisation, and the technological era in the development of society inevitable or not; will continuous technological progress go on or will it be replaced by some other forms of development; what is the duration of the technological era; can society from some future moment advance without the development of productive forces or will this lead to its stagnation and degradation, and will we be able to achieve mutual understanding with an extraterrestrial civilisation, should we contact it? None of these questions have been reliably answered yet. Shklovsky also believes that mankind's future development may raise the question of artificial intelligent systems.

The debate on Shklovsky's paper centered, first and foremost, on the presentation of the problem of extraterrestrial civilisations, and also on the concepts of "intelligence" and "civilisation".

E. Markaryan, D. Sc. (Philos.), considers that the concepts of "civilisation" and "culture" are analogous. Culture, in his opinion, is essentially the ability of living beings, united in stable collectives, to evolve a system of potentially non-predetermined biological types of the organisation of means and mechanisms for adapting to the environment and supporting social life.

There was heated controversy over the problems of analysing the development level, rate, and background of intelligent civilisations in the Universe. L. Gindilis, Cand. Sc. (Phys. & Math.), defended the view that the exponential law of the development of our civilisation in modern times is not universal and will have to give way to other laws of development. This conclusion should also be valid for other technological civilisations. Gindilis pointed to two viewpoints on the lifetime of technologically developed civilisations: 1) that this lifetime is limited to several hundred, several thousand, or several million years, and 2) that this lifetime is indefinitely long, that, having once arisen, such a civilisation embarks upon practically unlimited development. Both viewpoints require further elaboration.

Finally, there was a discussion on whether understanding could be achieved in an exchange of meaningful information between intelligent civilisations in the Universe.

In the opinion of B. Panovkin, Cand. Sc. (Phys. & Math.), an essential prerequisite for this is a common or similar biological and social evolution of the civilisations that have established contact. This is something that can scarcely be expected very often.

A problem that was reflected in all the discussions at the symposium and touched upon by the majority of the speakers was the one of evaluating the general trends and prospects of present-day astronomy.

The view expressed in the Ambartsumyan and Kazyutinsky paper was that a revolution is taking place in contemporary astronomy, a revolution possibly comparable in scale and consequences to the Copernican. Its main aspects are: 1) revolutionary changes in *the instruments for studying* the Universe; 2) the discovery of a multitude of bizarre phenomena, which necessitate a profound revision of *our system of knowledge* concerning the Universe and possibly (but not necessarily) generalising and clarifying the system of fundamental physical laws, and 3) revising *the philosophical and methodological foundations* of contemporary astronomy.

This interpretation of the trends in the development of contemporary astronomy was supported by Academician B. Kedrov, Professor S. Vsekhsvyatskiy and other Symposium participants.

A differing view was voiced by V. Ginzburg. In his opinion, astronomy is experiencing a revolution associated primarily with fundamental changes in the methods of studying the Universe (the transformation of optical astronomy into all-wave astronomy).

Various aspects of the scientific revolutions and, specifically, the revolution in astronomy were discussed by G. Naan, Y. Efremov, Professor P. Dyshlev, Professor M. Mostepanenko, A. Eremeyeva, Cand. Sc. (Phys. & Math.), and others. The view was also expressed (Professor D. Martynov) that there are no grounds as yet for speaking of a revolution in contemporary astronomy.

On the whole, the Symposium demonstrated a growing measure of cooperation between astrophysicists, cosmologists, and philosophers in working on the philosophical problems of contemporary astronomy.

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PROBLEMS OF PSYCHOLOGICAL SCIENCE

The 20th International Congress of Psychology was held in Tokyo in August 1972. It was attended by 2,400 scientists from 53 countries, including a Soviet delegation headed by B. Lomov, Director of the Institute of Psychology, USSR Academy of Sciences.

The Congress proceedings were in the form of plenary sessions, lectures, symposiums and meetings, at which review papers and individually submitted papers were read, free discussions held with the showing of scientific films. The programme also included excursions to research institutes, clinics, educational establishments and factories. During the Congress more than 500 papers were read at 120 sittings. An exhibition of scientific equipment and literature on psychology was organised.

Members of the Soviet delegation participated in the work of most of the panels and sittings; 17 of its members read papers. Altogether 65 papers by Soviet scientists were included in the Congress programme. During the Congress Soviet scientists established contacts with their foreign colleagues and exchanged opinions on a wide range of problems.

Important questions of general psychology and a number of branches of psychology — pedagogical, social; engineering and physiological psychology and pathopsychology were examined at the symposiums (in particular, the paper "Neurophysiological Mechanisms of Memory at the Level of Neuronal Interrelations" by P. Anokhin, Member of the USSR Academy of Sciences, was regarded as one of the most interesting).

Most of the papers contained concrete experimental data on problems of perception, attention, memory, thinking, man's mental states and so on. Inadequate attention in these papers was paid to systematising actual material and its theoretical generalisation. Many psychologists are beginning to understand that theory is lagging behind the rate of accumulation of actual data.

Speaking about the trend of explorations in the realm of theory, it should be noted that a departure from concepts traditional for Western psychology (behaviourism, gestalt-psychology, Freudism and others) is becoming evident. Thus, in theories of behaviour where behavioural notions predominated for a long time, some new trends have appeared connected with a study of the internal mechanisms and structure of behaviour. Phenomenological descriptions of mental processes in the spirit of gestalt-psychology are giving way to researches into the material (physiological and biochemical) foundations of these processes.

In particular, problems of mathematical statistics as applied to psychology were discussed, such as

methods of verifying hypotheses, the probabilistic approach to measuring relationships, problems of variational analysis by the method of selective scaling, the necessary and adequate conditions for linear factor analysis of data on homogeneous populations, the use of factor analysis for intra-group comparisons, and others.

Congress participants listened with great attention to the lecture by the Soviet scientist A. Leontyev "On the Importance of the Notion of Object-Oriented Activity for Psychology", read in his absence by O. Tikhomirov.

"Will psychology ever become a science?" L. La Fave, a Canadian scientist, asked, having in mind that a theory is essential as a basis for every science, a theory which meets the requirements of comprehensibility, consistency, conciseness and precision. La Fave considers the existing theories of behaviourism as contradictory and eclectic. Psychology must solve dilemmas by using modern mathematical logic.

Y. Morimasa (Japan) also emphasised the need for a theoretical system of science to unite all the "existing theories" and to make practical use of psychological science.

N. Resemeier (Federal Republic of Germany) and M. Adler (Spain), analysing psychological publications for sixty years (1905-1965), tried to determine psychology's place in the system of sciences, laying stress on the methods of research typical for some or other sciences.

M. McPherson and J. Popplestone of the Archives of the History of American Psychology, described their research work in the history of national psychology. They called the 1960s a decade of "invasion" into the sphere of the history of science.

The numerous papers and communications on problems of *social psychology* (heard at symposiums and at 11 meetings which discussed individually submitted papers) showed the intention of psychologists closely to study the social problems of the world.

Various questions were examined: the psychology of small groups and problems of leadership; national variants of socio-psychological problems; cross-cultural studies of general social phenomena; problems of socialisation of the younger generation; methods of sociometric studies.

The effects of cooperation, leadership style and member compatibility upon small group productivity were studied by G. O'Brien (Australia), T. Hewett and D. Hornik (USA). They compared leadership style (orientation on personal relations in a group or on the accomplishment of the task), different forms of organisation (coordination of work and cooperation), degree of compatibility of group members.

Problems of leadership training were raised in the paper of F. Fiedler (USA), who maintained that there was no positive proof that the experience of leadership (and its training) improved organisational performance. The work of a group depends on the motivational model of the leader: one leader is oriented on the accomplishment of the task; another on the establishment of good relations among the group members.

R. Helmreich and R. Bakeman (USA) in their communication dealt with a study of cohesiveness and solitude effects on the performance of a small scientific group in an undersea environment.

Political and social problems of war and peace, higher wages, equality of women, racial discrimination, aggressive behaviour, the use of narcotics — all these and many other questions were reflected in a number of communications by researchers from the United States, Britain and the Federal Republic of Germany.

K. Larsen (USA) summed up the results of an international survey on questions of the future: 10,000 interviews on the prospects of peaceful relations and of a world conflict were taken in Czechoslovakia, Norway, Poland, Spain, Sweden and Yugoslavia among different groups of the

population (15-40 years of age). The author believes that the behaviour of people depends both on historical precedents and the anticipation of the future.

Scientists, studying psychological differences between people arrived, in particular, at the conclusion that the widest gap between white and black groups of the population is observable in the sphere of social problems and requirements. Low correlations attest to substantial social differences — this evident truth was noted in the paper of L. Szalay and D. Bryson (USA). A poll of 100 white Americans, 100 black Americans and 100 Americans of Japanese origin (all students of the same college) taken by M. Maykovich (USA) led the author of the paper to the conclusion that the assumption that the dominant whites are characterised by positive traits and the minority blacks by negative ones was no longer valid.

The problem of socialisation — one of the most widely studied in US psychology — includes various social phenomena. The struggle of young people against wars of aggression, against militarisation, for disarmament, organised protests in connection with various political events — all these are elements of socialisation displayed through "activism".

The problem of vocational preparedness was also examined as an aspect of socialisation of particularly great importance at school age (T. Yamashita, Japan). A hypothetical relative criterion is constructed which makes it possible to determine the degree of this preparedness.

A large number of symposiums dealt with cross-cultural studies in the sphere of projective techniques, cross-cultural approaches to the structure of intelligence, juvenile delinquency and also with problems of social interaction in conditions of different cultures.

A group of US psychologists offered a project for studying ethnic groups. The need for ethnic criteria which determine the bounds of the acceptable and the impermissible in the professional, scientific and human behaviour of people of different ethnic groups is regarded as a vital one for psychologists and political leaders. Precise ethnic criteria will enable psychologists to ascertain the nature and the source of some or other conflicts without causing harm either to the subject, or research, or science.

The solution of some social problems through "synergetica", the work of laboratories which train individual perception; a mathematical model of responsibility diffusion; the need for multi-stage relations in a sociometric structure; inter-nation differences of the concept "educated man"; children's drawings as a method of finding and measuring cultural values — these are only a small part of the problems of social psychology proposed for examination by scientists.

The philosophical principles and scientific methodology of Soviet social psychology were described in materials submitted to the Congress and in reports by A. Bodalev, L. Bochkarev, F. Ibragimbekov, A. Rusalinova, E. Klimov, E. Chugunova and G. Khachatryan.

The problem of *engineering psychology* was taken up at several symposiums: "The Man-Machine System", "Computer Simulation of Human Behaviour", "Information Processing in Cognition", and others. B. Lomov (USSR), the organiser and chairman of the "Man-Machine System" symposium, read a communication "On the Interrelations of Engineering Psychology and Other Psychological Disciplines". Engineering psychology which arose as a result of the need for knowledge about the mental functions, processes and states of man connected in his activity with technological progress, proceeds from the general theoretical concept of man as a link in the management system. But the problem "man as a link in the management

system" is a component part of the more general problem "man as the subject of labour, cognition and communication". That is why the development of engineering psychology depends on the development of the entire system of psychological sciences: the general theory of psychology, social, differential and pedagogical psychology.

K. de Greene (USA) reported some data related to the "man-machine system" theory. Computers were discussed as man-machine system *per se*, as adjuncts to the study of man-machine systems and as integrative nodes of the technological subsystem of the hierarchial socio-technical system.

P. Foley, a Canadian researcher, spoke about design criterion in a "human-centred" man-machine system. He holds that, by utilising the information of the biological sciences, particularly experimental psychology and the efforts of psycholinguists and social psychologists, it is necessary to determine the nature of communication processes. W. Hacker (GDR) dealt with the same theme.

Problems of *the psychology of development and instruction* were the subject of both lectures and symposiums. More than 50 papers were read. A discussion was held on the problem "Development of Mental Capabilities" in which Soviet, Japanese and American psychologists took part. The communication on this subject by the Soviet psychologists I. Petrovsky and V. Lubovsky aroused considerable interest. At the symposium "Learning in Early Infancy", a paper "On the Particularities of the Development of Auditory Perception in Early Infancy" was read by E. Alexandryan (USSR).

Much attention was paid to problems of optimisational instruction in school. Recognising communication as an important means of instruction and development in the modern school D. Olson (Canada) examined the interrelations between the forms of instructional experience, the structure of information which the school child receives with their help, and the content of knowledge and the nature of the skills and abilities.

Y. Sayeki (Japan) links the notion of instructional optimisation with "human rationality" which manifests itself in agreement with the rules of optimal judgements and the open nature of man. During play and study a child strives for such rationality. Instruction helps the child to develop it.

Sessions on *problems of the individual* discussed methods of studying the individual and national variants of these methods; the role of social factors in the development of the individual; problems of developing self-consciousness in juveniles; problems of the personality of delinquents; gerontological aspect of the problem of the individual; psychological principles of vocational guidance; cross-cultural comparisons of the individual; problems of pathopsychology of the individual.

The Soviet researchers B. Zeigarnik, K. Platonov, A. Puni, S. Rubinstein, R. Voronova, M. Menshikova and V. Norakidze in their written papers and oral communications on problems of the individual in health and in disease expounded the positions of Soviet psychology based on the Marxist-Leninist understanding of the individual.

"Implications of Asian Psychology in World Perspectives" was the subject of the closing Congress symposium. The papers "Implications of Psychology on Zen" and "The Confucian Concept of Human Nature" and others made at this sitting aroused an unfavourable reaction among many participants. The ideas they contained run counter to the importance and tasks of psychology in the contemporary world, approve man's passivity and non-interference in social problems. Denying their connection with any philosophy, these ideas rest on a religious world view in different national variants.

During the Congress the main bodies of the International Union of Psychological Science, specifically the General Assembly of the IUPS, met. At its final sitting the General Assembly elected J. Nuttin of Belgium President of IUPS and ten members of its Executive Committee, including the Soviet scientists A. Leontyev and B. Lomov. It reaffirmed the decision of the 19th International Congress of Psychology to hold the 21st Congress in Paris in 1976 (beginning with 1972 congresses will be convened once in four years). The General Assembly also decided to accept the invitation of the German Democratic Republic to hold the 22nd Congress in Leipzig in 1980.

R. Voronova, Cand. Sc. (Psychology)

CHRONICLE

* In October 1972 Sofia was the venue of a symposium devoted to elaboration of the scientific conception of Soviet-Bulgarian economic cooperation up to 1990. The symposium was organised by the Institute of Socialist Economic Integration Studies under the Commission for Economic, Scientific and Technical Cooperation of the Council of Ministers of the Bulgarian People's Republic, the Economic Institute of the Bulgarian Academy of Sciences and the Institute of Economics of the World Socialist System, USSR Academy of Sciences.

The symposium heard reports by the following Soviet scholars: Professor I. Dudinsky, Deputy Director of the Institute of Economics of the World Socialist System — "On the Factors of Development of the Integration Process in the Economic Relations between the USSR and Bulgaria in Perspective, up to 1990"; Professor Y. Shiryayev, Head of one of the Institute's departments — "On the Directions and Forms of the Expansion of Economic Ties Between the USSR and Bulgaria in Perspective, up to 1990"; L. Yagodovsky, Head of an Institute sector, and V. Shabunina, senior researcher — "Some Results and Tendencies in the Economic Cooperation Between the USSR and Bulgaria". N. Mitrofanova, senior researcher, participated in the discussion on price-formation problems.

The Bulgarian side was represented by Academic Secretary E. Mateyev, Professor N. Tsarevsky, Director of the Scientific Institute of Socialist Economic Integration Studies, K. Dobryev, Director of the Economic Institute of the Bulgarian Academy of Sciences, I. Videnov, Chairman of the Prices Committee under the Council of Ministers, M. Savov, Deputy Director of the International Institute of Economic Problems of the World Socialist System, and by members of the State Planning Committee, the Ministry of Foreign Trade and other departments and scientific institutions.

* The Hungarian Scientific Council for World Economics and the Institute of Economics of the World Socialist System, USSR Academy of Sciences, held a symposium in Budapest, September 1972, to elaborate the scientific conception of Soviet-Hungarian economic cooperation up to 1990.

Reports were delivered by the Soviet scientists: O. Bogomolov, Director of the Institute of Economics of the World Socialist System, "On the Factors of Long-term Development of Soviet-Hungarian Relations"; L. Yagodovsky, Head of a sector of the Institute, "Analysis of the State of Soviet-Hungarian Economic Relations and Some Prospects of Their Development"; K. Popov, D. Sc. (Econ.), "On the Forms and Methods of Economic Relations Between the

CMEA Member Countries in the Period up to 1990. (Conformably to the Problems of the Development of Soviet-Hungarian Cooperation)". Also Candidates of Science (Econ.) E. Rayevskaya, V. Sorokin and M. Usiyevich took part in the symposium.

On the Hungarian side there participated J. Bognar, Corresponding Member of the Hungarian Academy of Sciences, Chairman of the Hungarian Scientific Council for World Economics; J. Szabó, Pro-Rector of the Higher Party School under the CC of the Hungarian Socialist Workers' Party; A. Balassa, Assistant Head of the Board of the State Planning Committee; F. Kozma, Head of the Board of the Commission for International Economic Relations under the Council of Ministers; E. Malatinszky, Secretary of the Soviet-Hungarian Inter-Governmental Commission; S. Lakos, Director of the Institute of Social Sciences under the CC of the Hungarian Socialist Workers' Party; S. Ausch, Head of a sector of the Institute of Economics of the Hungarian Academy of Sciences; T. Kiss, Head of a department of the Institute of Economy and Planning under the State Planning Committee; M. Simai, D. Sc. (Econ.) and B. Tálas, Head of a department of the Ministry of Foreign Affairs.

* In October 1972 the Hungarian Economic Society organised a Soviet-Hungarian colloquium in Budapest with the participation of scholars of the Institute of Economics of the USSR Academy of Sciences. The following subjects were discussed: "Results and Prospects of the Hungarian Economic Reform", "Long-term Economic Planning in Hungary" and "Application of Calculations Regarding the Economy of Investments in Hungary". The main reports on the Hungarian side were made by B. Nagy, I. Geteny and A. Madarasi, on the Soviet side, by D. Allakhverdyan, V. Krasovsky and V. Starodubrovsky.

* A plenary meeting of the Commission of Historians of the USSR and Czechoslovakia was held in Smolenice, near Bratislava, September 1972. The meeting was opened by J. Poulik, Vice-President of the Czechoslovak Academy of Sciences. The opening address was made by Academician P. Pospelov, Chairman of the Soviet part of the Commission. The subject of discussion was "The Second World War and Soviet-Czechoslovak Relations in the War Years". Reports were made by P. Zhilin (USSR)— "Some Current Problems of the History of the Second World War", and by V. Kral (Czechoslovakia) — "Czechoslovakia and the Second World War". In two co-reports the Czechoslovak historians J. Čierný and V. Plevza (jointly) and the Soviet historian P. Derevyanko subjected to a critical analysis the main falsifications of bourgeois historiography as regards problems of the Second World War. V. Morozov (USSR) read a communication on the operations of the Soviet Army in the liberation of Czechoslovakia, and A. Nedorezov (USSR) delivered a report "The Political Aspects of Soviet-Czechoslovak Relations in the Second World War". The meeting also heard interesting reports by the Czechoslovak scholars J. Hrozienčik, Č. Amort, M. Kropilák and other participants. It also discussed some general questions of historical science in Czechoslovakia and the USSR. Of particular interest in this connection was Academician J. Poulik's report on the state and tasks of Czechoslovak historiography.

* A meeting devoted to the 250th anniversary of the birth of the great Ukrainian enlightener, philosopher and poet Grigory Skovoroda was held in Moscow in December 1972. Besides scholars and cultural workers from all the Union Republics the meeting was attended by A. Kirilenko and N. Podgorny, members of the Political Bureau, CC CPSU; P. Demichev and B. Ponomarev, Alternate

Members of the Political Bureau, CC CPSU, Secretaries of the CPSU Central Committee; I. Kapitonov and K. Katushev, Secretaries of the CPSU Central Committee; and by a delegation from the Ukrainian SSR, headed by V. Malanchuk, Secretary of the Central Committee of the Communist Party of the Ukraine. Opening the meeting, M. Lukonin, Secretary of the Board of the Union of Writers of the USSR, reminded those present of the special decree signed by Lenin in 1918 to erect monuments to outstanding revolutionaries and social thinkers, to famed writers, scholars and philosophers of the past. Grigory Skovoroda's name was listed among them. The report on the life and work of this eminent scholar and poet was made by Academician F. Konstantinov, Chairman of the All-Union Jubilee Committee. Academician I. Beloded, Chairman of the Ukrainian Jubilee Committee, and others spoke of the enduring significance of Skovoroda's legacy.

Meetings devoted to this memorable date were held in the capital of the Ukraine, Kiev, and in other cities of the Soviet Union.

* A meeting devoted to the 120th anniversary of the birth of José Martí, outstanding Cuban revolutionary and democrat was held in January 1973 in the Institute of Latin America, USSR Academy of Sciences. The meeting heard the reports "José Martí and the Cuban Revolution" (V. Tsaregorodtsev); "Revolution and Humanism in the World Outlook of José Martí (V. Shishkin); and "José Martí, the Ideologist and Leader of the National-Liberation Struggle of the Cuban People at the End of the 19th Century" (A. Zorina). It was also addressed by the Cuban poetess Mary Cruz who characterised José Martí as the ideological inspirer of the Moncada programme.

* A symposium on current problems of sources studies took place in Tallinn in October 1972 under the auspices of the Institute of the History of the USSR, USSR Academy of Sciences, the Institute of History, the Academy of Sciences of the Estonian SSR, the Archaeographical Commission under the Department of History of the USSR Academy of Sciences and the Chair of Sources Studies of the History Faculty of Moscow University. The reports and communications made at the symposium covered many theoretical and methodological problems. Several reports were devoted to sources studies research of the Lenin heritage. The participants noted the fruitfulness of such research for gaining a deeper insight into the content of Lenin's works and for examining his methods of work with various sources. The symposium also discussed the origin and evolution of the various kinds of sources, demonstrativeness in sources studies, the application of mathematical methods in such studies, and a number of other questions.

* In September 1972 Leeuwenhorst, near Leiden (Holland) was the venue of the 24th International Congress of Chinese Studies. It was attended by about 150 scholars from more than 20 countries. The socialist countries were represented by sinologists from the Soviet Union, Czechoslovakia, the GDR, Hungary and Poland. The plenary and section meetings heard some 50 reports covering a wide range of subjects, among them history (mainly ancient and mediaeval), literarary criticism, art, linguistics, sociology, the history of philosophy, demography, bibliography, textual criticism. On the proposal of Belgian scholars the next, 25th International Congress of Chinese Studies will be held in Ghent (Belgium) in 1974.

* The 15th Meeting of the Permanent International Altaistic Conference (PIAC) took place in Strebersdorf, near Vienna, in August 1972. The main item on the agenda

was "War and Peace Among the Altai Peoples". Most of the reports dealt with folklore, ethnography, history and linguistics. The participants also told of the work accomplished by them to date, of their plans, of the research being done by their colleagues. The meeting's participants, scholars from many countries, decided to award to V. Tsintsius, a Soviet specialist in the sphere of studies of the Tungus-Manchurian languages, the medal of Indiana University, annually awarded by PIAC for outstanding achievements in Altaistic studies.

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Printed by Nauka Publishers